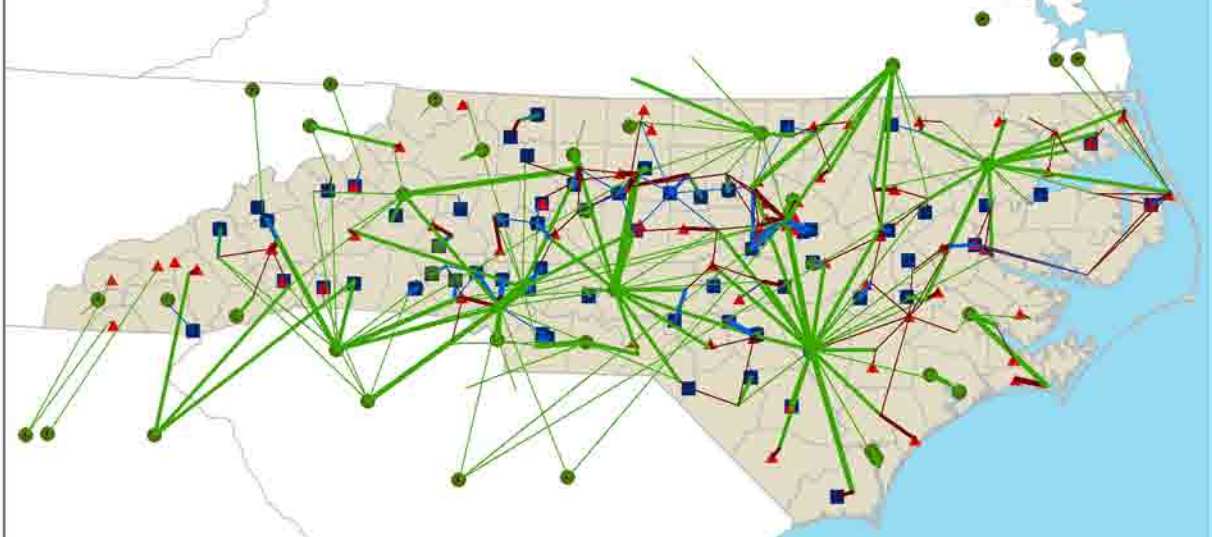
North Carolina

Solid Waste Management

Annual Report

July 1, 2006 – June 30, 2007



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ACKNOWLEDGMENTS

The North Carolina Department of Environment and Natural Resources (NCDENR) Divisions of Waste Management (DWM) and Pollution Prevention and Environmental Assistance (DPPEA) would also like to thank the county managers, solid waste directors, and recycling coordinators who provided much of this information.

DPPEA would also like to thank the North Carolina state agencies that diligently submit their reports to their office each year. Their hard work and dedication is very much appreciated.

Special thanks to the following staff of DENR, the Department of Administration (DOA) and the Department of Transportation (DOT) for providing data and information for this 16th annual report:

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On the Cover: map depicts movement of waste from North Carolina counties to transfer stations [shown as ▲], to construction and demolition landfills [shown as ■] and to municipal solid waste landfills [shown as ●].

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APPENDIX

CHAPTER 1 – Solid Waste Management

Executive Summary

The state per capita disposal rate is 1.34 tons per person per year; a one percent decrease from last fiscal year [FY] and an increase of 25 percent from the FY 91-92 base year. North Carolina communities created 11,865,829 tons of waste, which were disposed of in both North Carolina and out-of-state facilities. This represents an increase of only one percent or 99,974 tons over the previous fiscal year. North Carolina-permitted municipal landfills as well as construction and demolition landfills received a total of 10,637,808 tons of solid waste during FY 2006-2007, which represents a 28,061 ton decrease from the previous year. This decrease can be attributed primarily to a decrease in construction and demolition disposal. Construction and demolition disposal saw a decrease of 232,220 tons or a nine percent decrease from the previous fiscal year.

Approximately 129,906 tons of waste was imported from other states during FY 2006-2007 compared to over 1,329,202 tons of waste exported during the same time period. During the 2006-2007 Fiscal Year, an increase of 7,401 tons of additional waste was exported from North Carolina to Georgia, South Carolina, Virginia, and Tennessee. This clearly shows that North Carolina continues to export more waste than it imports. Based on these numbers, the forecast for waste disposal requirements 10 years into the future indicates a need for disposal capacity to handle approximately 15.1 million tons of waste annually.

Aside from disposal of waste, there is a need to increase recycling efforts. Local governments made strides in FY 07 to recycle more oil filters and to increase household hazardous [HHW] collections, although only a minority of communities operate such programs. Until small and mid-size municipalities update their programs to reflect the current state of the recycling industry, the number of curbside recycling programs will continue to decline. Without substantially increased efforts to improve participation through education, many local governments will continue to operate inefficient programs and increases in disposal will outpace increases in recycling.

Waste Disposal

Current Year

North Carolina communities disposed of a total of 11,865,829 tons of municipal and construction and demolition waste in facilities located within North Carolina and out-of-state.

Per Capita Rates (all waste)

The state measures changes in waste disposal rates by comparing the current year's per capita waste disposal rate to Fiscal Year 91-92's base per capita rate. (**Formula: Total Tons Disposed ÷ Population = Per Capita Disposal Rate**). Negative numbers indicate a decrease in the per capita disposal rate; positive numbers an increase. Waste reduction is a change from the base year, not a change from year to year. As seen in the following table, North Carolina continues to increase the absolute amount of waste disposed.

Fiscal Years	Tons Disposed	Population	Per Capita Disposal Rate	Percent Waste Change from Base Year 1991-1992
2006-2007	**11,865,829**	**8,860,341**	**1.34**	**25%**
2005-2006	**11,765,183**	**8,682,066**	**1.36**	**27%**
2004-2005	11,029,485	8,541,263	1.29	21 %
2003-2004	10,713,444	8,418,090	1.27	19 %
2002-2003	10,236,960	8,323,375	1.23	15 %
2001-2002	9,999,284	8,188,008	1.22	14 %
2000-2001	9,752,510	8,049,313	1.21	13 %
1999-2000	10,267,137	7,938,062	1.29	21 %
1998-1999	9,214,323	7,797,501	1.18	10 %
1997-1998	8,607,578	7,645,512	1.13	5 %
1996-1997	8,741,727	7,490,812	1.17	9 %
1995-1996	7,722,795	7,336,228	1.05	-2 %
1994-1995	7,624,144	7,180,525	1.06	-1 %
1993-1994	7,038,505	7,036,927	1.00	-7 %
1992-1993	6,890,818	6,892,673	1.00	-7 %
1991-1992	(managed) 7,257,428	6,781,321	(Base Year Rate) 1.07	
1990-1991	7,161,455	6,632,448	1.08	

Statewide solid waste disposal reporting began in FY 90-91. The state made slight reductions in per capita waste rates in the early 1990s. Several factors caused these reductions. In 1990, weighing of all waste at municipal solid waste landfills was initiated by legislative statute. Facilities started charging a disposal fee for each ton of waste disposed. The disposal fee, commonly called a tipping fee, lessened waste disposal for a period of time and created an incentive to explore alternatives to landfill disposal. Strong public and private interest helped local governments start recycling and waste reduction programs in response to state mandates and a perceived disposal crisis. In 1991, tipping fees charged by landfills averaged $18 per ton. At the time, this additional cost was considered to be economically prohibitive for landfill use as a means of disposal. This year, the average cost in North Carolina is $35 per ton. Despite the increase in price, tipping fees in North Carolina remain some of the lowest in the United States.

Waste disposal is a free-market industry involving competition, which helps to keep disposal costs for consumers low. From 1991 to 2006, the face of waste disposal drastically changed as stronger state regulations required lined landfills and leachate collection systems. Many local governments got out of the “business” of waste disposal. Ownership of landfills has moved primarily toward the private sector. The number of active municipal solid waste landfills managed by local governments has decreased from 105 in 1991 to 32 in June 2006. In the same 15-year time period, private landfills increased from five to the current number of eight privately owned landfills. Of the 11 largest municipal solid waste landfills only three; Wake County, Hanes Mill Road (city of Winston-Salem) and New Hanover County, are owned by local governments.

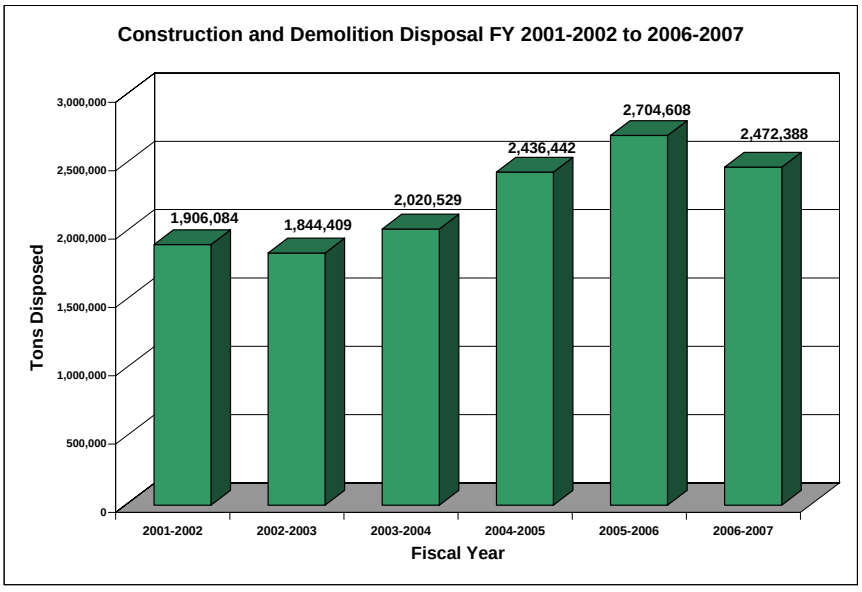
TYPE SOLID WASTE FACILITY	ACRONYM	NUMBER IN NC
Municipal Solid Waste Landfills	MSWLF	40
Construction and Demolition Landfills	CDLF	68
Industrial Landfills	IND	16
Land Clearing and Inert Debris Landfills	LCID	116
Land Clearing and Inert Debris Notification Site	LCIDN	700
Transfer Stations	TRANS	84
Tire Monofills/Processing	TIRE	5
Incinerators	INC	6
Solid Waste Compost Facilities	SWC	44
Treatment and Processing-Yard Waste or Land Clearing Debris	TP-YW or TP-LCD	9
Treatment and Processing Land Clearing Debris Notification	T&PN	50
Treatment and Processing – Other	T&P	33
Septage Land Application Sites	SLAS	527
Yard Waste Notification Site	YWN	131
Closed Landfills which require Inspection	CLOSED	211
	TOTAL	**2040**

Construction and Demolition Waste

North Carolina's construction and demolition landfills have seen a significant decrease in disposal over the past fiscal year. Disposal of construction and demolition waste in North Carolina landfills for FY 2006-2007 totaled 2,472,388 tons, indicating a decrease of approximately 232,000 tons or 9 percent from the previous fiscal year. This decrease can be primarily attributed to the Fort Bragg Army base that ceased large deconstruction activities and increased mandatory recycling of materials to minimize disposal into their construction and demolition landfill. The Fort Bragg construction and demolition landfill saw a decrease of 112,579 tons from the previous fiscal year. In addition, Cabarrus County saw a large decrease in disposal into their construction and demolition landfill from the previous year. This decrease again was due to the completion of deconstruction of the Pillowtex plant during the previous year. For FY 2006-2007, Cabarrus County Construction and Demolition Landfill saw a total decrease of approximately 91,000 tons from their FY 2005-2006 construction and demolition disposal totals.

These two deconstruction projects completed the previous year account for 203,394 tons of the 232,220 ton decrease North Carolina saw in construction and demolition disposal for the recent fiscal year. Additional decreases or lack of an increase such as what we have seen over past years can be attributed to less construction and more diversion and recycling of construction and demolition waste. Out of the 63 construction and demolition landfills receiving waste last fiscal year, just over half, or 34 landfills, reported a decrease in disposal from the previous year. An additional reason for the decrease in construction and demolition waste is that a significant quantity of construction and demolition waste is disposed of in MSW landfills, and is consequently recorded as MSW waste instead of construction and demolition waste.

According to calculations conducted from US Census data for housing starts, single family home construction decreased approximately 13 percent from FY 2005-2006 to FY 2006-2007 data. The decrease in construction of new single family homes over the past year could be the result of a slower economy in North Carolina. The amount of waste going into construction and demolition landfills is also directly proportionate to the housing market.

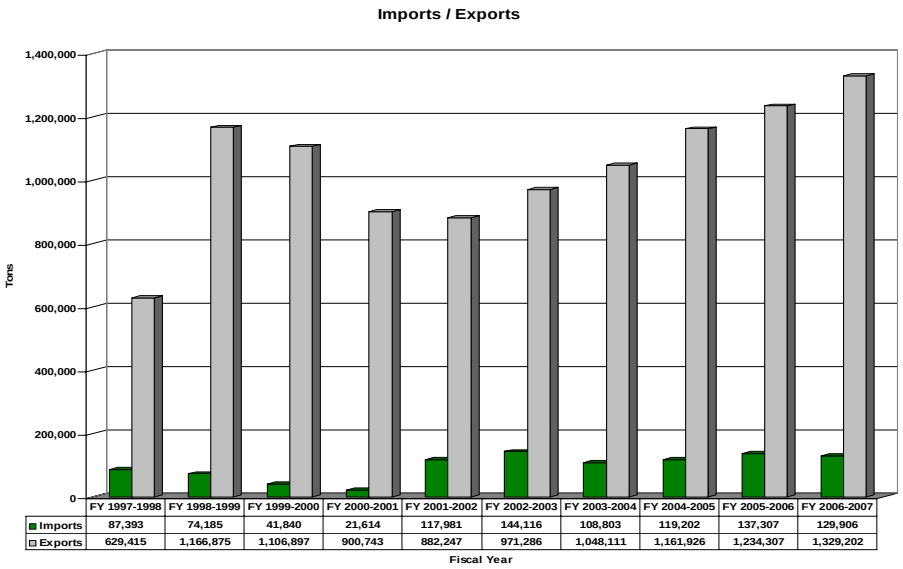


Imports and Exports

North Carolina continues to export more waste than it imports. Exported waste accounts for approximately 11 percent or a total of 1,329,202 tons of the total waste disposed in the past FY 2005-2006

In FY 95-96, North Carolina exported waste to only one landfill in South Carolina. During FY 2006-2007, 46 North Carolina counties exported at least some waste to 14 out-of-state landfills and transfer stations. Back-and forth-movement - where waste leaves the state only to re-enter for disposal - has continued for the fifth consecutive year. The Fort Mill Transfer Station in South Carolina received approximately 113,360 tons of waste from Mecklenburg County, which was then sent back into North Carolina for disposal. For this reason, the amount has not been included in the report's import or export totals.

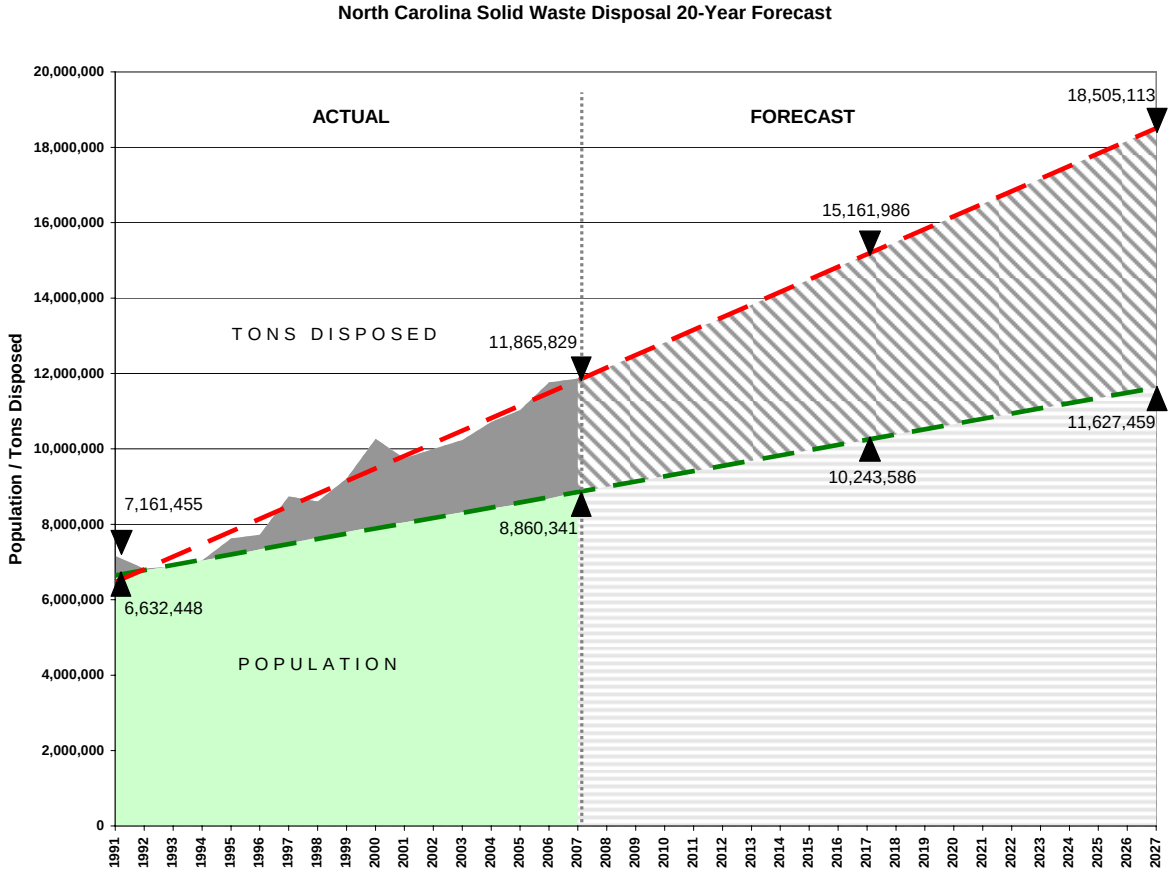
Imports continue to increase, since some North Carolina landfills are located near state borders. In FY 95-96, only one landfill, located in Forsyth County, received imported waste. Currently, nine North Carolina landfills receive imported waste.



	FY 1997-1998	FY 1998-1999	FY 1999-2000	FY 2000-2001	FY 2001-2002	FY 2002-2003	FY 2003-2004	FY 2004-2005	FY 2005-2006	FY 2006-2007
Imports	87,393	74,185	41,840	21,614	117,981	144,116	108,803	119,202	137,307	129,906
Exports	629,415	1,166,875	1,106,897	900,743	882,247	971,286	1,048,111	1,161,926	1,234,307	1,329,202

Projections

Regression analysis helps forecast future waste disposal. Factoring in population growth, North Carolina will dispose of approximately 15 million tons in 10 years, 17 million tons in 15 years, and 18.5 million tons in 20 years for an estimated population of 11,627,459. This represents 1.59 tons of waste for every citizen in North Carolina. The implication of this trend is that demand for landfill space will increase with time as populations grow, less waste is diverted, and imports become a larger portion of waste disposed in North Carolina landfills.



State Waste Reduction Goal

The 1991 amendment to the Solid Waste Management Act of 1989 (Senate Bill 111) established a statewide goal to reduce the amount of landfilled material 40 percent by 2001. Disposal is measured on a per capita basis. Since FY 91-92, *waste disposal increased 25 percent - from 1.07 to 1.34 tons per person per year*. The statewide goal is unmet, and although the state per capita rate has decreased since last fiscal year, this decrease is primarily due to a decrease in construction and demolition disposal. As mentioned previously, this decrease can be attributed to two major deconstruction projects that ended last year and a slight increase in recycling. Overall, per capita has increased since the base year of 91-92, although several counties achieved the state's waste reduction goal.

Three fundamental, interrelated reasons that contributed to this failure were changes in the dynamics of waste disposal, a lack of commitment to waste diversion, and economics. Waste management dynamics changed dramatically after the statewide reduction goal was established. Alternative technologies, such as incineration and mixed waste composting, did not develop as anticipated. Despite a great deal of interest and significant investment in these technologies, they did not decrease landfill disposal as expected. Additionally, the U.S. Supreme Court overturned legislation on flow control and prohibited local governments from directing waste to certain disposal facilities. Legally, waste is a commodity, and is allowed free movement. The economics of landfill disposal evolved since the 1989 adoption of the goal. As private landfill owners competed for tonnages, tipping fees remained low. Landfills did not become as expensive to operate as initially projected. Landfill customers apparently adapted readily to higher tip fees and apparently did not pursue waste reduction as a way to control costs. The combination of strong state and national economies in the early 1990s, moderate disposal costs and local communities establishing their own goals reduced the motivation to divert materials from landfills.

The commitment to reduce waste has waned over the years. Local governments perceive the 40 percent goal as "just a goal" and not a mandate. Funding and resources for waste reduction activities never occurred at the levels required or anticipated for waste reduction success. Despite landfill bans for used oil, yard trash, white goods, antifreeze, aluminum cans, lead-acid batteries, whole scrap tires and oyster shells (oyster shells are only banned from landfills for a 90 day period to promote recycling and alternative uses before disposal) waste disposal continues to increase. Additional landfill bans on alcoholic beverage containers from restaurants, motor vehicle oil filters, recyclable rigid containers and wooden pallets take effect in 2008 and 2009 and may make an impact on disposal.

Landfill Capacity

Current Status

North Carolina currently has 40 operational municipal solid waste landfills and one municipal solid waste incinerator. The total remaining capacity of all North Carolina MSW landfills measures approximately 265 million cubic yards, with room for approximately 158 million tons of MSW waste. The estimate was obtained using the state's average utilization factor of .60 tons of waste per cubic yard of air space and does not include waste exported to out-of-state landfills. If North Carolina's rate of landfill use remains steady at last year's rate of approximately 8,041,765 tons annually, the state would have 19.64 years of landfill capacity remaining. The opening of South Wake Landfill in 2008 will increase overall capacity, however, it is anticipated that two-to-three facilities will be closing.

Projections

The concept of statewide capacity does not translate into statewide access. Regions of the state have limited capacity. Both eliminating out-of-state capacity and continuing the acceptance of out-of-state waste into North Carolina further shrinks this capacity number further. At present, statewide capacity does not appear to be a problem. However, regions may experience disruptions and additional costs as facilities close, open, change jurisdictions or alter the average distance waste is transferred.

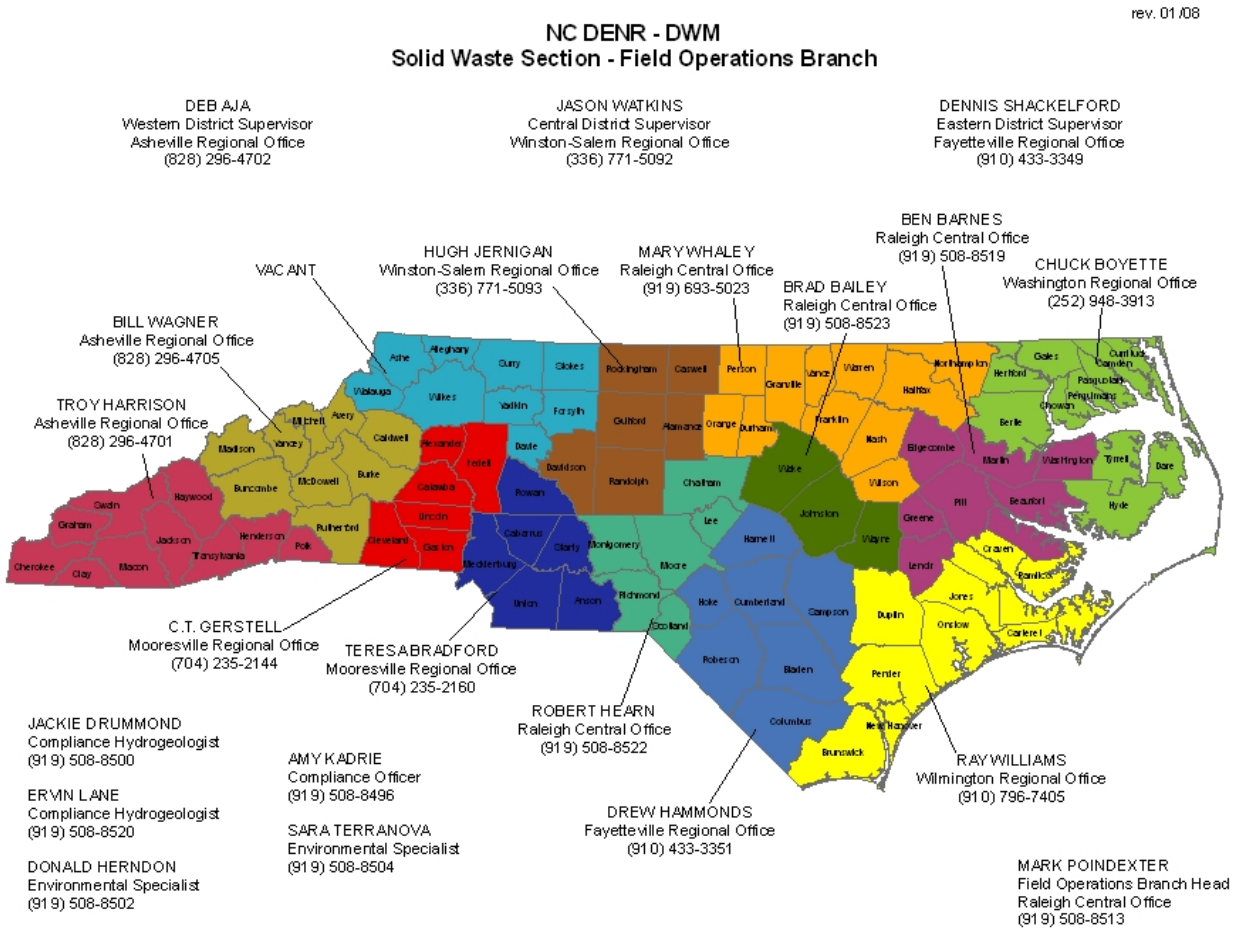
Much of the state's capacity is not widely available due to permit conditions, franchise arrangements, service areas and distance. The primary limiting factor regarding access to capacity in North Carolina is distance. The distance that large quantities of waste travel is normally less than 100 miles one-way.

Many landfills' franchise agreements only allow them to accept waste from a particular distance around the landfill. Examples of limiting factors affecting capacity are illustrated in that the Camp Lejeune landfill is for Marine Corps base use only; the Alamance County landfill is permitted to accept only Alamance

County waste; and the Upper Piedmont landfill is permitted for a maximum of 600 tons per day. Also, the opening of South Wake Landfill in 2008, which will increase the amount and years of capacity that are available for use, will only serve Wake County.

Some landfills owners/operators choose not to accept waste from other jurisdictions, although their permit and franchise allow it. Additionally, landfill owner/operators may elect not to construct or use all of the permitted space. This remaining capacity also assumes a current level of imported and exported waste. Increases in the importing of waste into North Carolina could decrease capacity even further.

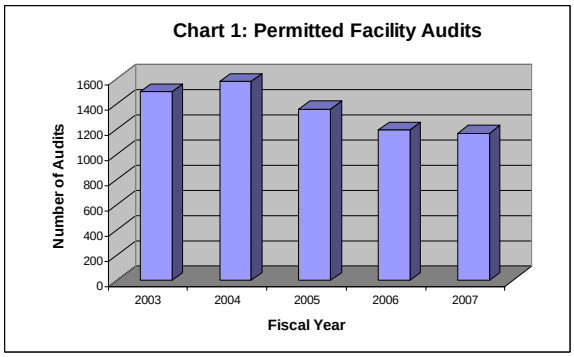
Solid Waste Section - Field Operations Branch



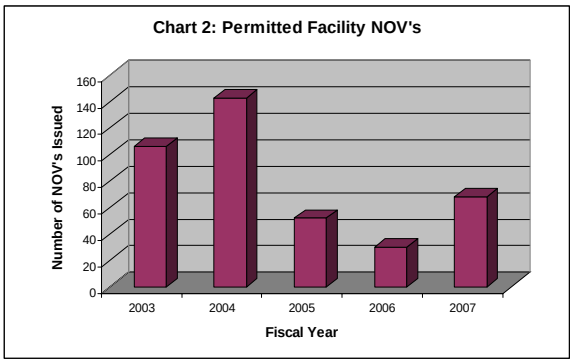
The Environmental Senior Specialists of the Solid Waste Section, Field Operations Branch, have varying job responsibilities, from regulatory and compliance action to providing technical assistance related to a host of issues. Presently, there are approximately 19 different types of solid waste facilities, ranging from the highly-engineered and complex Subtitle D municipal solid waste landfills to medical waste incinerators. A routine audit of a facility may take as little time as a half day at a transfer facility to up to two days for a full inspection of a Subtitle D landfill.

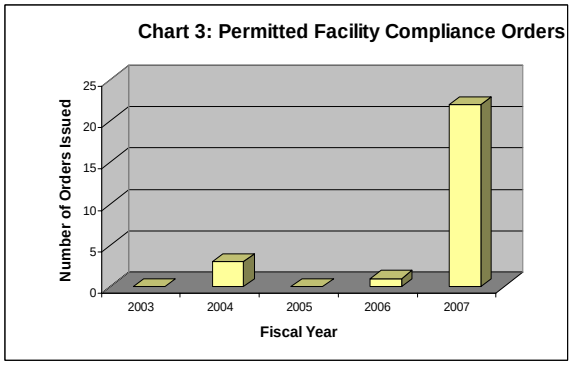
The various job responsibilities of the Field Operations Branch field staff are displayed in the chart below. These tasks include, but are not limited to: audits of permitted facilities, response to citizen complaints of illegal dumps and permitted facilities, tax certifications, enforcement actions, local government assistance, disaster response, education and training, technical assistance to permitted facilities and the public, local governments and solid waste management facilities in their annual reporting, and administrative duties. The largest amount of time spent on any of the responsibilities is devoted to conducting audits at permitted facilities, with approximately 6,005 hours in 2007. The second-most time-consuming task is investigating citizen complaints of illegal dumping, which totaled 2,295 hours.

Permitted Facilities



Although the largest amount of staff time was spent conducting audits and providing technical assistance at permitted facilities in 2007, the actual number of facility audits has decreased in the past five years (see Chart 1). The decrease is largely due to the increased number of other solid waste program responsibilities and increased time that is required to conduct audits at increasingly complex facilities. While there has been a reduction in the number of Notice of Violations (NOVs) issued to permitted facilities in recent years compared to past years, there was an increase in the number of NOVs issued in 2007 compared to 2006 (see chart 2). There was also an increase in Compliance Orders (COs) issued to permitted facilities during 2007 (see chart 3). A significant number of the Compliance Orders were issued to facilities for receiving waste they were not permitted to receive and for mismanagement of leachate.

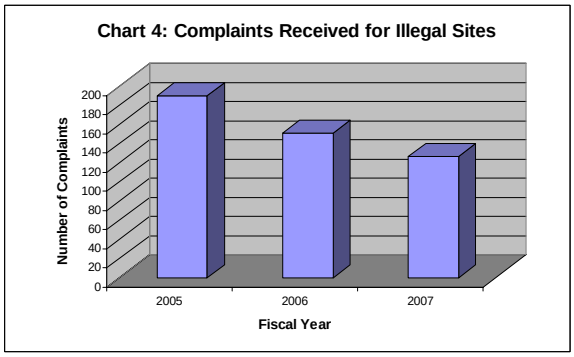




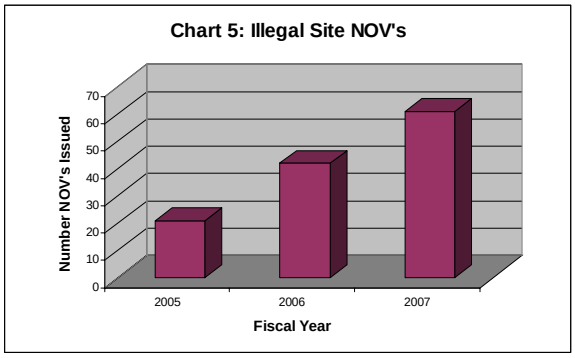
Field Operations Branch - Illegal Dumping

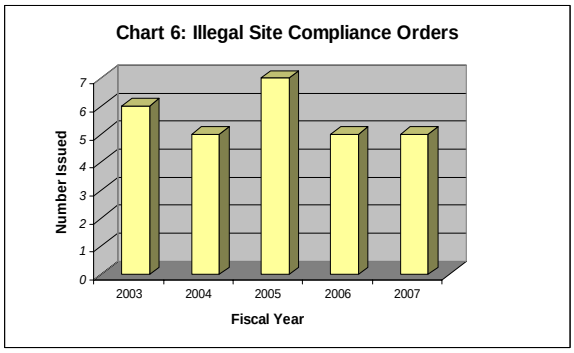
Based on Governor Easley's "Truth in Penalties" initiative and the Department of Environment and Natural Resources' compliance and enforcement policies, the Field Operations Branch has redoubled efforts for the past several years to curtail illegal dumping across the State. Due to that effort there has been a steady increase in the number of NOV's issued to illegal sites in the past three years (Chart 5), while the number of Compliance Orders has remained relatively the same in the past five years (Chart 6). Indications are that, because of the Branch's approach, a violator receives, a NOV quickly to clean up their illegal dumping to avoid further enforcement proceedings (e.g. compliance order). The rise of such

enforcement actions at illegal sites may be responsible for the reduced number of citizen complaints, as shown in Chart 4.



At the direction of the Solid Waste Section, Field Operations Branch, an estimated 159,563 cubic yards of waste was removed from illegal dumps in 2007. An estimated 31,467 tons of LCID waste from illegal dumps went to permitted landfills last year. Assuming that the average cost-per-truckload is $20, that is a total of $25,174 in tip fees. Approximately 14,573 tons of C&D waste from illegal dumps went to permitted landfills last year. Assuming that the average cost per ton is $30, that is a total $437,190 in disposal fees. Approximately $500,000 seems to be the average dollar amount for tipping fees of illegally disposed waste that is removed and sent to permitted facilities for proper disposal per year.

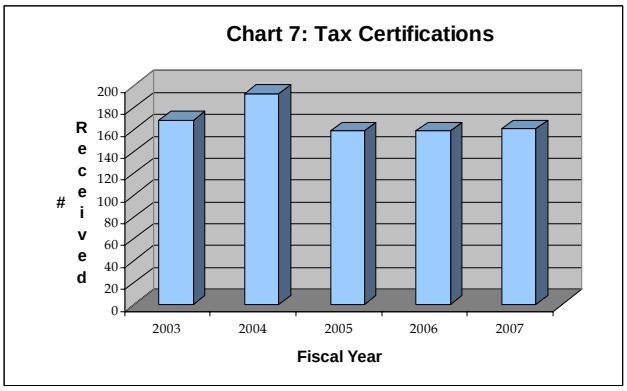




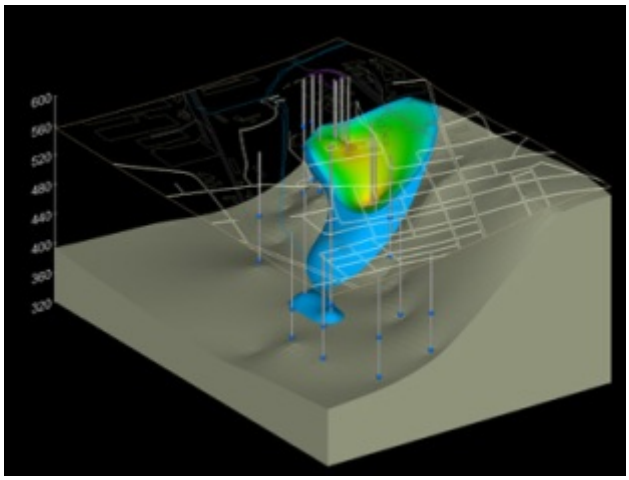
Field Operations Branch - Tax Certification Program

The purpose of the tax certification program is to encourage the purchase of resource recovery and recycling equipment and the construction of facilities that will remove recyclable commodities from the solid waste stream. Approved recycling equipment and facilities may be approved for an exemption from ad valoreum taxes. The last sentence of new G.S. 130-166.18(3) provides: "The standards shall be so developed as to qualify only those facilities and equipment exclusively used in the actual resource recovering or recycling process and shall exclude any incidental or supportive facilities and equipment." This provision restricts the equipment and facilities that can qualify and places the responsibility on the Department of Environment and Natural Resources to include appropriate restrictive provisions in its standards. Accordingly, the adopted standards reflect the statutory mandate that only limited expenditures and property qualify for special tax treatment.

Field Operations Branch field staff received 161 applications in 2007. Site inspections/audits routinely include facilities with complex industrial processes varying from steel production, craft paper production, glass production, and meat rendering facilities, to name a few. Field Operations Branch staff must acquire a basic understanding of a wide array of complicated industrial processes before approval of facilities and equipment is granted.



Field Operations Branch - Groundwater Monitoring Reports



The Field Operations Branch, Environmental Compliance Unit has notified facility owners/operators that they are strongly encouraged to submit reports in electronic format. When paper copies of environmental monitoring reports are submitted to the Solid Waste Section, the reports are scanned into an electronic format and stored in a document database. The paper copy of the report is then recycled. At this point, electronic data are not required by the Solid Waste Section, but as facilities learn the reporting and submitting process, submittal of environmental monitoring data will be required in the near future. Some of the expected benefits are 1) paper and space reductions in report preparation, mailing and filing, 2) increased efficiency in the data submission process, 3) improved long-term data formatting organization and management, as well as 4) less time and financial expenditures for data reporting. We greatly appreciate the effort so far in regards to compliance with this issue. Of the reports that we have received over the past six months, over 80 percent of the facilities are submitting reports in an electronic format.

Additionally, electronic data submittals have allowed the Environmental Compliance Unit to efficiently populate a new risk assessment/compliance database with water quality data. Presently, this database has data from about 75 percent of the sites that perform semi-annual water quality sampling. From this data, it is estimated that of the roughly 250 sites that will eventually be in the database, approximately 140 of these have at least one well location with an organic exceedance of the North Carolina 2L groundwater standards. Of these, 63 sites are currently in assessment monitoring and 19 sites are undergoing corrective action. The risk assessment/compliance database will better allow the Environmental Compliance Unit to efficiently track the environmental data for the landfills in North Carolina and to devote staff time and effort to the sites which pose the greatest potential threat to human health and the environment.

North Carolina's Newest Gas to Energy Project

The Municipal Solid Waste Landfill (MSWLF) owned by the Coastal Area Solid Waste Management Authority (CRSWMA) is the latest landfill facility in North Carolina to convert waste byproducts into a commodity. In the fall of 2007, Ingenco, a company based in Richmond, Virginia started operating a newly-built power plant which is located within the CRSWMA facility.

The power produced comes from the more than 1.5 million tons of waste which have already been put into the ground at this Craven county landfill since it was first opened in August of 1999. Capacity studies show that at present rate of waste disposal, waste will accumulate for another 48 years. Methane will continue to be generated and can be used for energy for possibly 10-to-15 years after that point.

The waste starts producing methane within days of disposal. The methane, along with sulfur dioxide, carbon dioxide and other gases, is extracted from the waste. Allen Hardison, Director of CRSWMA, said "We don't own the generators; we run the landfill and the gas extraction system. Ingenco buys the gas and makes the electricity." The power plant produces about 3.5 megawatts of electricity a day. The power produced is ultimately sold to Progress Energy to be redistributed.

The generator as viewed from the top of the closed CRSWMA landfill cell. The leachate pre-treatment ponds and the flare station are in the background.

Other Gas-to-Energy projects in North Carolina vary in the form of energy produced, but all push North Carolina forward in the use of renewable energy. The General Assembly passed Senate Bill 3 in the summer of 2007, which promotes development of renewable energy and energy efficiency in the state. This project and the projects listed in Table #1 help reach the goals set by that new law.

LANDFILL GAS-TO-ENERGY PROJECTS IN NORTH CAROLINA

Facility	County	Energy Type/End Use
BFI-Charlotte Motor Speedway MSW	Cabarrus	Electricity
Buncombe Co MSW	Buncombe	Steam
Catawba Co. MSWLF	Catawba	Electricity
City of Greensboro MSW	Guilford	Steam
City of Raleigh MSW	Wake	Steam
City of Winston-Salem MSW	Forsyth	Electricity
Coastal Area Solid Waste Mgmt Authority MSW	Craven	Electricity
Cumberland Co. MSW	Cumberland	Steam
Henderson Co. MSW	Henderson	Steam
Iredell Co. MSW	Iredell	Electricity
Jackson County MSW Green Energy Park	Jackson	Art Center/Blacksmith
North Wake MSW	Wake	Steam
Pitt Co. MSW	Pitt	Steam
Yancey/Mitchell Co. MSW	Yancey	Greenhouse/Art Center

CHAPTER 2 - Government Waste Reduction Activities

Annual reports received from local governments provide data on source reduction, reuse, recycling and composting activities statewide as well as other aspects of solid waste management. Data from these reports develop a picture of waste reduction efforts in North Carolina and the relative effectiveness of these programs and trends in program implementation.

Source Reduction and Reuse Programs

The number of local governments with source reduction and/or reuse programs decreased again during FY 06-07. The decrease of governments reporting programs from 102 to 95 is possibly due to reporting fluctuations; however, the downward trend over recent years does show that local governments are failing to take advantage cost of effective waste reduction options.

Thirty-two local governments reported having swap shops for the free exchange of reusable materials. In total, these 32 local governments had 86 swap shops in use and likely diverted more than 2,100 tons of material from disposal during FY 2006-07. Swap shops remain a very cost effective and popular reuse method for local governments that rely on staffed drop-off centers for collection.

Local Reduction/Reuse Programs

Program Type	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07
Source Reduction Programs							
Backyard Composting	64	67	69	68	59	55	53
Grass Cycling	35	29	38	38	33	33	32
Xeriscaping	8	8	11	14	13	14	12
Junk Mail Reduction	64	61	65	63	59	59	55
Enviroshopping	31	27	32	31	29	25	26
Promotion of Non-toxics	33	27	27	28	30	23	22
Other	3	4	2	1	2	1	3
Reuse Programs							
Swap Shops	28	34	33	31	33	37	32
Paint Exchange	19	19	19	18	18	18	19
Waste Exchange	4	3	4	6	8	3	3
Pallet Exchange	9	6	5	9	9	4	5
Other	8	9	11	7	11	5	4
Local Governments with Programs	**117**	**109**	**112**	**109**	**104**	**102**	**95**

Local Government Recovery Programs

Local government recovery grew by more than 77,000 tons during FY 2006-07. This represents a six percent increase over FY 2005-06. Tonnage increases were experienced in every commodity category except “other” materials and metals. The decline in metal recovery can be almost completely attributed to the failure of several counties to report white goods (appliances) recovery.

The overall increase in recovery can be attributed to a strong increase in the recovery of tires and construction and demolition debris as well as improved reporting by local governments and modest increases due to general recycling program performance. Despite the increase in tonnage, the ratio of recycling to disposal remained unchanged, indicating that the increase in recycling tonnage changed very little when compared to the increase in disposed tonnage.

Overall, local government recycling program performance changed little during the year. The result is that many local governments continue to operate inefficient recycling programs. Without substantially increased efforts to improve participation through education and modernize local waste reduction

programs, disposal will continue to rise rapidly and the number of local government waste reduction programs will fall.

Local Government Recovery (Tons) and Performance Measures

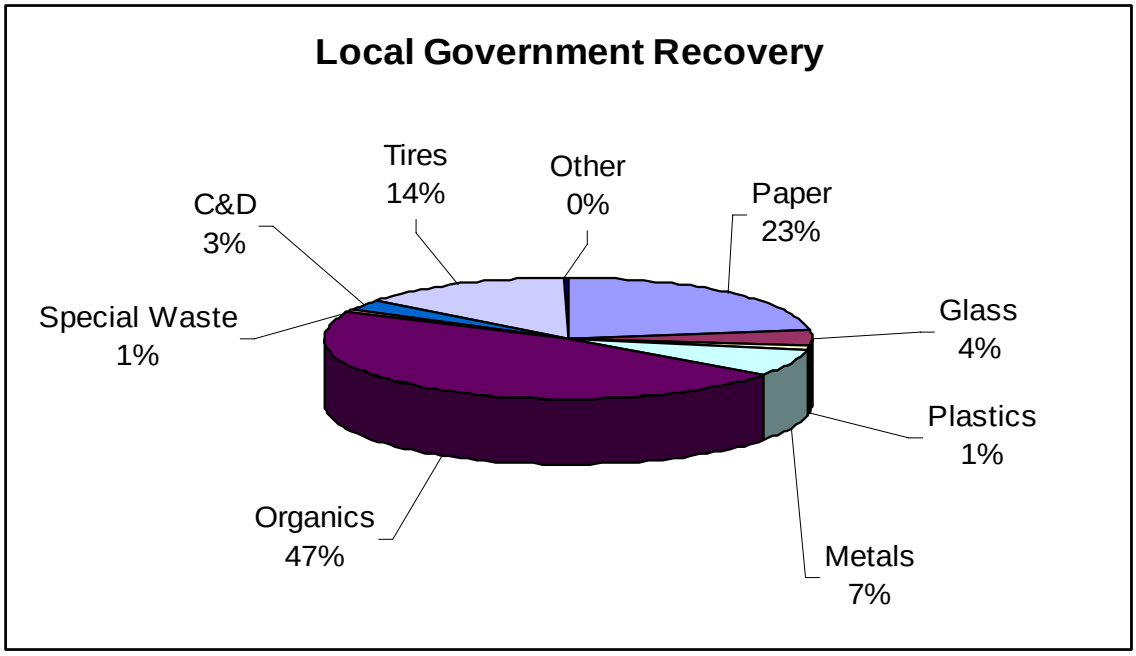
Material	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02
Total Paper	216,121	233,339	241,859	263,365	267,840
Total Glass	43,449	41,623	41,826	46,936	49,891
Total Plastics	14,399	14,835	14,474	15,062	17,269
Total Metal*	81,262	77,564	86,480	92,634	114,786
Total Organics**	504,554	525,033	638,757	540,582	468,901
Special Wastes***	3,527	3,817	4,907	4,947	5,426
Construction and Demolition Debris	N/A	N/A	59,598	15,406	17,648
Tires	N/A	N/A	N/A	N/A	N/A
Other	35,977	63,794	5,329	6,120	5,896
Totals	**899,290**	**960,005**	**1,093,032**	**985,052**	**947,657**
Per Capita Recovery (lbs.)	**242.03**	**254.40**	**285.61**	**243.66**	**231.47**
Recovery Ratio (Recycling:Disposal)	**0.11**	**0.10**	**0.11**	**0.10**	**0.10**

Material	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07
Total Paper	275,538	267,371	303,514	292,641	305,615
Total Glass	51,433	52,117	44,003	45,421	51,883
Total Plastics	16,807	18,679	18,320	18,177	19,373
Total Metal*	109,723	114,097	109,612	108,488	96,884
Total Organics**	689,027	589,124	583,101	619,494	631,393
Special Wastes***	5,926	6,271	6,690	6,955	8,304
Construction and Demolition Debris	20,002	24,084	20,292	24,001	40,352
Tires	N/A	N/A	113,670	146,177	187,273
Other	4,626	4,773	5,677	7,743	5,558
Totals	**1,173,082**	**1,076,516**	**1,204,879**	**1,269,097**	**1,346,635**
Per Capita Recovery (lbs.)	**281.88**	**255.76**	**282.13**	**292.35**	**303.97**
Recovery Ratio (Recycling:Disposal)	**0.11**	**0.10**	**0.11**	**0.11**	**0.11**

* Includes white goods, aluminum cans, steel cans and other metals.
** Includes yard waste, pallets and wood waste.
*** Includes electronics, used oil, oil filters, antifreeze and batteries.

The vast majority of the material recovered during the year was yard waste and other organics, comprising almost 50 percent of total recovery. Paper products were the second largest category, comprising roughly 23 percent of total recovery. Tires, metals and glass were the next three categories by size.

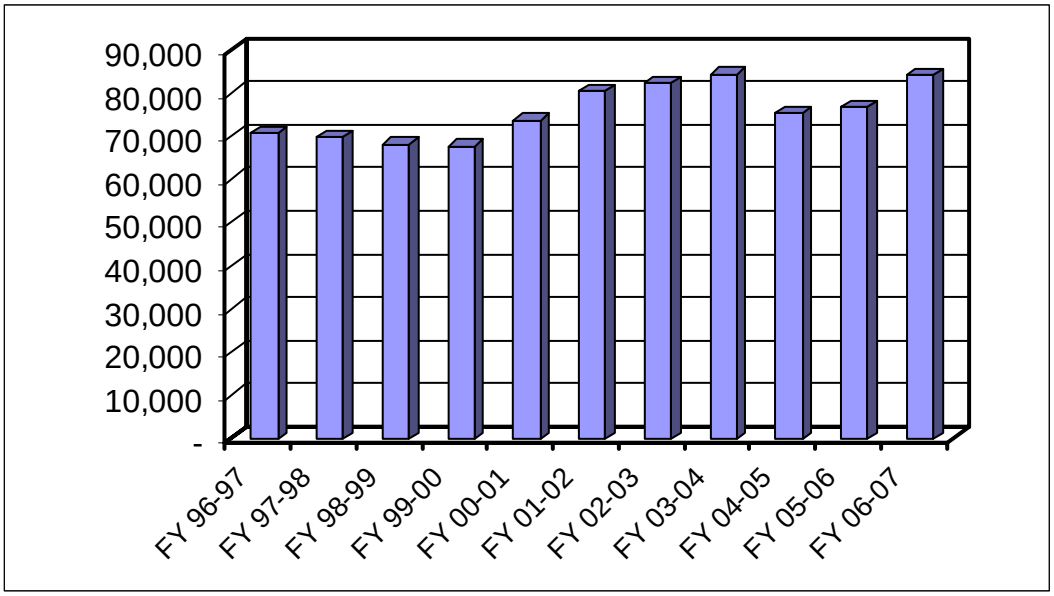
Characterization of Local Government Recovery



Recovery of Traditional Materials

Recovery of glass, PET, HDPE, aluminum and steel containers grew again during FY 2006-07, accounting for 84,196 tons of the overall total. The recovery rate fell just shy of the all-time high, which was achieved during FY 2003-04. Glass, plastic and aluminum can recovery all experienced increases during the year, while the recovery of steel cans fell slightly. Although aluminum can recovery did increase slightly during the year, it is likely that continued strong market conditions resulted some individuals selling aluminum cans directly to markets instead of contributing the containers to local government-operated recycling programs. Although small in comparison to the amount of paper recovered annually, overall container recovery provides the best snap shot of local-government-recovery program performance.

Container Recovery in Tons FY 96-97 to FY 06-07



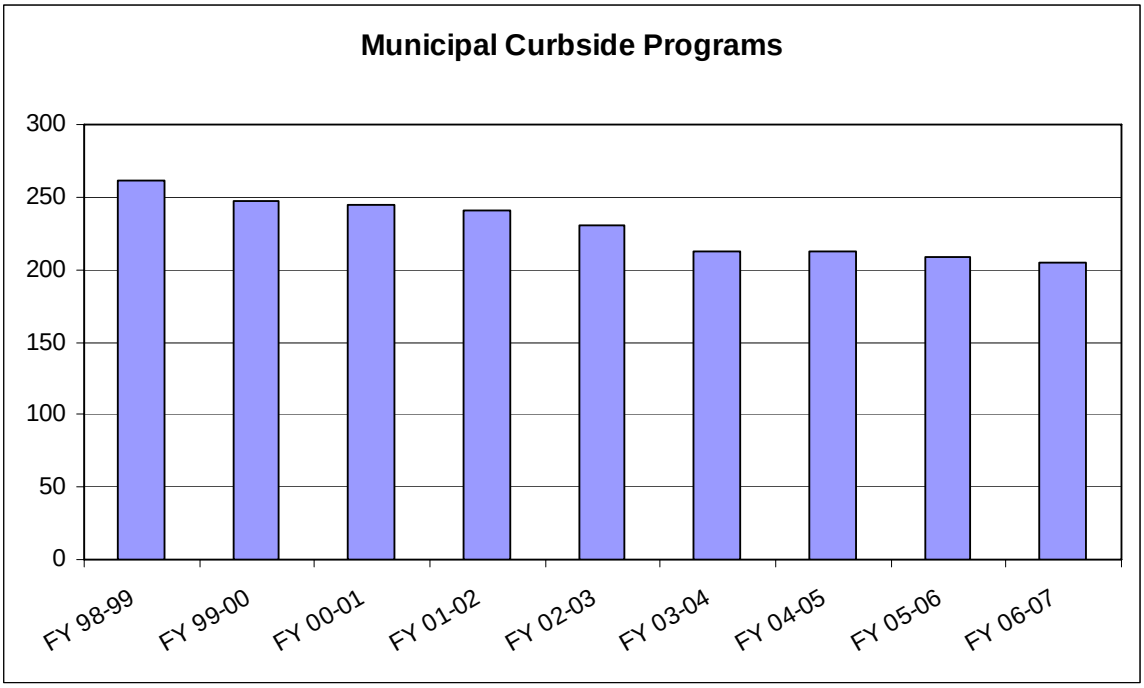
Local Government Recycling Program Management

Despite the addition of a few new curbside programs, the number of municipal curbside recycling programs dropped again during FY 2006-07 to 205. This trend has been continuing since 1999 and represents a problem in achieving meaningful waste reduction in North Carolina. Many curbside recycling programs were originally implemented in the early 1990s without much thought or planning for maintaining the programs into the future. Many of these programs are still being operated in a manner consistent with the state of the recycling industry in the early 1990s. The recycling industry has evolved dramatically in the past 15 years and unless small and mid-sized municipal governments update their programs to reflect the current state of the industry it is likely that the trend towards fewer curbside recycling programs will continue.

The majority of the curbside programs dropped each year are contracted for or operated by small and mid-sized municipalities. During the past year, several mid-sized towns and a couple of large cities began the process of analyzing the cost of adding curbside recycling. It is possible that this new interest in curbside recycling programs will counteract the loss of programs in smaller towns and may even result in a significant increase in the number of households served by curbside recycling in North Carolina. The decrease in the number of curbside programs last year had almost no impact on the total number of households served by curbside recycling due to growth in the urban areas of the state, which remained at approximately 1.4 million households served.

In a properly developed program, each household could potentially generate up to 750 pounds of recyclables per year. In reality, North Carolina households are contributing only about 240 pounds of recycling per year to their local recovery programs. If these programs were functioning at their potential, recovery of traditional commodities would increase by more than 350,000 tons. It is very clear that improving the breadth of program collection and increasing participation are keys to improving statewide recovery.

Municipal Curbside Program Trends FY 98-99 to FY 06-07



Drop-off programs continue to contribute more to recycling than any other type of program. Roughly 42 percent of all material recovered by local governments comes from drop-off recycling programs. The ability of these programs to handle special wastes, white goods and scrap metal is the primary reason they contribute more than curbside programs. The use of mixed-waste-processing continues to decline in the state and may no longer be used for processing traditional recyclables sometime in the future. The "Other Programs" category grew to approximately 21 percent during FY 2006-07. This

increase is likely due to improved reporting as well as some local governments expanding to included additional recycling programs, specifically public school recycling programs.

Local Government Recovery by Program Type

Program Type	Percent of Total Recovery
Curbside	37 %
Drop-off	42 %
Mixed Waste Processing	< 1 %
Other Programs	21 %

Special Waste Management

As shown in Table 1, FY 07 saw mixed results for local government diversion of special wastes. Gallons of oil declined to their lowest level in five years, as did lead acid battery collection. Local governments apparently started to react to the upcoming disposal ban on oil filters in October 2009 with a jump in the number of filter management programs and a 27 percent increase in tonnage. Antifreeze collection was also up from FY06. Household hazardous waste programs experienced a healthy rise in both the number of programs and tonnage, while achieving the lowest per-ton operating costs in five years.

Table 1: Local Government Special Waste Management, FY03 to FY07

	FY03	FY04	FY05	FY06	FY07
Used Motor Oil					
Number of programs	125	124	119	122	126
Gallons collected	907,123	939,916	987,057	933,618	872,399
Oil Filters					
Number of programs	21	19	17	20	32
Tons collected	18.64	24.07	20.40	28.21	35.84
Antifreeze					
Number of programs	58	63	55	58	62
Gallons collected	26,308	26,767	41,050	32,415	35,893
Lead Acid Batteries					
Number of programs	86	90	89	95	93
Number collected	92,292	100,217	97,290	91,947	83,853
Household Haz. Waste					
Number of programs	31	32	34	34	40
Number of permanent sites	17	17	17	16	16
HHW tons collected	1540.59	1760.17	1940.57	2066.91	2227.24
Total cost reported	$2,161,359 $1,403/ton	$2,429,912 $1,381/ton	$4,417,657 $2,276/ton	$2,718,980 $1,315/ton	$2,729,511 $1,226/ton

Conversions: Oil, 1 gal = 7.4 lbs; Antifreeze, 1 gal = 8.42 lbs; Lead Acid Battery, 1 battery = 35.9 lbs

Yard Waste Management

The yard waste tonnage for FY07 was almost unchanged from FY06. Although North Carolina began to experience a serious drought in 2007, it did not seem to affect the amount of material collected by local governments as of the end of the fiscal year. It is likely that North Carolina will see a drop in yard waste tonnage in FY 08 due to the severe lack of rainfall. With the steady performance of local yard waste diversion programs, North Carolina once again avoided the disposal of over a half million tons of material from landfills in FY07. Total disposed tonnage would be higher by five percent if the 1993 yard waste ban was not in effect.

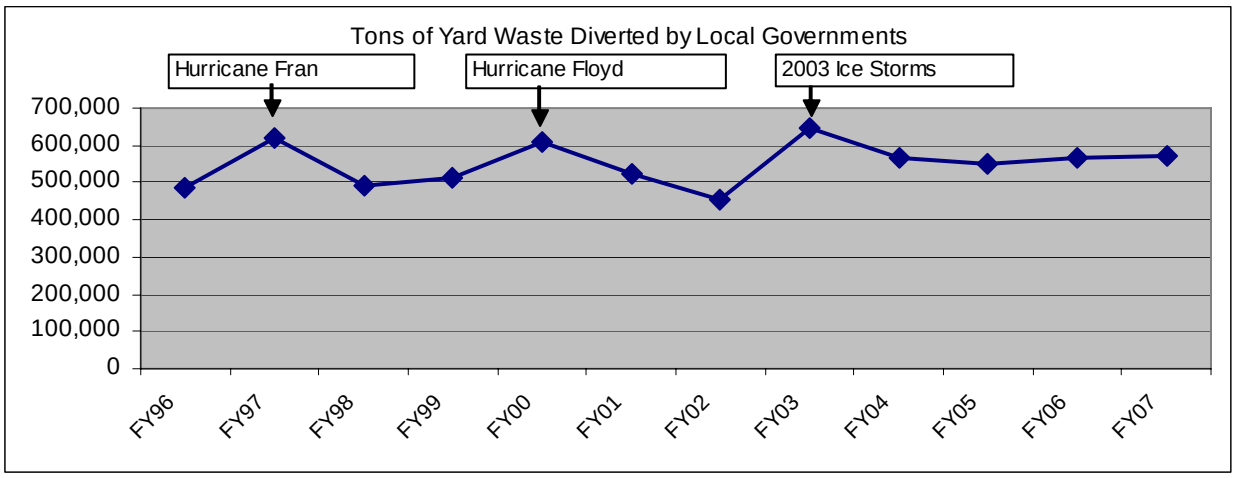
Table 2: Local Government Yard Waste Management FY06 and FY07

Destination of Materials	FY 06 Tons Managed	FY 07 Tons Managed	Percentage Change
End Users (direct delivery)	54,438	57,854	+6%
Local mulch/compost facility	513,635	513,140	0%
TOTAL DISPOSAL DIVERSION*	**568,073**	**570,994**	**+1%**
Other Public Facility**	*151,960*	*107,486*	-29%
Private Facility	79,854	77,819	-2.5%
LCID Landfill	128,157	142,647	+11%
YARD WASTE TOTALS	**776,084**	**791,460**	**+2%**

* Tonnages under the row for "Total Disposal Diversion" are not included in diversion because of data redundancy, uncertainty about actual disposition of the waste, and actual disposal of noted tonnages.

** Yard Waste Totals exclude tons for "other public facilities" - it is assumed these tons were captured under other categories.

Chart 1: Yard Waste Diverted From Disposal by Local Governments, FY96 – FY07



Recycling Markets and Prices

FY07 marks the fifth straight year of strong market demand for recyclable materials by both domestic and export markets, as reflected in consistently strong pricing for plastic, paper, and metals. China continues to exert tremendous influence over the trading of recyclable commodities, with much of its industrial production dependent on recycled materials imported from the U.S. According to the 2006 National Association of PET Container Resources Annual Report (http://www.napcor.com/pdf/2006PET_Report.pdf), almost 40 percent of all PET bottles recovered in the U.S. now go to China, and scrap paper, much of which is destined for Chinese ports, has become one of the largest bulk exports of any commodity for the U.S.

As can be seen in Table 3 displaying the price received by three representative processing facilities in eastern, central, and western North Carolina, recycling markets are demonstrating a consistency that should give local recovery programs confidence and reason to expand collection programs.

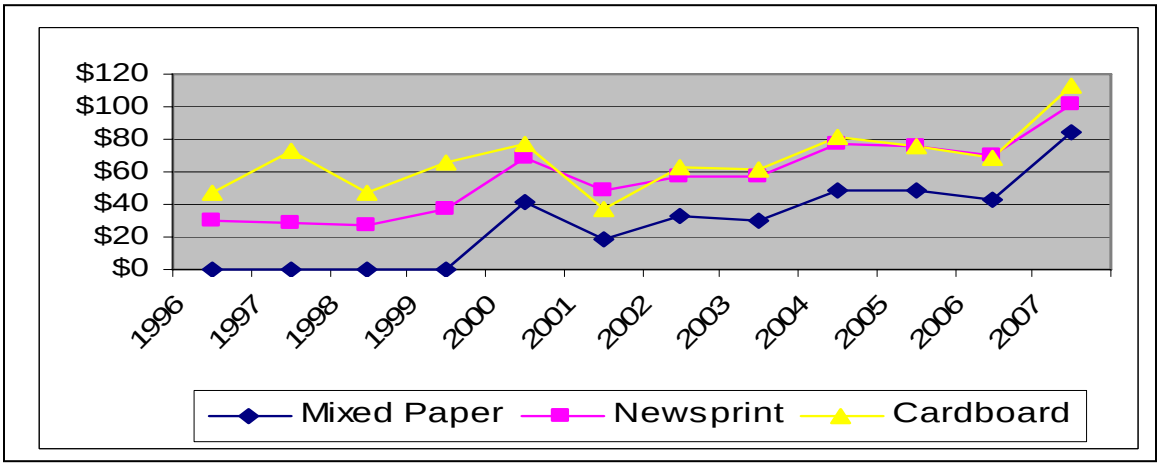
Table 3: Recycling Market Prices Received by Major NC Processors, FY 06

Materials	Summer 2006	Fall 2006	Winter 2006-07	Spring 2007	Summer 2007
Aluminum Cans, Lbs., loose	$.74	$.84	$.92	$.93	$.90
Steel cans, gross tons, Baled	$115	$103	$107	$144	$146
PETE, Lbs. Baled	$.15	$.13	$.15	$.17	$.17
HDPE, Lbs., Baled	$.21	$.22	$.23	$.25	$.27
Newsprint, ton, baled	$71	$81	$91	$119	$114
Corrugated, ton, baled	$105	$87	$73	$126	$133
Office paper, ton, baled	$138	$143	$168	$188	$192
Mixed paper, ton, baled	$57	$53	$56	$87	$93
Clear glass, ton	$23	$23	$23	$23	$23
Brown glass, ton	$17	$17	$17	$17	$17
Green glass, ton	-$5	-$5	-$5	-$5	-$5

As reflected in the table, paper prices enjoyed a strong rise over the course of FY07. Mixed paper continued to show its strength as a legitimate grade. By now, it should be a routine material collected in local government curbside and drop-off programs.

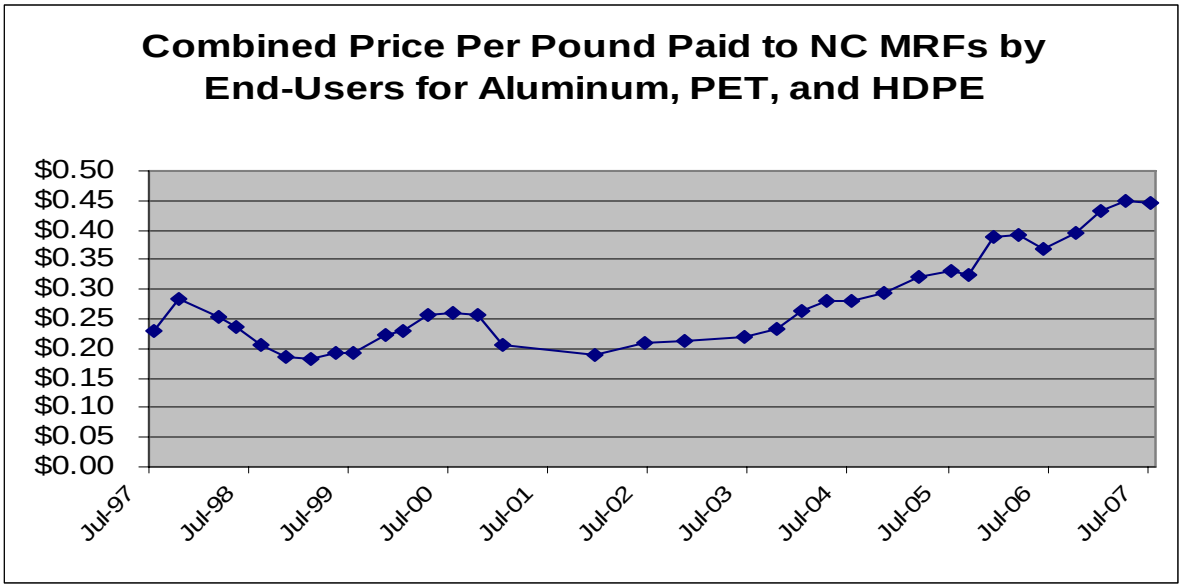
Figure 1 below, presents the average yearly paper mill pricing for the southeastern U.S. as reported in the Official Board Markets Yellow Sheet, a major paper industry trade publication (http://www.packaging-online.com/paperboardpackaging/issue/issueList.jsp?id=43). As can be seen, mixed paper has emerged in the past decade as a highly sought-after grade, closely tracking the pricing for the more traditional grades of newspaper and cardboard.

Figure 1: Prices Reported for the Southeast for Mixed Paper, Cardboard, and Newspaper, 1996 - 2007



Container materials such as PET, aluminum and HDPE are experiencing similar increases in pricing, reflecting a growing appetite for recovered commodities by domestic and global markets. Figure 2 shows the composite price-per-pound received by material recovery facilities in North Carolina for these commodities. It documents the steady rise in prices over the past five years.

Figure 2: Prices Paid for Container Materials, 1997 - 2007



Recycling Market Development

Recycling markets in North Carolina are strong, and the amount and kinds of materials recycled in the state are growing. For example, carpet recycling companies in the state began collection operations in 2007 in response to a growing demand for carpet materials in the southeast. A recycler of wallboard near Charlotte expanded its business to feed a growing appetite for its processed gypsum and began to reach out to communities to setup wallboard collection centers. A metal recycler in Asheboro opened a new material recovery facility for paper and containers, allowing the town to then begin a new curbside collection program (Asheboro was one of the few towns of its size in the state without curbside collection). A major paper recycler in the southeast also began construction of a new single stream material recovery facility in Charlotte, which will double the curbside processing infrastructure in that area. And in a development close to North Carolina that will positively affect markets, Coca Cola announced plans for a $60 million PET recycling plant in Spartanburg, SC. The recycled PET will be used to make new plastic bottles at manufacturing facilities in North Carolina.

A number of other recycling companies in the state also took steps to expand their operations in FY07, including two of the state's electronics processors, three plastics recyclers, and companies recycling metals, pallets, wood, and organics. The capital investments made by these firms will enhance their capacity for new tonnage.

Some new market development has been driven by the law requiring ABC permit-holders to begin recycling their beverage containers on January 1, 2008. At least six new collection companies started up to provide collection services to bars and restaurants in different parts of the state, and a number of existing recyclers and haulers have also expanded their operations to serve permit-holders. The glass plants in North Carolina anticipate a healthy increase in the amount of cullet, or recycled glass, supplied to their facilities as a result of the ABC law.

A long-term and ongoing problem for recycling in North Carolina is answering the demand needs of recycling companies in the state. The capacity of the state's recyclers exceeds the existing available supply, and their continued growth will require greater recovery of materials from disposal. Material prices reflect both the global and domestic shift toward greater reliance on recycled commodities.

CHAPTER 3 – Scrap Tire Management

Scrap Tire Disposal Account

The Scrap Tire Disposal Account (STDA) was created by the 1993 General Assembly. It receives 27 percent of its revenues from the Scrap Tire Disposal Tax initiated on October 1, 1993.

Beginning in October 1993, 25 percent of the STDA fund was allocated for cost overrun grants to counties and 75 percent was allocated for clean-up of nuisance tire sites. Starting with the August, 1997 distribution, 50 percent of the fund is allocated for cost overrun grants, 10 percent for clean-up of nuisance tire sites and 40 percent for processed tire material market development grants.

FY 06-07 Balances

Balance of Funds as of July 1, 2006	$6,116,801.16
Deposits Received FY 2006-2007	$3,633,522.82
Total Funds in Account	$9,750,323.98
Grants to County Scrap Tire Programs	$1,764,596.22
Nuisance Tire Site Cleanup Program	$407,701.03
Processed Tire Material Grants	$629,971.05
Balance of Funds as of June 30, 2007	$6,948,055.68
Obligated funds as of June 30, 2007*	$2,951,469.61
Net Balance of Funds as of June 30, 2007	$3,996,586.07

* $2,951,469.61 obligated: $650,570 for tire cleanup, $2,300,900 for tire recycling grants under contract and under negotiation

Tire Tax Distribution

Of the state's tire disposal tax revenue, 68 percent is distributed to counties on a per capita basis. In the past year, the total amount distributed was $9,120,877.50 (see Table 7). This subsidized tire disposal costs for the counties, but did not cover the total expenses of some counties. The total distributed to the counties represented 75 percent of the total reported disposal costs of $11,049,377.65. The distribution provided an average of $1.03 for each of the 8.8 million scrap tires handled by the counties.

On January 1, 1994, counties stopped charging tipping fees to dispose of tires that were certified as generated in N.C. (G.S. 130A-309.58). Counties may charge a fee for tires presented for disposal that are not accompanied by a scrap tire certification form verifying the tires were generated in North Carolina, scrap tires stockpiled prior to January 1, 1994, or new tires that are scrapped by their manufacturer because they do not meet the standards for salable tires.

Counties whose scrap tire management costs exceed the amount they receive in their allocation of the tire tax can apply for a grant to cover the deficit. For the first grant cycle of this fiscal year, 61 counties requested $1,312,536 and were awarded $847,422. In the second grant cycle, 62 counties requested $1,206,815 and were awarded $917,174.

Funds are available to help counties whose costs exceed their allocation. Historically, the amount of grant funds requested by counties has surpassed availability. Scrap tire legislation requires the division to consider county efforts to avoid free disposal of out-of-state tires and county program efficiency in using their allocated funds when making decisions about grant awards. The amounts requested and awarded are as follows.

Grant Period	10/03-3/04	4/04-9/04	10/04-3/05	4/05-9/05	10/05-3/06	4/06-9/06
Funds Available	$834,700	$974,029	$884,873	$872,316	$827,869	$936,920
Funds Awarded	$767,032	$949,011	$799,168	$907,438	$847,422	$917,175
Grant Requests	60	67	60	61	61	62
Funds Requested	$1,094,005	$1,403,584	$1,157,388	$1,267,951	$1,312,536	$1,206,815

Processed Tire Material Market Development Grants Awarded

The goal of the division's grant program is to make scrap tire recycling sustainable in North Carolina. This goal can be met. We anticipate awarding grants for manufacturing rubber products such as mats, auto parts, gaskets, flooring material, tire derived fuel, new tire manufacturing and other applications.

The Processed Scrap Tire Material Market Development Grants program received its first allocation of funding in August 1997. Grants awarded to date are:

- Roll-Tech, Inc., Hickory, N.C. $212,420.00
  Construct additional molds to increase hard rubber tire manufacture
  COMPLETED
- Continental Tire, Inc., Charlotte, N.C. $1,520,000.00
  Develop “tire to tire” technology with 25 percent recycled content goal
  COMPLETED
- Jackson Paper, Inc., Sylva, N.C. $377,000.00
  Boiler modifications for tire derived fuel
  COMPLETED
- N.C. State University, Raleigh, N.C. $38,291.00
  Tooling development for scrap tire recycling
  COMPLETED
- TIRES, Inc., Winston Salem, N.C. $320,000.00
  Produce playground/industrial mats
  COMPLETED
- Texas Encore Materials, Inc. (Carolina Materials LLC), Belmont, N.C. $983,360.00
  Manufacture extruded sheets from processed tire material
  COMPLETED
- Roll-Tech LLC, Hickory, N.C. $855,937.50
  Equipment acquisition for manufacturing solid rubber wheels
  COMPLETED
- N.C. State University, Raleigh, N.C. $122,480.00
  Performance of Tire Chips in Bed Systems Drain-fields of Septic Systems
- Central Carolina Holdings LLC, Cameron, N.C. $912,000.00
  Equipment acquisition for expansion of TDF and crumb rubber production

Tire Cleanup Program

A total of 374 nuisance tire sites have been identified in North Carolina: 351 have been cleaned and 21 sites have cleanups underway. The remaining two sites are either under investigation or enforcement action. Counties are encouraged to locate and clean all small tire sites through countywide cleanup activities.

Status	Number of Sites	Total Known Tires	Total Tires	Cleared Tires
Cleanedup	351	8,253,857	93.5%	8,253,857
Under Clean Up	21	552,480	6.2%	114,455
Remaining Sites	2	18,000	0.3%	0
TOTAL	**374**	**8,824,337**	**100%**	**8,369,312**

The law requires the Division to first address nuisance tire sites that pose the greatest threat to public health and the environment. For this reason, the largest identified sites have been cleaned up. The section has established and implemented a specific cleanup plan for each known nuisance tire site. As new sites are discovered, prompt investigation leads to a cleanup plan for each site within 30 days. The plan is implemented as soon as possible to minimize potential threats to human health and the environment. The section is committed to the N.C. Big Sweep program and other countywide cleanup efforts, with reimbursements going to counties that request funds to dispose of scrap tires collected by these events.

To date, 183 nuisance tire sites were cleaned using STDA funds. Cost recovery efforts collected $425,784.39 from responsible parties in 11 of these sites. One site is under cost recovery action. As a cost-saving measure, minimum-security inmates have been used to help remove tires from numerous nuisance tire sites in 28 counties.

Scrap Tire Generation

The U.S. EPA standard to estimate scrap tire generation is one tire per person, per year.[1] The 2006 N.C. population was about 8.9 million, so it is estimated an equal number of tires were generated. This includes passenger, truck, and tires for special uses, such as off-road equipment and tractors. Counties report tires collected in either tons or the number of tires. Tons can be converted to number of tires to be compared to the population to determine the state's scrap tire generation rate. Several methods of converting tons to number of tires have been used over the years in an attempt to be most accurate. An EPA workgroup consisting of state scrap tire regulators, including North Carolina, has developed a conversion method for all states to use that will provide consistency in reporting. This will be beneficial by providing greater accuracy in compiling national reports that track trends in scrap tire management and recycling.

During FY 06-07, North Carolina counties disposed of 8,832,841 tires (calculated using the EPA workgroup method). Comparing scrap tire generation to population results in 1 scrap tire per person.

Tire Volume

All counties are required to provide a facility for scrap tire collection and to report on their management programs. A summary of this data is presented in the Appendix.

In FY 06-07, North Carolina businesses and individuals disposed of approximately 200,000 tons of tires. These tires were managed by county collection facilities and private processing/disposal facilities as follows:

144,411 tons	Managed by counties and shipped to two NC processing firms
1,280 tons	Managed by counties and shipped to out-of-state processors
54,066 tons	Tires taken directly to processing firms (not managed by counties)
199,757 tons	**Total**

Counties reported receiving approximately 146,000 tons from N.C. scrap tire generators. The counties shipped about 144,000 tons to two private North Carolina recycling facilities; the remaining tons were shipped to out-of-state processors.

Two private N.C. processing firms received 146,000 tons from county tire programs and an additional 54,000 tons directly from disposers not participating in county tire programs. These may be individuals involved in privately-funded cleanups or tire dealers not participating in a county program. In addition, the two N.C. processors received 66,005 tons of tires from other states.

The tire program's success is proven by the increase in the number of tires properly disposed at permitted facilities. When free disposal was implemented in 1994 for scrap tires generated in the normal course of business in N.C., a potential problem emerged of illegal disposal of out-of-state tires at county collection sites. Counties should be diligent in screening scrap tires brought for disposal to identify out-of-state tires and other tires not eligible for free disposal. Those that do not are likely spending a portion of their tire tax revenues for disposal of out-of-state tires.

The Section assists counties in avoiding fraudulent disposal of out-of-state tires. County efforts to deter disposal of out-of-state tires is an eligibility factor when awarding grants from the STDA to cover cost over-runs.

[1] "Markets for Scrap Tires," 1991. U.S. EPA, Office of Solid Waste. EPA/530-SW-90-074A. Washington, DC.

County Tire Disposal

There are 98 county programs, including one regional program [Carteret, Craven and Pamlico (CRSWMA)]. Counties reported spending a total of $11,049,377.65 for scrap tire disposal. The reported costs for scrap tire disposal varied greatly. Some counties only report disposal costs while other counties include associated costs, such as personnel or equipment. Counties with unusually low costs may stockpile tires during the year rather than sending them for processing. Some of the fluctuation is probably due to recordkeeping errors or county reporting errors. Also, some counties manage tires inefficiently. For example, counties that allow citizens to dispose tires in "green boxes" or at multiple recycling facilities incur increased labor costs to recover and load tires into trailers.

Tire disposal costs charged by processors are very competitive in North Carolina. North Carolina processors report that county contracts typically charge $70-$85 per ton, including transportation and trailer rental costs. Counties at a distance from processing facilities may pay as much as $85-$100 per ton.

COUNTY REPORTS OF TIRE DISPOSAL ACTIVITIES

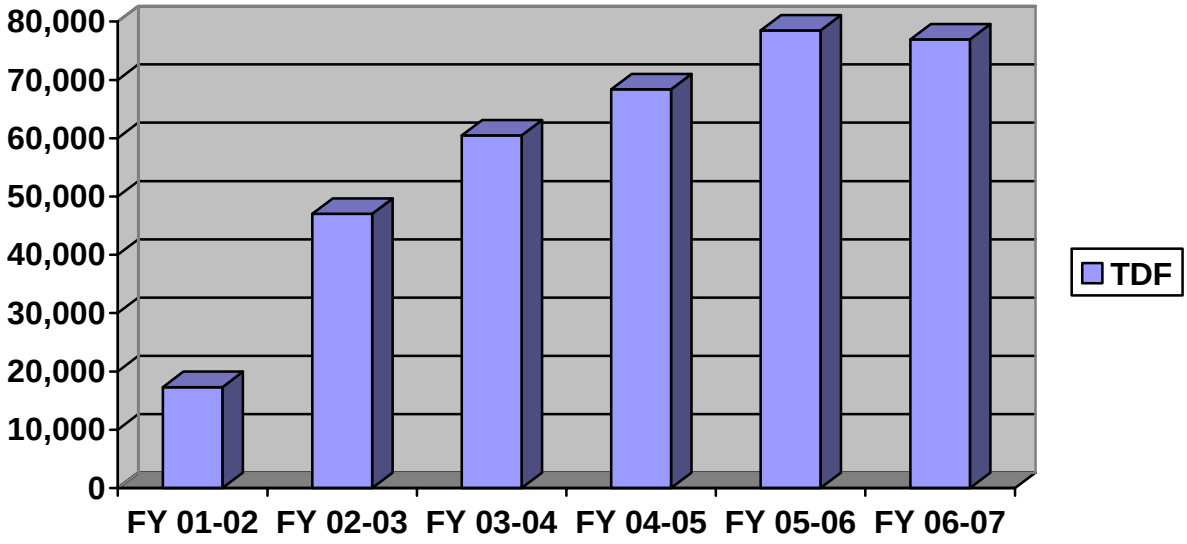
County	Tons Collected	Tax Revenue	Total Costs	Contractor
Alamance	2028.41	$146,208.98	$149,510.70	CCTD
Alexander	413.73	37,573.43	36,670.00	USTR
Alleghany	270.68	11,552.00	24,006.36	USTR
Anson	226.61	27,366.88	20,451.87	USTR
Ashe	588.93	26,802.70	43,424.07	USTR
Avery	246.45	19,148.64	23,647.05	USTR
Beaufort	873.40	48,806.58	83,295.96	CCTD
Bertie	204.30	20,945.21	20,260.02	CCTD
Bladen	615.88	35,051.06	42,344.00	CCTD
Brunswick	1,417.43	91,631.22	161,449.09	CCTD
Buncombe	2,458.13	229,185.21	230,092.00	USTR
Burke	1,434.30	94,362.82	114,358.00	USTR
Cabarrus	2,404.39	156,957.56	175,408.71	USTR
Caldwell	1,329.22	83,509.38	104,337.81	USTR
Camden	60.82	9,197.05	12,280.60	CCTD
Caswell	157.16	25,194.00	14,867.47	CCTD
Catawba	3,316.36	157,492.14	262,111.51	USTR
Chatham	786.08	58,782.40	65,481.30	CCTD
Cherokee	347.35	27,451.50	42,076.40	USTR
Chowan	518.72	15,387.59	48,831.00	CCTD
Clay	167.60	10,297.84	14,213.40	USTR
Cleveland	1,907.63	103,477.15	179,142.62	USTR
Columbus	978.10	58,010.16	85,012.51	CCTD
CRSWMA	2,898.81	177,929.88	266,977.08	CCTD
Cumberland	4,289.79	328,994.48	273,121.69	CCTD
Currituck	331.10	23,564.63	33,739.87	WM
Dare	676.61	36,565.92	0	CCTD
Davidson	2,041.90	163,255.84	159,255.37	USTR
Davie	114.59	40,603.93	5,347.28	USTR
Duplin	797.58	54,863.43	81,140.07	CCTD
Durham	3,052.25	254,912.63	276,242.00	CCTD
Edgecombe	1,104.84	57,091.14	12,206.60	CCTD
Forsyth	6,349.18	342,609.92	496,018.40	USTR
Franklin	718.91	56,566.80	56,977.16	CCTD
Gaston	2,843.95	204,714.65	234,904.65	USTR
Gates	149.59	11,745.68	14,740.00	CCTD
Graham	166.42	8,597.85	21,516.40	CCTD
Granville	872.00	56,409.38	69,497.00	CCTD
Greene	244.78	21,312.83	50,497.68	CCTD
Guilford	7,363.93	464,073.81	536,093.75	CCTD
Halifax	884.99	59,993.32	86,361.15	CCTD
Harnett	1,438.54	106,481.01	95,951.65	CCTD

County	Tons Collected	Tax Revenue	Total Costs	Contractor
Hertford	316.34	25,270.09	51,467.87	CCTD
Hoke	452.00	41,638.62	34,597.34	CCTD
Hyde	81.23	5,984.45	7,488.59	CCTD
Iredell	3,120.20	145,640.93	230,519.47	USTR
Jackson	595.79	37,919.98	60,058.15	USTR
Johnston	2,383.00	151,693.27	180,745.00	CCTD
Jones	187.95	10,891.22	19,071.27	CCTD
Lee	980.20	54,318.11	51,127.00	CCTD
Lenoir	1,525.06	62,182.18	128,810.38	CCTD
Lincoln	1,167.00	72,781.27	91,118.67	USTR
Macon	832.64	36,896.93	71,855.52	USTR
Madison	205.25	24,855.91	23,022.00	USTR
Martin	417.81	25,063.75	33,223.84	CCTD
McDowell	805.89	40,888.91	80,673.42	USTR
Mecklenburg	14,826.24	824,993.12	1,070,182.14	USTR
Mitchell	432.40	16,974.63	42,975.60	USTR
Montgomery	393.05	28,929.63	27,201.30	CCTD
Moore	964.72	84,785.46	61,930.23	CCTD
Nash	1,492.81	96,686.57	129,029.87	CCTD
New Hanover	3,641.66	187,008.13	302,257.78	CCTD
Northampton	255.54	22,932.92	20,485.40	CCTD
Onslow	2,115.96	169,293.91	175,097.06	CCTD
Orange	1,409.55	128,909.34	116,018.35	CCTD
Pasquotank	878.00	40,337.15	98,556.91	CCTD
Pender	715.59	48,384.97	66,326.40	CCTD
Perquimans	221.90	12,675.92	21,271.00	CCTD
Person	516.90	39,366.54	47,854.00	CCTD
Pitt	2,745.87	150,937.71	203,738.96	CCTD
Polk	204.21	20,178.58	19,190.79	USTR
Randolph	2,238.00	144,813.04	201,248.46	CCTD
Richmond	1,105.00	49,456.29	57,474.35	CCTD
Robeson	1,334.00	134,883.85	97,144.61	CCTD
Rockingham	1,353.00	97,872.23	102,503.00	CCTD
Rowan	2,184.66	141,625.14	146,443.22	USTR
Rutherford	1,351.54	67,248.18	97,500.00	USTR
Sampson	1,400.00	66,853.76	121,255.77	CCTD
Scotland	578.58	39,192.54	40,906.02	CCTD
Stanly	986.22	62,775.75	98,688.55	USTR
Stokes	535.52	48,889.09	46,577.47	USTR
Surry	1,839.42	77,060.66	134,882.10	CCTD
Swain	276.56	14,354.84	16,575.00	USTR
Transylvania	423.00	31,641.96	45,719.00	USTR
Tyrell	58.38	4,446.38	5,619.00	CCTD
Union	1,583.90	164,058.21	119,076.67	USTR
Vance	851.94	46,549.93	116,968.00	CCTD
Wake	13,116.53	778,116.32	590,243.85	CCTD
Warren	303.72	21,384.37	26,419.02	CCTD
Washington	415.33	14,317.13	36,875.06	CCTD
Watauga	751.00	45,591.01	47,332.80	USTR
Wayne	2,685.00	122,568.13	203,390.00	CCTD
Wilkes	1,310.14	71,202.65	119,603.31	USTR
Wilson	2,517.21	81,367.98	166,100.62	CCTD
Yadkin	467.67	39,497.26	47,373.94	USTR
Yancey	328.23	19,238.07	DNR	USTR
TOTAL	**145,690.87**	**$9,120,877.50**	**$11,049,377.65**	

CCTD – Central Carolina Tire Disposal / USTR – U.S. Tire Disposal / WM – Waste Management / WR – Waste Recovery

Tire Recycling

In FY 06-07, 70% of tires received by the two North Carolina processing facilities were recycled. In order of weight recycled, the categories are tire-derived fuel, civil engineering (including drain field material), other rubber products, crumb/ground rubber, and recap/resale. The remaining tires go to the two permitted tire monofills in the state. The market for tire-derived fuel (TDF) has seen strong growth in the last few years. In FY 06/07, 76,934 tons of TDF were produced, down slightly from FY 05/06. One North Carolina processor is adding an additional TDF production line to meet increased demand. This should result in an increase in TDF production next year. This processor is also adding new equipment for the production of crumb/ground rubber, which should boost the state's tire recycling rate next year. The Section is actively pursuing new opportunities for sustainable scrap tire recycling.



CHAPTER 4 - White Goods Management

"White goods" are defined in General Statute 130A-290 (a)(44) as, "refrigerators, ranges, water heaters, freezers, unit air conditioners, washing machines, dishwashers, clothes dryers and other similar domestic and commercial large appliances." In 1993 the North Carolina General Assembly passed the statute because white goods were difficult to dispose and contained chlorofluorocarbons refrigerants (CFCs). Counties were mandated to manage them by providing at least one disposal site, at no cost to citizens, and to arrange for the removal of CFCs. To fund this statute, the General Assembly imposed a $3 tax (Advanced Disposal Fee or ADF) on new white goods purchased.

Current Trends in White Goods Management

- Reports from metal recyclers indicate that overseas demand for scrap metal continues to keep scrap metal prices high. Most counties continue to receive good returns on scrap metals sales. Counties that have improved their white goods facilities with grants from the white goods program are receiving exceptional returns. This means that fewer counties are requesting cost over-run grants to meet operational expenses. As a consequence of the continuing high value of scrap, the white goods program is increasingly moving toward assessing counties in regards to their efficiency in maximizing profits.

- The white goods program is actively encouraging counties that have yet to upgrade their white goods facilities' infrastructure to do so by using the program's capital improvements grants program. Those counties that have accessed the program for funds have significantly improved their white goods management, with subsequent improvement in the environmental impact of white goods and improved revenue return.

- A small number of counties with high program costs have extensive programs which are beyond the scope of the white goods law. These counties continue to request subsidizing of their programs from the white goods program. County programs which do not demonstrate efficiency will have their grant requests severely limited in the future in order to encourage the program to more strongly support capital improvements.

- A small portion of rural counties have struggled with meeting white goods costs due to sparse populations and limited tax bases. These counties will continue to require subsidization of their programs to meet white goods disposal costs. This activity will continue to be supported by white goods grants in the future.

- The white goods program continues to encourage counties to improve CFC reclamation by providing money to counties for purchasing of machinery, training of personnel and finding markets for reclaimed CFCs. Refrigerant gas recycling provides another source of revenue to counties willing to organize such a program.

- Counties which do not use the white goods tax revenues for white goods management are in violation of the white goods law. However, a method has not been established for ensuring that counties abide by the law. County programs would be greatly improved if all appropriated funds were used as intended.

This interim report is based on information supplied by counties' Annual Financial Information Reports (AFIRs). AFIRs are submitted to the Office of the State Treasurer. AFIRs are due by November 1st. At the time this report was prepared, January 10, 2008, 60 counties had submitted their AFIRs. A final, revised report will be issued when the remaining counties submit their AFIRs. It should be noted that, aside from many AFIRs from counties being late, many have blank or erroneous entries.

Counties that did not report as of January 10, 2008

Alamance	Ashe	Beaufort	Bertie	Burke	Caldwell
Camden	Cherokee	Chowan	Columbus	Currituck	Davidson
Gates	Graham	Greene	Halifax	Harnett	Hoke
Jackson	Jones	Madison	Montgomery	Nash	Northampton
Pamlico	Pender	Perquimans	Polk	Richmond	Robeson
Rowan	Sampson	Scotland	Transylvania	Wake	Watauga
Wayne	Wilkes	Yadkin	Yancey		

Financial Update

- **The white goods management account no longer runs a large surplus**. The number of counties that forfeit their tax proceeds declined significantly while overall grant requests continue to stay relatively high. In FY 98-99, 42 counties forfeited tax proceeds, the largest number of counties to do so in one year to date. However, by the fourth quarter of FY 06-07, only eight counties had forfeited their proceeds.

- In FY 2005-06 the white goods management account received $539,293.00 in forfeited funds.

- In FY 05-06 the white goods management account received $295,473.29 in funds forfeited by counties. In FY 06-07, the white goods account received $231,730.49.This represents a continuous and significant drop in revenues.

- The amount of forfeited funds available for redistribution dropped 75 percent from the early years of the decade. At the same time that county requests for cost overrun grants have declined steadily and capital improvement grant requests have remained relatively unchanged.

White Goods Management Account

Net white goods ADF collections in FY 06-07 totaled $5,220,325.82. Funds were disbursed as follows:

$3,609,002.47	Allocated for direct distribution to counties
$1,002,500.68	Allocated for white goods management account
$401,000.28	Solid Waste Management Trust Fund
$207,822.39	N. C. Revenue Department cost of collections
$3,377,271.98	Actual amount distributed directly to counties
$231,730.49	Forfeited by ineligible counties

Although $3,609,002.47 (72 percent of the net disposal fee collections) was allotted for distribution, ineligible counties forfeited $231,730.49. The forfeited funds went to the white goods management account, which receives 20 percent of net collections.

The White Goods Management Account was established to help counties whose costs exceed their share of Advanced Disposal Fee (ADF) revenue. The account receives 20 percent of white goods ADF revenues. It also receives funds forfeited by counties whose surplus exceeds their threshold amount. By the end of FY 06-07, the White Goods Management Account had $1,025,413.00 in actual and projected commitments and an account balance of $1,256,405.99 which was slightly higher than the starting balance of 969,305.17. These commitments include $500,000 for grant requests for the next fiscal year and $525,413.00 for capital improvement grants obligations. This account is used to fund counties that incur deficits in their white goods accounts and to provide capital funds to counties to upgrade program infrastructure.

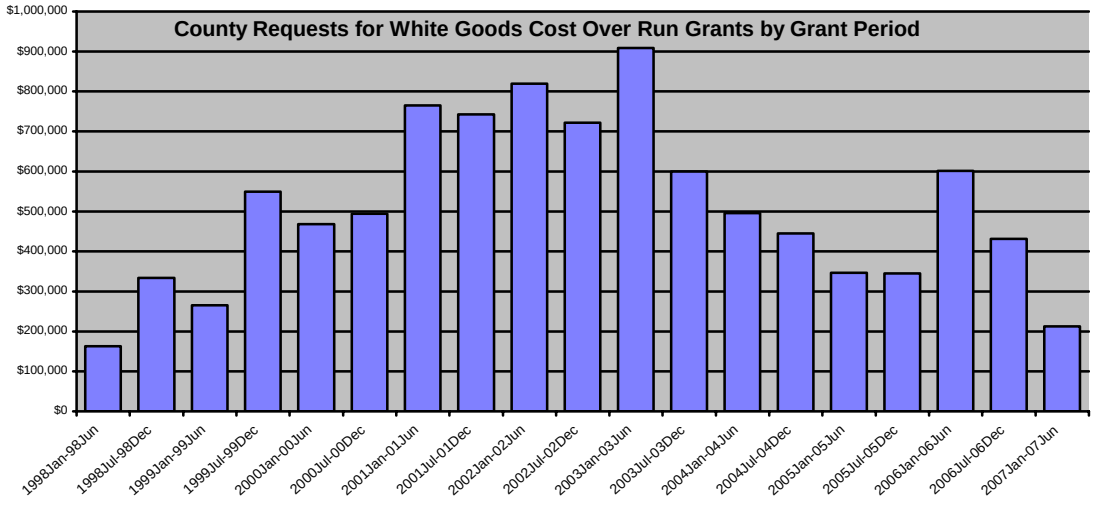
WHITE GOODS DISPOSAL ACCOUNT BALANCE FY 06-07

Beginning Balance (July 1, 2006)	$ 969,305.17
Funds Received during FY 06-07	$1,234,231.17
Cost Overrun Grants Disbursed in FY 06-07	$ 322,309.22
Capital Improvement Grants Paid in FY 06-07	$ 647,919.89
Clean up of Illegal White Goods Sites in FY 06-07	$ 3,954.00
Moneys Needed for Future Grant Awards*	$1,025,413.00
Ending Balance (June 30, 2007)	$ 203,940.23

*Includes $525,413.00 reserved for capital improvement grants and $500,000 reserved for overrun grants.

Graph 1 (see below) shows that total amounts of money requested by counties for cost over-run grants in the last recent grant periods have decreased. There were sharp rises in the amount of funds requested in the January – June 2006 and the July-December 2006 grant rounds due to the failure of one county to accurately report expenses. Otherwise, the graph continued a downward trend. This is believed to be primarily due to the high value of scrap metal and the good returns counties are receiving for the sale of their scrap metal. The high value of scrap metal is being driven primarily by demand in the overseas markets. This condition has existed for the past several years and there is no way to determine how long the situation will last. If overseas demand decreases significantly, it can be expected that the number of counties requesting cost over-run grants will increase, as well as, the amounts of the grants requested. At the end of 2001, the benchmark price (benchmark pricing does not include the costs of shipping and processing metals) of scrap metals was at $95 per ton. At the end of 2003, the benchmark price was set at $150 per ton, and in December of 2006, the benchmark price of scrap metal stood at $185 per ton. Presently, at the end of 2007, the benchmark price now stands at $220 per ton.

Graph 1



Over $180,991.59 in grants went to 22 counties for losses incurred July-December 2006; $141,317.66 was distributed to 15 counties for losses incurred January-June 2007 (Tables 1 and 2).

Table 1
Grant Requests & Awards from the White Goods Disposal Account for Losses Incurred July-December 2006

County	ADF	Amount Requested	Amount Paid
Beaufort	$9,537.90	$20,070.22	$10,035.11
Chatham	$11,438.83	$22,100.11	$11,050.06
Chowan	$3,009.66	$2,075.74	$2,075.74
Cleveland	$20,257.14	$23,726.78	$23,726.78
Currituck	$4,549.75	$3,654.16	$3,654.16
Duplin	$10,707.16	$18,965.88	$9,482.94
Durham	$49,678.85	$182,242.00	$18,224.20
Edgecombe	$11,213.38	$6,780.87	$3,390.44
Gates	$2,284.86	$2,915.66	$2,915.66
Graham	$0.00	$10,340.00	$5,170.00
Lenoir	$12,176.33	$18,185.77	$13,639.33
Macon	$6,607.28	$1,317.72	$1,317.72
Madison	$4,202.00	$3,811.00	$3,811.00
McDowell	$8,994.46	$354.14	$354.14
Mitchell	$3,326.00	$13,774.33	$13,774.33
Nash	$9,189.08	$27,351.28	$20,513.46
Orange	$25,158.15	$40,366.05	$20,183.03
Perquimans	$2,462.47	$2,460.43	$2,460.43
Stanly	$12,286.97	$12,144.11	$6,072.06
Tyrrell	$868.10	$3,959.19	$395.92
Washington	$2,803.56	$11,732.95	$5,866.48
Yancey	$3,758.38	$2,878.63	$2,878.63

Table 2
Disposal Grant Requests & Awards from the White Goods Account for Losses Incurred January- June 2007

County	ADF	Amount Requested	Amount Awarded
Camden	$1,773.02	$6,177.00	$6,177.00
Chatham	$11,438.83	$26,664.82	$13,332.41
Chowan	$3,009.66	$7,212.94	$7,212.94
Cleveland	$20,257.14	$14,906.14	$14,906.14
Currituck	$4,549.75	$5,132.19	$5,132.19
Duplin	$10,707.16	$18,846.00	$14,134.50
Edgecombe	$11,213.38	$8,088.91	$4,044.46
Gates	$2,284.86	$4,658.94	$4,658.94
Hyde	0.00	$1,639.15	$1,229.36
Lenoir	$12,176.33	$12,275.12	$12,275.12
Macon	$6,607.28	$557.02	$557.02
Nash	$9,189.08	$60,277.65	$30,138.83
Orange	$25,158.15	$22,611.11	$11,305.56
Perquimans	$2,462.47	$8,702.53	$8,702.53
Washington	$2,803.56	$15,021.34	$7,510.67

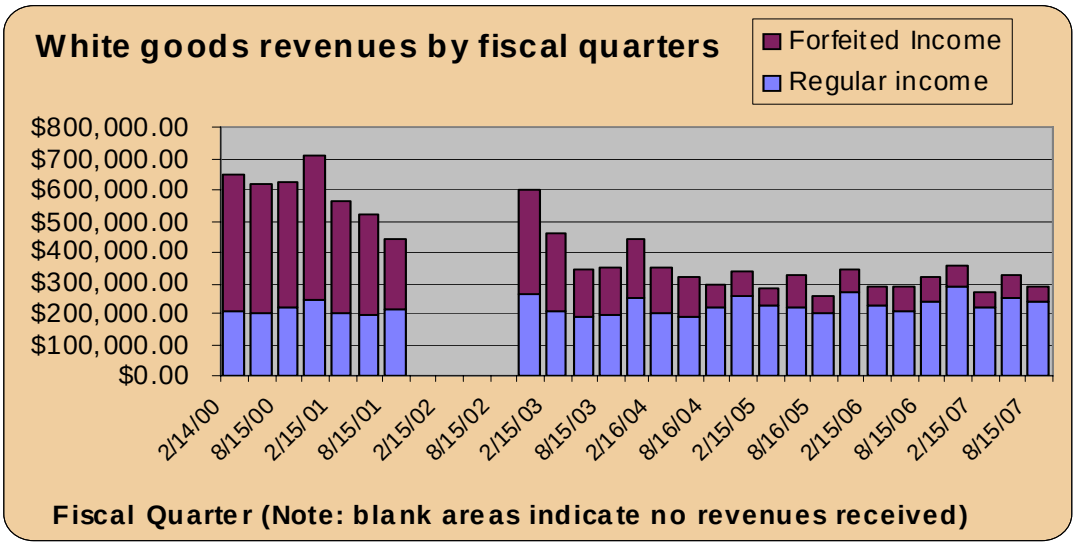
Capital improvement grants totaling $647,919.89 were awarded to nine counties (Table 3). *In FY 06-07, counties received* $970,229.14 *in cost overrun and capitol improvement grants, and* $1,234,231.17 *in revenues was received.*

Table 3
Capital Improvement Grants Paid to Counties for Fiscal Year 2006-2007

County	Amount	Purpose
Alamance	$98,101.85	CFC equipment, storage bldg. & skid steer
Cherokee	$15,650.00	skid steer
Duplin	$39,500.00	skid steer
Greene	$63,341.20	CFC equipment, pad & skid steer
Hoke	$25,000.00	concrete pad cover
Robeson	$120,310.00	roll-off truck and containers
Stanly	$181,070.84	CFC equipment, concrete pad, sheds, skid steer
Swain	$32,721.00	backhoe, CFC equipment
Wayne	$72,225.00	track-hoe

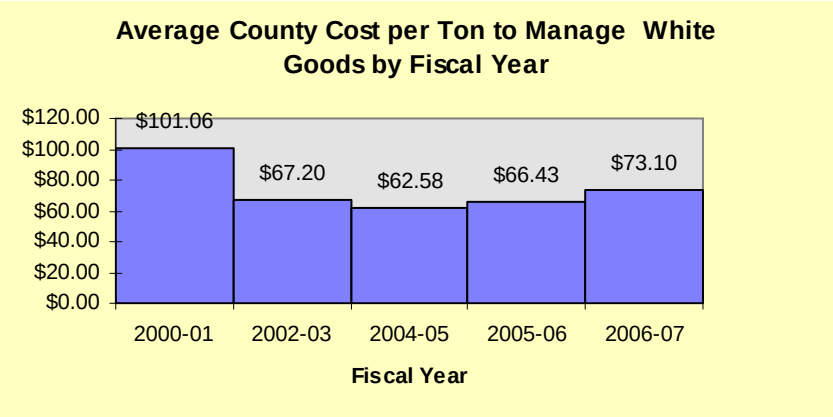
As graph 1 demonstrated, the total of the amounts requested has decreased gradually and steadily in recent grant periods. As the next graph depicts, the amount of available funds dropped significantly at the same time grant requests have declined and capital improvement grants requests have remained relatively steady. Funds are received into the white goods account from the Department of Revenue forty-five days after the end of the fiscal quarter.

Graph 2



The white goods program is actively encouraging counties to improve infrastructure and equipment to enhance county program efficiency. The net effect of these trends is that careful management of the fund will be necessary to keep it solvent.

Graph 3



Graph 3 above shows the average county cost per ton to manage white goods. The data was derived from previous annual reports and reporting county AFIRs, where counties listed daily operating expenses and the total tonnage collected by a county, if reported. This data indicates that, as the value of scrap metal has risen and counties have upgraded their infrastructure with grants from the white goods program over recent years, the cost to process white goods has dropped to a plateau. Minor fluctuations in the cost per ton are thought to be due to inconsistent reporting.

Program Results

Grant and ADF funding made it possible to clean up illegal dumpsites. Previously, many counties gave white goods a low priority and under-funded their management. The white goods account makes it possible for counties to obtain the specialized equipment or develop collection and loading areas needed to improve white goods management.

In FY 06-07, 60 county collection sites took in 38,517 tons, or an estimated 962,925 appliances. This compares to the 25,749 tons, or 644,000 appliances, collected in FY 91-92 by all 100 counties. Without the program, large numbers of appliances would have likely been dumped or stockpiled.

White Goods Management by County Governments

The banning of white goods from landfills in 1989 has encouraged recycling and better management. Comprehensive white goods management laws enacted in 1993 included an Advanced Disposal Fee [ADF]. In 1998, Senate Bill 124 extended the fee for three years, but reduced it from $10 to $3. In 2000, the sunset on the fee was removed.

The major accomplishment of the program is a drastic reduction in illegal dumping of white goods. The critical factor was requiring local governments to provide collection sites at no cost to citizens. Counties can use ADF proceeds to clean sites based on the percentage of white goods at the site.

CFC Collection

Another accomplishment came when counties began to implement proper management practices to capture and recycle CFCs (chloroflourocarbon refrigerants). This practice avoids the illegal venting of CFCs into the atmosphere and creates a potential revenue source for counties from the sale of CFCs.

The accidental and intentional venting of CFCs due to poor management practices may be more widespread than previously thought. Although markets exist for reclaimed CFCs, reports from sources in the field indicate that some counties and metal recyclers contracted by counties, accidentally and intentionally vent CFCs on a routine basis into the atmosphere. Proper extraction of CFCs from appliances is considered to be time-consuming, requires trained personnel, specialized equipment and is generally given low priority among solid waste programs.

State and federal environmental agencies are aware of the widespread practice of CFCs being illegally vented from appliances, but lack the manpower and funding to adequately regulate the practice.

The white goods program is actively encouraging and promoting counties to reclaim more refrigerant gasses from appliances. This is being done by emphasizing that the program can provide funding for the purchase of equipment, the training of personnel and helping counties to in find markets for reclaimed CFCs. It is hoped that the net result will be a decrease in the amounts of ozone depleting CFCs accidentally released into the environment, while at the same time providing a new revenue source for counties through reclaimed CFCs.

Extension of Funds to Expand Programs

The white goods program anticipates extending capital improvement grants to counties that, in the past, have accessed the program to a limited degree. To date, a minority of counties have repeatedly accessed the program for funds to replace worn and outdated equipment. This has allowed the white goods programs in these counties to become more efficient and profitable.

The trend now is to limit funds to counties that have repeatedly accessed the program for operational costs in the past and have thriving white goods programs and to extend funding to under capitalized counties. This will prove to be especially critical to counties who are or will be experiencing moderate to high growth rates in the coming years but have yet to upgrade their facilities in anticipation of the growth in their populations. Improved infrastructure for white goods means that it costs less for counties to manage their white goods, decreases the environmental impact of white goods, and improves the returns the counties receive for the value of their white goods as scrap metal. This has the effect of making the counties less dependent on cost over-run grants to meet operational costs and eases constraints on limited local funding.

Utilization of Funds

Though the white goods program has had many accomplishments, some problems remain. Some counties ignore the white goods law by not allocating white goods tax distributions to their white goods programs. This means that some county white goods programs are underfunded.

Many local governments are privatizing their white goods management. Privatization does not necessarily mean that programs are more efficient. In many instances, privatized white goods management is incorporated into a more comprehensive solid waste contract between a local government and a private firm, making it more difficult to measure program efficiency.

Forfeited Funds

Counties That Became Ineligible for Advance Disposal Fees (ADF) In March 2006
(Based on FY 05-06 AFIR Reports)

Anson	Bertie	Burke	Cabarrus	Camden
Cherokee	Chowan	Columbus	Currituck	Durham
Franklin	Forsyth	Gates	Graham	Greene
Halifax	Hyde	Lincoln	Nash	New Hanover
Madison	Montgomery	Pamlico	Pender	Perquimans
Pitt	Polk	Richmond	Robeson	Sampson
Scotland	Stokes	Wilson	Yancey	

Counties That Will Become Ineligible for Advance Disposal Fees in March 2007
(Based on FY 06-07 AFIR Reports)

These are counties that will not receive ADF distributions because undesignated balances exceed their threshold amounts.

Alexander	Anson	Cabarrus	Forsyth
Franklin	Moore	Onslow	Rockingham

Counties that do not submit their AFIR by March 1, 2008 will be ineligible to receive tax proceeds.

White Goods Management Costs

Counties can use the white goods ADF proceeds disbursed quarterly by the Department of Revenue for daily expenses incurred to recycle white goods. Funds can also be used for one-time expenses, such as purchasing specialized equipment and making site improvements for better management. A few county programs are not self-sustaining and require subsidies. Expenses for these programs include fuel, labor and the cost of associated items. Low or high program costs are not necessarily good indicators of program efficiency. This means that counties with minimal costs are not necessarily more efficient than counties with high costs. Some counties with low program costs are marginally in compliance with the law's intent.

Highest Operating Costs Reported

County	Cost per ton	Cost per appliance*
Washington	$483.43	$19.34
Cumberland	$298.04	$11.92
Alexander	$293.79	$11.75
Orange	$283.28	$11.33
Chatham	$229.90	$9.20
Rutherford	$156.21	$6.25
Stanly	$147.40	$5.90
Edgecombe	$140.26	$5.61
Vance	$133.23	$5.33
Gaston	$132.19	$5.29

Lowest Operating Costs Reported

County	Cost per ton	Cost per appliance*
Martin	$1.09	$0.04
Iredell	$3.43	$0.14
Swain	$12.51	$0.50
Lincoln	$16.03	$0.64
Bladen	$20.15	$0.81
Clay	$20.38	$0.82
Cabarrus	$21.59	$0.86
Carteret	$25.30	$1.01
Pasquotank	$26.70	$1.07
Dare	$27.51	$1.10

*Estimate assumes an average appliance weight of 80 pounds.

The 60 reporting counties reportedly spent $4,083,963.00 in FY 06-07. Of this total $2,815,614.00 was for daily operations, $399,700.00 for capital improvements, and $128,345.00 went to cleanup illegal disposal sites.

Counties with high per unit costs usually have extensive intra-county collections, a cost allocation plan, lack a local market, or have a combination of these factors. Counties with little or no disposal costs tend to have minimal programs, poor record keeping, and lack access to a local market or a combination of these factors. Due to the high value of scrap metal, many counties have metals recyclers willing to provide free pickup from county collection sites and/or provide CFC recovery in exchange for access to the scrap metal. In recent years, scrap metal prices are at historic highs, yet some counties continue to pay private contractors to collect and haul scrap metals with little or no remuneration to the county. This imposes financial pressures on the white goods program, since several of these counties must apply for taxpayer- funded cost overrun grants to finance their programs.

Outsourcing loading and transport to the recycler can reduce some costs. Other counties use in-house labor to sort and segregate metals, recover CFCs or extract motors or oil. In general, operating costs by counties do not seem restricted by geography or population. Instead, analysis suggests that a correlation to distance to markets, extent of intra-county collections, extent of record keeping, cost allocation plans and agreements with private contractors among counties have a greater effect on county costs.

Tonnage Collected by Counties

In FY 06-07, 60 counties reported processing 38,517 tons of white goods. This translates into 962,925 individual appliances (assuming 25 appliances per ton), or about .11 appliances per person in North Carolina. In FY 91-92 all 100 counties collected 25,749 tons, or 644,000 appliances.

CHAPTER 5 – Local Government Assistance (Fiscal Year 2006-07)

Solid Waste Management Trust Fund Annual Report

This report details for FY 07 (July 1, 2006 - June 30, 2007) the activities and expenditures of the Solid Waste Management (Trust Fund), which is administered by the Division of Pollution Prevention and Environmental Assistance (DPPEA) in the DENR. The Trust Fund was created by the Solid Waste Management Act of 1989 (SB 111). It is funded by a portion of the revenues from a fee on the sale of new tires and an advanced disposal fee on white goods (appliances), as well as a tax on virgin newsprint. Additional revenues can come from appropriations and contributions. The purpose of the Trust Fund is to support a range of solid waste management activities including: technical assistance to local governments, businesses, and other entities on solid waste issues; public educational programs; research and demonstration projects; and recycling market development (G.S. 130A- 309.12).

As noted in the table below, the Solid Waste Management Trust Fund received $1,119,717 in revenues in FY 07. When added to the beginning balance on July 1, 2006 of $1,623,029, a total of $2,742,746 was managed in the Trust Fund for FY 07. Actual expenditures were $1,366,142, leaving a fund balance at the end of FY 07 of $1,376,604. However, a total of $392,171 of that balance was encumbered for standing grant contracts that have been awarded and for which funding had not been fully disbursed (grant contracts are paid on a reimbursement basis). The unencumbered balance at the end of FY 07 was $984,443. An additional set of grant contracts worth approximately $322,015 were in the process of being encumbered at the end of the fiscal year, which further reduced the available balance entering FY07.

FY 07 Trust Fund Expenditures and Revenues

	Total FY 07
Beginning Balance	$ 1,623,029
+ Revenue	$ 1,119,717
- Expenditures	$ 1,366,142
Ending Balance	$ 1,376,604
Encumbrances	$ 392,171
Unencumbered funds on 6/30/07	$ 984,443

Breakdown of FY 07 Revenue Sources

Revenue Source	Total FY 07
Tire Tax	$ 670,653
White Goods ADF	$ 399,337
Newsprint Tax	$ 1,802
Appropriations	$ 0
Contributions and Misc.	$ 47,925
Total Revenues	$ 1,119,717

TRUST FUND REVENUE SOURCES - FY 07

Trust Fund revenues in FY 07, as indicated in the table above, came from four of the five possible revenue sources identified in the General Statutes. Activity from each revenue source is described below:

2% Tire tax – Trust Fund revenues from the tax on the sale of new tires accounted for $670,653 in FY 07, an increase of almost 6.5 percent from FY 06. Tire revenue accounted for close to 60 percent of total Trust Fund revenues for FY 07.

White Goods Tax – Proceeds from the advanced disposal fee (ADF) on white goods accounted for $399,337 or about 36 percent of total revenues for FY 07. White goods proceeds were up almost 11 percent from FY 06.

Virgin Newsprint Tax – North Carolina newspaper publishers who fail to meet state-required purchasing goals for recycled content newsprint must pay a $15.00 per ton tax on the virgin newsprint they consume. The law allows wide exemptions for companies who are unable to purchase recycled content newsprint due to availability or pricing constraints, or who are actively involved in the recovery of newspaper for recycling. During FY 07, $1,802 was received from the virgin newsprint tax. Compliance with the law has been consistent - in eleven years, the annual revenue from the newsprint tax has never been higher than $3,000.

General Appropriations - When the Trust Fund was first established in 1989, a one-time appropriation of $300,000 was allocated to provide an initial fund balance. Since that time, however, there have been no further appropriations to the Trust Fund.

Contributions to the Trust Fund and Miscellaneous Revenues – The DPPEA continued a recycling promotion program in FY 07 that entailed a cost-sharing partnership with local governments and private sector contributors. Local governments contributed $43,245 and private sectors sources donated $4,680 toward the campaign in FY 07. The list of outreach program partners is provided in Attachment A to this report. More information on the recycling outreach program is provided below.

Trust Fund Expenditures - FY 07

As in past years, most of Trust Fund expenditures in FY 07 went to grants and to the state's recycling outreach efforts. Trust Fund resources were also used to continue delivery of technical assistance to North Carolina communities, recycling businesses, and waste generators. These activities are among the explicit purposes noted for the Trust Fund in G.S. 130A- 309.12, and are described in more detail below.

FY 07 Community Waste Reduction and Recycling Grants

The Community Waste Reduction and Recycling Grants (CWRARGs) are a standard annual grant cycle that DPPEA offers to local government and non-profit recycling programs to expand and improve community recycling efforts. The CWRARGs usually include targeted grant categories designed to increase activity in certain program areas or to increase the recovery of certain commodities.

DPPEA held one CWRARG grant cycle in FY 07, which was initiated by a Request for Proposals distributed to local governments and to non-profit agencies involved in waste reduction. Bonus points were awarded in the FY 07 cycle to proposals that addressed disposal bans that will be in effect in 2009 and the ABC permit recycling requirements that will be in effect January 1, 2008. DPPEA received and evaluated a total of 28 proposals from eligible applicants, and selected 22 for a total of $322,015 in grant awards. Details on the grantees and their projects are provided under Attachment B to this report.

FY 07 Business Recycling Grants

To increase market demand and encourage recycling economic development in North Carolina, DPPEA conducted a grant cycle in FY 07 for recycling businesses. The grants are designed to help these businesses afford or leverage a critical capital expenditure and thereby expand their material-handling capacity. These expansions in turn translate into new market opportunities for local government recycling programs and for waste generators of all kinds.

The Business Recycling Grant cycle in the spring of 2007 attracted 24 proposals requesting $658,133. Seventeen of these proposals were awarded grants for a total of $294,500 in funding. Details on the grantees and their projects are described in Attachment C to this report.

Recycle Guys and RE3 Outreach Campaigns

DPPEA continued its efforts in FY 07 to increase public participation in recycling. High participation raises the efficiency of local programs and results in a greater supply of materials for recycling businesses.

To boost participation, DPPEA expanded its statewide recycling promotion campaigns in FY 07 - the "Recycle Guys" and "RE3." DPPEA's outreach efforts included:

- A new contract with Time Warner cable to broadcast RE3 and Recycle Guys television commercials. Time Warner's system covers the most populous areas of the state and using cable allows demographic targeting through use of specific channels.
- Procurement of six new television commercials for the RE3 campaign.
- Use of new media outlets such as the internet sites Youtube and MySpace, as well as radio advertising and streaming of commercials on radio Websites.

- Production and distribution of supplemental materials that help expand the presence and reach of the campaigns. Materials included pencils, tattoos, posters, stickers, coloring books, and bottle openers that communities and recycling educators use to promote recycling behavior.

Technical Assistance Activities

The General Statutes direct DPPEA to use the Trust Fund to promote waste reduction and recycling generally, and specifically to provide technical assistance to local governments and to build recycling markets. The following section lists a number of activities that DPPEA pursued in FY 07 to accomplish these requirements.

Waste Reduction Partners Program

The Waste Reduction Partners (WRP) is a highly successful program using retired engineers and business professionals to provide environmental technical assistance to companies and local governments in western North Carolina. DPPEA continued its annual funding of WRP with $20,000 to support industrial solid waste audits and other recycling activities. With this funding, WRP helped western North Carolina businesses and other entities divert 20,872 tons of solid waste from landfills, a diverted cost of less than $5 per ton (by comparison, the most efficient curbside programs have costs of around $100 - $120/ton). The estimated solid waste reduction savings for businesses served by Waste Reduction Partners in FY 07 totaled $1.4 million, which translates into a leverage of savings to invested funding of 39 to 1.

Staff Support

To accomplish the technical assistance, public education, and recycling market development requirements in the General Statutes, the Trust Fund was used in FY 07 to support staff positions in the DPPEA. A total of $408,780 was expended to pay for salaries, benefits and some limited operational support. These positions are described below:

Recycling Market Development Specialist - This position provides marketing assistance to local governments and others involved in recyclable materials collection. As a part of the Recycling Business Assistance Center in DPPEA, this person is responsible for strengthening recycling capacity for secondary materials collected throughout the state. Among other duties, it manages the recycling markets directory required by state statute.

Recycling Market Development Specialist - This position is shared part-time with the NC Department of Commerce and is responsible for working with local and state economic developers to recruit recycling businesses to North Carolina.

Recycling Market Development Specialist - This position focuses on building the recycling infrastructure for the diversion of construction and demolition debris and wood waste, which together constitute one third of the state's entire waste stream. In addition to managing grants and conducting other technical assistance, this position also produces the *Recycling Works* newsletter, which keeps recycling companies and community recycling programs abreast of market developments, material prices, and news about grants and available assistance.

Waste Management Analyst - In addition to working with local recycling coordinators, this position is responsible for developing educational materials and programs on solid waste issues for audiences ranging from school children to adult populations. In particular, this position implements the multi-media statewide Recycle Guys and RE3 campaigns designed to boost recycling participation rates in North Carolina and to make community recycling efforts more efficient.

Waste Management Analyst - This position is responsible for providing technical assistance to local governments on their waste reduction programs, including solid waste planning and full cost accounting (both statutory requirements for local governments). The position also manages recycling program data from state-mandated local waste reduction reports, which in turn allows completion of the State Solid Waste Management Annual Report.

Waste Management Analyst – This position manages the WasteTrader waste exchange service, provides direct assistance to commercial and industrial waste generators, helps to manage grants and the local reporting process, and is responsible for many training and outreach activities to local recycling programs.

Organics Recycling Specialist - This position provides technical assistance to local governments, recycling businesses, waste generators, and the general public on the reduction and composting of organic waste streams, including yard wastes, which are banned from disposal by state statute.

Graduate Interns - To encourage professional development and complete technical assistance projects, DPPEA hired student interns to work in the Division in FY 07. Student projects in FY 07 focused on development and implementation of the RE3 and Recycle Guys outreach campaigns, research and materials development for school recycling programs, and technical assistance to local government recycling programs.

Product Stewardship Initiatives

"Product Stewardship" is a growing movement by state and local governments to increase manufacturer responsibility for the environmental impacts of their products, including the diversion of those products from disposal to recycling. Greater manufacturer responsibility for end-of-life products will reduce cost and tax burdens on state and local governments. In FY 07, North Carolina participated in product stewardship initiatives by supporting the activities of the Product Stewardship Institute (PSI), including the development of a national agreement with the paint industry on paint disposal. DPPEA participated in additional PSI projects addressing mercury thermostats and excess phone books. DPPEA also helped lead a multi-state effort to encourage the producer responsibility for beverage containers and continued its participation with the Carpet America Recovery Effort (CARE), a national product stewardship program for the carpet industry.

Publications and Outreach Efforts

DPPEA used Trust Fund resources in FY 07 for a number of technical assistance and outreach activities, including: production of technical assistance materials to help in the implementation of new disposal bans and requirements for ABC permit holders to recycle, printing and distributing a document on the use of recycled materials by North Carolina manufacturers, and travel to provide technical assistance to local governments and Trust Fund grantees.

Workshops and Training

DPPEA used Trust Fund provided funding and technical assistance to support a major state recycling conference in March 2007 and to support other waste reduction workshops and outreach conducted by the Carolina Recycling Association (CRA) and the North Carolina chapter of the Solid Waste Association of North America (SWANA). DPPEA worked with SWANA to put on a series of three workshops on the ABC permit recycling requirements, and coordinated a one-day recycling conference with SWANA and CRA at the Catawba College Center for the Environment. DPPEA used Trust Fund resources to provide scholarships to local recycling coordinators who would not normally attend the CRA conference, helping to increase their professional knowledge and skills.

Temporary Assistance

As in past years, DPPEA used temporary labor to help enter data from over 600 local government solid waste management annual reports. These reports are required by North Carolina statutes and they provide information necessary to complete the State Annual Solid Waste Report.

PLANNED EXPENDITURES AND CHANGES TO TRUST FUND REVENUES FOR FY 08

Due to changes implemented by House Bill 1779 in the 2007 General Assembly session, the Trust Fund will begin receiving eight percent of the tire tax revenue in FY 08 instead of five percent over previous years. This funding will increase the available resources for grants by over $300,000.

In FY 08, the Solid Waste Management Trust Fund will be used to provide technical assistance to local government recycling programs and to recycling businesses statewide. As part of that effort, DPPEA will conduct its standard community-based and a recycling business grant cycles, helping directly expand collection and processing capacity for recyclable materials. The Division will run two additional grant cycles, one to support the ABC recycling requirements and the other to focus on improving curbside recycling programs. DPPEA will further work to increase the reach of the Recycle Guys and RE3 campaigns in FY 08. In addition, the Trust Fund will also continue to support the effective Waste Reduction Partners program in western NC and a similar initiative covering the central and eastern part of the state. North Carolina will also continue to participate in national coalitions seeking to promote product stewardship.

Questions regarding the North Carolina Solid Waste Management Trust Fund may be directed to Scott Mouw, Chief, Community and Business Assistance Section, Division of Pollution Prevention and Environmental Assistance, at 919-715-6512.

ATTACHMENT A: TRUST FUND REVENUE SOURCES

The North Carolina Solid Waste Trust Fund received close to 96 percent of its revenues in FY 07 from two sources: the statewide fees on the purchase of new tires and white goods. The total distribution arrangement of each of these fees is described below:

Scrap Tire Tax - During this reporting period (July 1, 2006 - June 30, 2007), a two percent fee was levied on the purchase of new tires in North Carolina. The tire tax allocation is as follows:

- 68% of revenues are distributed to the counties on a per capita basis to pay for the proper management of discarded tires.
- 27% of revenues are credited to the Scrap Tire Disposal Account (administered by the Solid Waste Section) for local government grants and nuisance tire site cleanup.
- 5% of revenues are credited to the Solid Waste Management Trust Fund.

White Goods Tax - During this reporting period (July 1, 2006 - June 30, 2007), a $3 dollar fee was levied on the purchase on all appliances. The white goods tax allocation is as follows:

- 72% of revenues are distributed to the counties on a per capita basis to pay for the proper management of discarded white goods.
- 20% of revenues are credited to the White Goods Management Account (administered by the Solid Waste Section) for grants to local governments for managing discarded white goods.
- 8% of revenues are credited to the Solid Waste Management Trust Fund.

FUNDING PARTNERS FOR THE FY 07 RECYCLE GUYS and RE3 CAMPAIGNS

The Solid Waste Trust Fund received an additional small percentage of its revenues from partners supporting the Recycle Guys and RE3 educational campaign, as detailed below.

Partner Name	Amount Given
Asheboro Recycling	$1,000
Brunswick County	$1,000
Catawba County	$1,000
Chatham County	$1,000
City of Burlington	$2,500
City of Cary	$5,000
City of Charlotte	$2,500
City of Raleigh	$5,000
Davidson County	$2,500
Durham County	$5,000
Envision Plastics	$1,000
Friends of the Museum of Natural Sciences	$280
Johnston County	$5,000
Lee County	$1,000
Mecklenburg County	$5,000
NC State University	$300
New Hanover County	$995
NRC	$100
Orange County	$1,000
Pasquotank County	$500
SWANA	$2,000
Wake County	$3,000
Wayne County	$250
TOTAL	**$47,925**

ATTACHMENT B: 2007 COMMUNITY WASTE REDUCTION AND RECYCLING GRANTS

GRANTEE	AMOUNT	GRANT DESCRIPTION
Habitat for Humanity - Moore County	$10,500.00	Habitat for Humanity of Moore County will purchase and put into use a baler for processing cardboard from its operations and outside generators
Macon County Solid Waste Department	$10,000.00	Macon County will purchase an Auto-Tie Dual Ram Baler to improve its recycling efficiency.
Madison County	$17,205.00	Madison County will purchase rolling recycling containers and three 20-cubic yard roll-off containers for the collection and recycling of mixed paper.
City of Greenville	$16,625.00	Greenville will pour concrete pads for 30 new recycling centers to be located at multi-family complex. Each center will be fenced in and be fitted with signage and roll-out carts. The city will also print and circulate educational handouts..
Habitat for Humanity of Charlotte ReUse Store	$20,000.00	Habitat for Humanity ReStore of Charlotte will purchase and put into use a sixteen foot, lift gate diesel truck to streamline operations.
Gaston County	$25,000.00	Gaston County will purchase and put into use six 40-yard roll-off containers for mixed paper recycling collection.
Town of Sylva	$20,000.00	The Town of Sylva will purchase a new recycling collection vehicle and try to increase participation in the existing recycling program.
PCG SWM Commission	$5,000.00	The PCG Commission will pave a convenience site using glassphalt.
Greene County	$2,940.00	Greene County will purchase and install DOT approved signs to identify convenience site locations.
Elizabeth City	$11,000.00	Elizabeth City will purchase and distribute 1,300 curbside recycling bins and improve the City's public outreach on recycling.
Food Bank of Eastern & Central NC	$10,000.00	The Food Bank of Eastern and Central NC will purchase a forklift that will significantly increase the Raleigh warehouse staff efficiency in receiving, processing and moving the additional produce and dry items.
Land of Sky Regional Council	$15,000.00	Land-of-Sky Regional Council will partner with private sector companies to provide direct technical assistance and training of establishments along with purchasing recycling containers for ABC permit holders.
Kernersville	$4,285.00	The Town of Kernersville will survey the business community and will conduct a full-scale participation study. Funding will be used to print surveys and booklets, and pay postage and intern hours.
Town of Kill Devil Hills	$23,273.00	The Town of Kill Devil Hills will purchase (7) open top roll-off containers along with 1 cable/winch system.
Onslow County	$12,063.00	Onslow County will purchase 96 gallon roll carts and 32 gallon recycling bins to help expand the Onslow School Recycling Program to three more schools.
The Scrap Exchange	$13,500.00	The Scrap Exchange will purchase a used cargo van to collect materials in the Triangle region, which will be used at the store for reuse projects.
Brunswick County	$12,000.00	Brunswick County will purchase recycling containers (curbside bins, 90-gallon roll carts and beverage collection containers) for the remaining 12 schools in the county.
City of Hickory	$25,000.00	Hickory will purchase and put into operation a new recycling collection vehicle for the purpose of collecting containers from ABC permit holders.
Edgecombe County	$16,164.00	Edgecombe County will purchase and put into use rolloff containers and rollout carts to support its school recycling program.
Town of Mount Olive	$13,500.00	The Town of Mount Olive will purchase and put into use a compartmentalized trailer for its curbside recycling program.
Wayne County	$18,960.00	Wayne County will purchase and put into use recycling containers to support its ABC permit-holder recycling program and its oil filter recycling services.
Town of Black Mountain	$20,000.00	Black Mountain will purchase 3,500 recycling containers and conduct an educational campaign in conjunction with the distribution of the bins. 3,300 bins will be distributed to residents and 200 will be kept as replacements.

ATTACHMENT C: 2007 RECYCLING BUSINESS GRANT PROJECTS

GRANTEE	AMOUNT	GRANT DESCRIPTION
BarnStar Vintage	$5,000.00	BarnStar Vintage will purchase and put into use a trailer to haul material handling equipment to deconstruction sites.
Blue Ridge Plastics	$20,000.00	Blue Ridge will purchase, install and put into use a third wash line to process polystyrene and other plastics with a specific gravity greater than water (1.0).
Bromley Plastics	$20,000.00	Bromley Plastics will purchase, install, and put into use a roll-cutter and stand in order to greatly increase the recycling facility's efficiency and capacity.
CompuTel	$10,000.00	CompuTel will purchase, install and put into use a Material Shredding System that will provide on-site destruction of computer hard drives.
Container Recycling Alliance	$20,000.00	CRA will develop a drop-off recycling center to allow ABC-license holders to deposit containers for recycling.
FCR, LLC	$25,000.00	FCR will purchase, install and put into use an Optical Fiber Sort system that will provide for precise and fully automated separation of Old Corrugated Containers (OCC) and non-paper items (trash) from a stream of pre-processed Old Newspapers (ONP).
Futura Recycling	$10,000.00	Futura Recycling will install a commingled container sort line to include a vibratory feed conveyor along with bins to hold the separated inventory.
Hatteras Recycle	$25,000.00	Hatteras Recycle will provide for curbside collection of recyclables from vacation cottages and other properties on the Outer Banks.
Kamlar Corp	$20,000.00	Kamlar will construct a new material unloading ramp and pad for its pallet mulching operation.
Martin Enterprises	$10,000.00	Martin Enterprises will install a horizontal baler to increase its efficiency and processing capacity.
PalletOne - Butner	$10,000.00	Pallet One – Butner will purchase, install and put into use dismantling equipment to assist in the increased capacity to recycle pallets.
PalletOne - Mocksville	$10,000.00	Pallet One- Mocksville will purchase, install and put into use dismantling equipment to assist in the increased capacity to recycle pallets.
Piedmont BioFarms	$4,500.00	Piedmont Biofarms will build and install a vermi-digester and purchase containers to collect food waste to be processed by the worms.
Plastic Revolutions	$30,000.00	Plastics Revolutions will build a mixed plastics sorting line and acquire and install an automated baler system that will allow for the purchase and processing of co-mingled bales of mixed plastics and the baling and subsequent sale of PETE bottles.
Shimar Recycling	$30,000.00	Shimar will add collection and storage capacity to meet the demand for the collection and processing of recyclable containers from ABC permit-holders.
Synergy Recycling, LLC	$20,000.00	Synergy Recycling will purchase, install, and put into use an eddy current separator and a shaker table to increase material diversion and efficiency.
Tri-State Scrap Metals	$25,000.00	Tri-State Scrap Metals will purchase, install, and put into use a magnet and generator, metal-shear, front-end-loader, and car recycling rack, and construct a building for non-ferrous metals processing and storage to expand their current operation.

CHAPTER 6 - Department Of Administration

Environmentally Preferred Purchasing

The Department of Administration continues to promote the purchase and use of reusable, refillable, repairable, more durable, and less toxic supplies and products. As the Department progresses, more of these products are being added to statewide term contracts, agency specific term contracts, as well as awarded through open market bids. For more information visit the new Purchase and Contract Web site: http://ncP&C.gov

Solicitations advertised by the Division To Comply With the Session Laws 1993 {G.S. 130A - 309.14(al)}

Presently, the bids advertised in the Division of Purchase and Contract contain a Recycling and Source Reduction paragraph in item #10 of Instructions to Bidders. When developing bid invitation language, requirements and specifications, purchasers are continuing to look at alternative methods and products, if such products result in waste reduction and their procurement is both practicable and cost-effective.

Recycling and Source Reduction information provided by the contractors on bids received during the 2006 to 2007 fiscal year indicate the sustainable features or criteria of those products. Table 1 lists the purchase awards by the type of bid for those commodities.

Table 1

Commodity Purchase Awards by Bid Type	Number Awards by Bid Type	Percentage Awards by Bid Type
Agency RFP	303	33.3%
Contractual Services	36	7.3%
Convenience Contracts	247	10.6%
Open Market	627	11.4%
Quotes	179	2.6%
Term Contracts	38	20.5
Waivers	300	14.3%
Total	1730	100.0%

NC E-Procurement @Your Service

NC E-Procurement @ Your Service, now in its sixth year of operations, continues to support Governor Michael Easley's "One North Carolina" vision. As of December 2007, the enterprise-wide system has over 55,800 vendors registered and over 14,400 users from more than 242 entities across the State including state agencies, hospitals, institutions, community colleges, K-12 public schools, universities and local governments. This year NC E-Procurement @ Your Service successfully integrated with its first university financial system, East Carolina University. NC E-Procurement @ Your Service also continues to contribute to a sustainable environment through significant reductions in hard copy document reproduction (paper, printers and supplies) through the use of electronic business transactions and electronic documents. This year, NC E-Procurement modified the informal bidding tool, eQuote, to allow only electronic vendor notification of bids and bid awards further reducing unnecessary hard copy documentation.

Purchasing Compliance Reviews

The North Carolina Administrative Code (01 NCAC 05B.1605) gives the Division of Purchase and Contract the authority to conduct compliance reviews. As of January 2006, most purchasing compliance reviews within the Division of Purchase and Contract are being conducted utilizing NC E-Procurement@Your Service. In previous years, compliance officers traveled weekly to conduct the reviews on-site at community colleges, state agencies, universities and prior to 2004, local school systems. Travel expenses (subsistence only) were approximately $11,000 per year for three officers. Now, P&C compliance officers are able to conduct most of the compliance reviews at their desks. The

officers are reviewing much more data than in prior years due to the utilization of technology that was previously not available to us. Furthermore, the purchasing data for entities was not accessible in one location; it was very fragmented. The electronic information reviewed includes but is not limited to, approvals, eQuotes (competition sought), purchase orders, P-card expenditures, IPS (Interactive Purchasing System) formal bids, and payments (direct pays) that do not go through the purchasing offices.

Compliance reviews are conducted for all community colleges, state agencies, state institutions and hospitals, and universities. Currently, there is only one university that utilizes NC E-Procurement @ Your Service; therefore, reviews for universities are conducted on-site. Additionally, there are occasions when it is necessary for P&C compliance officers to conduct an on-site review at an agency, or community college.

Due to the utilization of technology, sustainable efficiencies or savings include reduction in paper, file cabinets/storage furniture, travel, fuel emissions, employee time, and operating costs. These are just a few examples of improved processes within P&C.

IPS (Interactive Purchasing System) & Vendor Link NC

The Division of Purchase and Contract continues to promote opportunities for vendors to do business with the state through electronic advertisement of goods, services and design/construction in IPS. The entities using this system consist of state agencies, institutions, universities, community colleges, K-12 public schools, and local governments.

Vendor Link allows vendors to register to receive electronic notification of solicitations. Vendor Link had 17,908 registered vendors as of June 30, 2007. The system continues to grow with the addition of users increasing from 148 Entities with 490 users as of June 30, 2007. This is an increased user base of 7% for the Entities and 5% for the users, which posted 6,105 solicitations.

Open Market Awards

- **Hybird Electric School Buses** - Two plug-in hybrid electric school buses were purchased in North Carolina for the purposes of education, training and research. The Plug-in Hybrid Electric School Bus Project is a collaborative effort led by the Advanced Energy Corporation for the Hybrid Electric School Bus Buyers Consortium with the goal of transforming the nation's school bus market by introducing plug-in hybrid technology. Reference: http://www.hybridschoolbus.org/
- **Electric Utility Trucks** - Six electric road-worthy trucks were purchased for the Department of Environment And Natural Resources that are capable of a speed of 25 mph and a minimum 30 miles driving range.
- **Recycled Plastic Lumber** - 63,400 Board feet of the product manufactured with minimum of 95% recycled HDPE (both post industrial and post consumer) were purchased for the Department of Correction. As an alternative to standard treated lumber, redwood and western cedar, the recycled plastic lumber conserves natural resources, requires no maintenance or treatment for pests or rot, and poses fewer environmental risks than traditional products. The use of the recycled materials reduces our landfill space and the need to extract and process virgin wood. Products require reduced maintenance (sealers or paints) and do not suffer from any of the traditional issues with wood, such as cracking, splitting, or warping.
- **Shucked Oysters Shells** - 21,000 Bushels of cured, clean, whole, eastern oyster (*crassostrea virginica*) shells from shucked oysters were purchased for the Division of Marine Fisheries for oyster bed restoration.
- **Ultra-Bright LED Lights** - Three hundred and fifty headband light assemblies were purchased for the Department of Crime Control And Public Safety. Each product consisted of 24 custom ultra-bright LED's to enable a 40 feet range of panoramic vision without a shadow zone. Product is easily recharged and allows better visibility for the examination of commercial motor vehicles during night inspection.

New Statewide Term Contract

- The Division of Purchase and Contract has established a new Statewide Term **Contract for Neighborhood Electric Vehicles**. Neighborhood Electric Vehicles (NEV) are battery operated vehicles that are "street legal" for use on roads with a posted speed limit of 35 MPH or less. There are 6 different NEV models available from this contract from two suppliers offering GEM and E-Ride vehicles. The contract vehicles are offered with a price range of $10,887 to $18,713 and include an extended warranty. These vehicles could be fueled (recharged) by an alternate to most carbon derived fuel sources. It is estimated that NEVs cost 3 to 5 cents per mile to operate. These vehicles are considered good additions to agency fleets to help meet petroleum reduction goals. This contract may be viewed at the following website www.doa.state.nc.us/PandC/070n.pdf and includes links to the manufacturers' sites.

Statewide Term Contracts

As existing term contracts are re-bid and new term contracts are developed, the Division of Purchase and Contract continues to improve the contracts by offering a wide range of sustainable or environmentally friendly products. Examples of the improved sustainable features of these term contracts are listed below.

- **Air Conditioners, Room, 031A** - Items available through this contract were awarded based on the lowest energy efficiency cost, meeting specifications. The majority of the items awarded are Energy Star Compliant, containing recycled materials and packaging.

- **Domestic Appliances, 045A** - All refrigerators, washers and dishwashers are "Energy Star" qualified. This is a fairly stringent measurement of energy efficiency, which is monitored by the Department of Energy. The payoff is a more efficient appliance, which use less energy over the lifetime of the product.

- **Batteries, Storage, 060B** - Battery casings are made from recycled material (96%). Batteries are exchanged as a core and picked up by the vendor. In addition the contractor will pick up and properly dispose of junk batteries on quantities less than 20. Core (junk) batteries are considered to be an environmental hazard and are otherwise expensive to properly remove.

- **Tire, Automotive, Recapping and Repairing, 060E** - The retread tire provided should be a premium retread that will provide optimum tire mileage/service and safety. Recycling of tires through retreading and repairing reduces the new purchases and disposal of tire casings.

- **Passenger Cars, 070A; Law Enforcement Vehicles, 070B; Trucks/Vans/Utility Vehicles, 070G** – Passenger car awards included an alternate fuel vehicle (AFV) and two models of gasoline /electric hybrid vehicles. Limited availability restricted award of the AFVs for the passenger cars, especially the Law Enforcement and Trucks/Vans/Utility Vehicles. According to the Steel Recycling Institute, 67.7% of a vehicle is steel or iron. Of that steel or iron, 26.6% is post consumer material. Therefore, 18% of a vehicle is made from post consumer recycled material.

- **Neighborhood Electric Vehicles, 070N** - Neighborhood Electric Vehicles (NEV) are battery operated vehicles that are "street legal" for use on roads with a posted speed limit of 35 MPH or less. There are 6 different NEV models available from this contract from two suppliers offering GEM and E-Ride vehicles. The contract vehicles are offered with a price range of $10,887 to $18,713 and include an extended warranty. Because these vehicles do not consume fuel they produce zero emissions. It is estimated that NEVs cost 3 to 5 cents per mile to operate. These vehicles are considered good additions to agency fleets to help meet petroleum reduction goals.

- **Remanufactured Toner Cartridges, 207A** - Currently common use Hewlett Packard and Lexmark cartridges are remanufactured to equivalency with the original OEM performance. Fewer cartridges are added to the waste stream. Product specifications are being transitioned from mandated construction requirements to product and vendor performance requirements. This is expected to allow a wider variety of brands and models to be covered as requested by the contract users.

- **Coolers, Water, Electric, 225A** - Packaging, refrigerant and metal components are recyclable.

- **Large & Specialty Lamps, 285A** - Some of the lamps contain up to 65% recycled content including glass and mercury. Some of the packaging contains 73% recycled content. Some of the lamps are low mercury (TCLP compliant), non-hazardous.

- **Ballasts, 285B** - Electronic ballasts are more energy efficient, support variable illumination on demand and reduce electro magnetic radiation. A link is provided to Federal Energy Management Program (FEMP) that illustrates a return on investment for retrofitting with more energy efficient lamps and ballasts. Ballasts contain no PCB's and can be disposed of in the trash. Reduced product shape and size also minimizes packaging and metal enclosure requirements.

- **Carpet, 360A** - Recycled content required is either (1) minimum 5% postconsumer content except that vinyl-backed and other similar hard backed products contain 20% by weight of postconsumer recycled content, (2) minimum 15% by weight of recovered materials (both preconsumer and postconsumer), or (3) minimum of 25% by weight of recyclable content.

- **Paper, Computer and Labels, 395B** - Computer paper contains 50% recycled with 30% post consumer content.

- **Recycled Motor Oil, 405H, 405J** - State Surplus Property disposes of waste oil and antifreeze under contract.

- **Bio-Diesel Fuel, 405L** - B20 blended fuel contains 80% diesel fuel and 20% virgin soy or reprocessed vegetable oil. Approximately 1,840,000 gallons purchased with 368,000 gallons from recycled biomass reduces crude oil consumption.

- **Gasohol, 405M** - E-10 blended fuel contains 90% unleaded gasoline and 10% ethanol. Approximately 9,456,942 gallons were purchased with 945,694 gallons from ethanol.

- **Ultra-lo Sulfur Diesel Transport, 405P** - This new term contract has replaced the 405B lo sulfur diesel. 405P offers 15 ppm of sulfur content compared to 500 ppm sulfur content on the lo sulfur diesel. Transport loads are over 6,000 gallons per delivery, and are typically used heavily by DPI and DOT. Approximately 21,897,810 gallons were purchased annually. This will help with clean air mandates.

- **Ultra-lo Sulfur Diesel Tankwagon, 405Q** - This new contract has replaced the 405C lo sulfur diesel tankwagon. As in above this offers 15 ppm sulfur content vs 500 ppm sulfur content on the previous contract. Tankwagon loads are less than 6,000 gallons down to a minimum of 500 gallons. Approximately 851,690 gallons were purchased annually. This will help with clean air mandates.

- **Furniture, Metal, Folding Chairs, Tables, Storage Units, Wood Library Furniture, 420 - Furniture, Desks (Wood), Credenzas, Conference Tables, Etc. & Bookcases, Furniture, 425B & C** - Contractors support sustainability through different practices. Mechanical parts can be recycled or replaced, thereby extending service of item. Packaging is recycled and recyclable. Products may be ground up into particleboard. Packaging may contain up to 40% post consumer waste and is reusable. Wood, plastic and metal contain recycled post consumer content and are recyclable.

- **Furniture, Chairs, Ergonomic, 425E** – Fabric and chair cushions may contain up to 100% post consumer recycled content. Packaging contains post consumer waste, is reusable and recyclable after use.

- **Lateral and Vertical Filing Cabinets, 425F & 425G** - Cabinets contain from 10% to 30% recycled content. Corrugated boxes have a minimum of 50% post consumer waste and are recyclable. Contractor will purchase back files at end of their use.

- **Storage, Combination Storage/Wardrobe and Wardrobe Cabinets, 425H** - Cabinets have a minimum of 10% recycled metals. Packaging contains post consumer waste, is reusable and recyclable after use.

- **Industrial, Medical and Specialty Gases, 430A** - Are delivered statewide in reusable cylinders and are exchanged when replacement cylinders are needed.

- **Disinfectants and Odor Counteractants, 435A** - Plastic bottles and shipping boxes are 100% recyclable. Plastic containers for deodorant cake can be recycled after cake evaporates.

- **External Defibrillators, 465B** - Defibrillators can be refurbished and packaging materials can be recycled.

- **Incontinent Care Products, Disposable, 475C** - Disposable washcloths (wipes) contain a minimum 50% of fully biodegradable paper (cellulose fibers).

- **Indoor And Outdoor Waste Receptacles, Food Prep Containers, Pails, and Related Items, 485F** - Most plastic products contain 15% post consumer recycled content. Packaging contains 10% post consumer recycled content. Some containers are sold to customers to assist with sustainability management. For example, the aluminum can recycle bins support recycling procedures recommended to users. Metal parts contain recycled content.

- **Brooms, Mops, Brushes, and Other Cleaning Implements, 485G** - Products may contain up to 60% post consumer recycled content. Packaging may contain up to 40% post consumer recycled waste. All cotton mops are made of cotton waste. Shipping boxes are recyclable. Broom handles can be used as wooden dowels for multiple purposes, such as garden stakes, hanging banners in classroom, etc. Forty-five percent of broom material is biodegradable.

- **LED Vehicle Traffic Signal Modules, 550A** - Traffic signals employing the high efficiency light emitting diode (LED) technology consume 90% less energy than conventional signals, while providing greater reliability, longer life, and low-maintenance performance. Signals are certified for ENERGY STAR for reduced energy consumption.

- **Material Handling Carts/Trucks, 560A** - Very few products are made from virgin steel. Products are not shipped in cartons.

- **Musical Instruments and Accessories, 580B** - New designs use recyclable plastics. Band instruments may be traded in to be reconditioned and re-sold. Donations of trade-in instruments to the Links Program for the needy promote music education. Plastic and brass parts may be recycled for future part replacement. Cardboard and pallets are recyclable.

- **Calculators, 600A** - Packaging material may be recycled.

- **Dictation/Transcription Equipment, 600C** - New digital recorders employ internal electronic storage media for constant reuse without cassette tapes. Voice recordings may be easily downloaded for dictation transcription, copied to disc (cd or dvd) and transmitted to distance or remote locations. Only proofed or edited recordings are archived to (cd or dvd). Archived recordings facilitate applications such as offline lectures and training events. Electronic storage media has a long lifetime before replacement. Contract also offers voice to text digital transcription software that serves the traditional state users or nonprofits for the physically impaired.

- **Office Supplies, 615A** - Contractors are required to the extent feasible and practical, to offer recycled products, including packaging, especially those having post-consumer waste content. Wherever possible and practical, such products should be identified as such.

- **Napkins, Bathroom Tissue, and Paper Towels**, **640A** - Contains 100% recycled fiber, 40% post-consumer recycled fiber.

- **Office Paper, 645A** - Various products contain both 100% and 50% post consumer and chlorine free copy paper. Other recycled and virgin paper products including envelopes are supported.

- **Cameras, Digital & Film, 655A** - The metal camera bodies, plastic parts and packaging materials can be recycled. Contract also includes the digital cameras and electronic storage media that promote reduction, reuse, and recycling and reduced environmental impact. Soft copy images can be easily transmitted to distant locations. Chemicals used in manufacturing and processing of the film are eliminated. Typically only proofed images are printed. Electronic storage media has a long lifetime before replacement. Even when the images are printed, the user can decide if high cost paper and

toner are required. Disposal of the images on paper has less environmental impact than the toxic metals contained in film.

- **Bags, Plastic, Trash, 655B** - Liners contain a minimum of 10% post-consumer or 10% pre-consumer reprocessed copolymer. All the liners awarded were thoroughly evaluated for strength and performance.

- **Laminators & Laminating Film, 665A** - Some of the film contains 5% post consumer content. Packaging contains 25%-80% post consumer content.

- **Ammunition, 680A** - Brass shell casings can be saved and recycled and others can be reloaded.

- **Wiping Cloths, 735A** - All items are second-hand textiles. Vendors resell waste instead of sending to landfills. All recycled textile rags can be sold to make paper products. All rags can be re-laundered.

- **Ice Machines and Dispensers, 740A** - Products are evaluated based upon initial bid, cost of energy and cost of water to provide the required ice harvest rate per day. Packaging, refrigerant and metal components may contain recycled content and are recyclable.

- **Vending Machines And Money Changers, 740B** - Packaging, refrigerant and metal components may contain recycled content and are recyclable.

- **Markerboards, Tackboards and Accessories, 785A** - Metal and wood components contain recycled materials.

- **Paper, Drawing and Construction, Newsprint, 785B** - Various products as indicated typically contain 25% to 100% recycled paper fiber.

- **Television/Video Equipment, 840A** - Most video products are certified “Energy Star” to denote efficient energy use.

- **Teaching Equipment, Electricity/Electronics Courses, 924A** - Office paper, cardboard and metal enclosures have recycled content. Documentation provided in soft copy instead of hard copy printed materials.

- **E-85 Fuel, 405R** - **Agency Specific Contract for use by Motor Fleet Management. -** E-85 blended fuel contains 15% unleaded gasoline and 85% ethanol. Fuel is used in the flex fuel vehicles compatible with E85 fuel. Approximately 311,111 gallons were purchased with 264,444 gallons from ethanol.

- **Electronic Equipment Recycling Services, 926A** - Assists agencies and local governments with CRT disposal prohibition and in diverting surplus or discarded electronic products from landfill disposal.

Items Aiding Waste Reduction Purchased By State Agencies Through Term Contracts and Open Market

The following items purchased by State agencies meet the criteria for aiding waste reduction by being reusable, refillable, repairable, more durable, and/or less toxic than their traditional counterparts:

Reusable
Digital Cameras (reduces need for film and chemicals)
Refrigerant Recovery System (filters reusable refrigerant)
Musical Instruments
Rechargeable Dry Cell Batteries
Recycled Carpet
Recycled Paper
Recycled Content Furniture (not traditional wood)
Printers
Solvent Degreaser (reuses solvent)
Tire Recapping & Repairing Service
Uniforms, Vacuum Bags, Wiping Cloths

More Durable
Above-Ground Vaulted Fuel Storage Tanks
Classroom Furniture, Electronic Lamps & Ballasts
Vacuum Cleaners, Floor Polish, Grader Blades
Grader Slope Attachment, Kindergarten Furniture
Paint Brushes, Plastic Lumber, Mattresses
Plastic Tableware, Staplers
Vertical File Cabinets, Wood Case goods
Wood library furniture

Energy Star – Reduced Energy Consumption
Audio Visual System,
Changeable Message Signs – Solar Powered
Domestic Appliances
Lighting Fixtures,
Room Air Conditioners,
Sonography Equipment
Television & Video Equipment, Lamps
Traffic Signals – LED,
Ultrasound Scanner
Ultrasound Training Simulator Equipment
Warning Lights - Vehicles Safety
Water Coolers

Used - Automobiles and trucks

Refillable
Ammunition - Cartridge Refills
Batteries - Vehicle & Storage
Drums – Steel, Fire Extinguishers
Cylinders for Welding, Medical & Specialty Gases
Fuel Tanks, Liquid Hand Soap
Self-Contained Breathing Apparatus

Repairable
Defibrillators, Musical Instruments
Tire Recapping & Repairing Service

Refurbished/Rebuilt
Aircraft Engines, Ferry Engine Repair Parts
Medical Diagnostic Equipment & Instrumentation
Remanufactured Toner Cartridges for Laser
Scientific Equipment, Sewing Machines

Less Toxic
Alternative Fuel Vehicles, Correction Fluid
Dry Cell Batteries, Electronic Lamps & Ballasts, Fertilizers/Farm Chemicals, Inks for printing (using non-petroleum based inks) Instructional Art Materials, Markerboard Markers, Mattresses, Scientific Products (eliminating Freon), Refrigeration and A/C Equipment

Longer Lasting
Floor Maintenance Machine Batteries, Library Furniture, Aluminum Nuts and Bolts – non-rusting alloys, Fluorescent electronic ballasts permit longer lamp life

Recyclable
Commodity Packaging, Commodity Metal enclosures & parts, Plastics, Steel & Reinforced Concrete Pipe, Chain Link Fencing, Electrical Wire, Treated Lumber, Motor Oil – refined, HVAC & Refrigeration Equipment - Refrigerants

Washable - HVAC Filters Wiping Cloths

CHAPTER 7 – State Agency Purchasing

Introduction

State agencies are directed to use products containing recycled materials by state law - N.C. General Statute 143-58.2(a), - and by Executive Order. Executive Order 156 was signed in 1999 in support of N.C. Project Green, the state environmental sustainability initiative, and was an updating and strengthening of the original Executive Order, signed in 1993.[2] Purchasing recycled content (RC) and other environmentally preferable products (EPPs) improves recycling markets, reduces environmental impacts from waste, and saves energy and natural resources. Many state agencies and local school districts help achieve these goals through thoughtful purchasing decisions and the use of RC products.

NC state government has continued to make progress toward environmental sustainability by offering RC and EPPs at affordable prices on state contract. Currently, there are about 25 products on term contract that exhibit some sort of environmentally preferable attribute, including recycled content, reduced packaging, and energy efficiency. State agencies and others who can buy from state term contracts, such as local governments, have a sample of high quality, cost-effective recycled products on term contract. The list of products can be seen at **www.doa.state.nc.us/PandC/recycled.htm**.

This document summarizes the efforts of state agencies to purchase recycled products. It fulfills the reporting mandate of N.C. General Statute 143-58.2(f) for fiscal year 2007. This year there was a slight decrease in reporting agencies, the majority of which were local school entities, but reporting community colleges also decreased significantly. More than half the non-reporting agencies did not comply with reporting requirements last year. All reporting was conducted online, saving paper and postage.

Figure 1. 2007 Reporting Summary	
Departments	23
UNC Institutions	10
Community Colleges	45
Local Public School Units	78
Total (220)	156
Percent Reporting	**71%**

Figure 2. Department of Corrections	
Office Paper	36% RC
Tissue and Towel	23% RC
Miscellanous Paper	78% RC
Total Paper	33% RC
NonPaper Expenditures recycled content products	$111.6 million
Toner	$5.8 million
Container	$2.6 million
Carpet	$2.1 million
Rerefined Oil	$3.8 million
Office Supplies	$70.1 million
Plumber	$24.6 million
Recapped Tires	$2.7 million

Fluctuations in data have stabilized somewhat, with small various annually. This year, numbers were greatly skewed, due to a sizeable increase in data reported by Department of Corrections. When this data was removed from the equation, most comparisons varied relatively predictably with years past, experiencing mild improvements. For the purpose of drawing comparrisons amongst the other agencies, DOC commodity data was extrapulated and is highlighted in Figure 2. DOC made up 85 percent of all nonpaper products and 89 percent of all paper purchases reported.

Purchases of Recycled Products

Paper and Paper Products. This is the sixth year in which agencies failed to meet the goal set forth by Executive Order 156; that, as of FY 2000-01, 100 percent of the total dollar value of expenditures for paper and paper products be toward purchases of paper and paper products with recycled content.

The percentage of RC paper purchases reached an all-time high of 84 percent in 2000, and has since fluctuated in the 70s, a decline attributable to the reinstatement of the virgin paper available on state contract at a lower price. Recycled content paper costs about three dollars more per box than virgin paper, or 30 cents per ream. Seeking more vendors of RC paper and implementing waste reduction techniques, such as double-sided printing and reusing one-sided pages, could help neutralize this cost, which is a notable obstacle in reaching statewide goals.

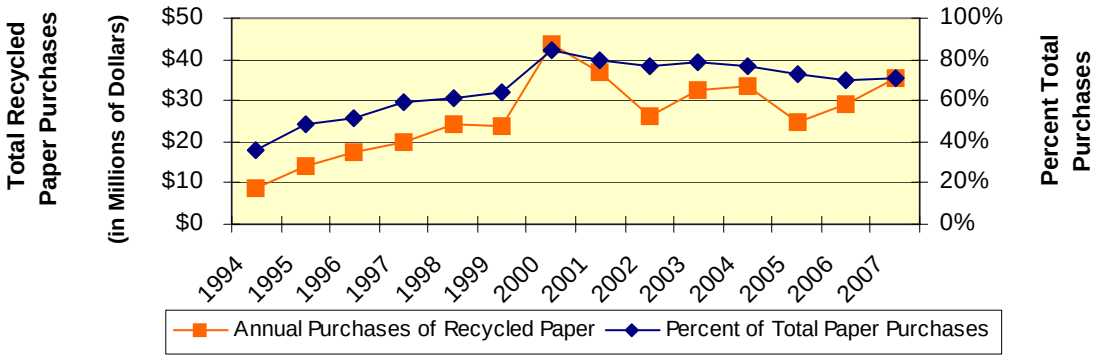
Below, **Chart 1** illustrates the trend in overall dollar amounts and percentages of recycled paper purchases over the past 14 fiscal years, including this year's increase in RC paper expenditures.

[2] Full text of No. 156 is available online at www.p2pays.org/epp/reports.asp.

Recycled content paper purchases totaled $35.3 million, which represents 71 percent of all paper purchases, nearly equivalent to last year. The data indicates a need to enhance efforts to achieve the 100 percent goal across all agencies, which is incorporated in the ***Recommendations*** section below.

- Half the paper purchases were spent on office paper, achieving a 40% rate for RC office paper
- 18 agencies reached 100% goal for all paper purchases, relatively consistent over the past 10 years
- More than 1/3 of the agencies achieved a stellar 90% or higher rate of RC purchases for paper
- Only 16% of reporting agencies purchased all office paper with recycled content
- 50% of the agencies purchased all RC towel and tissue products, achieving an overall purchase rate of 84%
- $18.2 million was spent on outside print orders, increasing more than 1/3 from last year, 76% of which was RC

Chart 1. State Agency Purchases of Recycled Paper and Paper Products
Fiscal Years 1994-2007



A significant impact is realized from the state's purchases of RC paper. For comparison, assume that the roughly $35.3 million spent on RC office paper and the nearly $14.7 million on virgin office paper included exclusively 8 1/2X11 white copy paper, all purchased from the state contract. The recycled office paper purchased conserved 25,711 trees, saved enough BTUs to provide nearly 200 households with energy for a year, and reduced the CO2 equivalent of removing 205 cars off the road for a year. Over 58 million gallons of wastewater were also conserved, equivalent of nearly 14 swimming pools. The solid waste avoidance could fill 43 garbage trucks, amounting to 1.2 million pounds. If we converted the $14.7 million in virgin paper to 30 percent RC paper, we could save another 11,851 trees, 20 more truckloads of garbage, and heat and light 91 more homes. These comparisons help put the impacts of the state's purchasing decisions in more tangible terms, and validate the motives behind our purchasing efforts[3].

Policy and Administrative Support

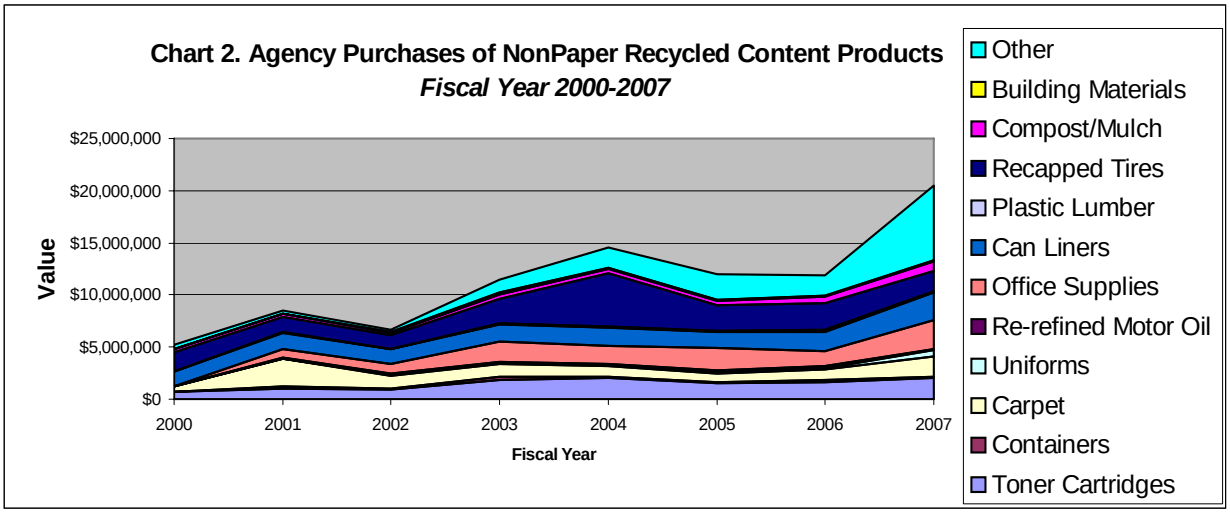
While agencies are not required to develop an internal policy by the General Statutes or Executive Order, it could be the first step to improving our state's effectiveness in RC product purchases. A mere 42 percent report having a buy recycled policy or goal in place, which is consistent with the last four years. Agencies are specifically charged with the responsibility of purchasing RC products, as well as designating a lead coordinator, which less than half have reported accomplishing. Agencies are also reporting that fewer administrators are communicating the importance of green purchasing. These are key components to a successful RC procurement program, and should be examined as a way to significantly increase participation.

Non-Paper Products

Agencies reported spending $20.5 million on non-paper RC products in fiscal year 2007, doubling last year's expenditures. Non-paper recycled product spending is on the rise, and is expected to increase

[3] These numbers are based on the assumptions outlined in the report. The weight of the office paper was estimated using a calculator at www.replanttrees.org, and the environmental impacts were estimated from the Environmental Defense's paper calculator at www.environmentaldefense.org/papercalculator.

continually as purchasers become further educated about the products they buy, and as the array of recycled products become more readily available.



Total expenditures of the recycled non-paper products reflect similar numbers as last year and are illustrated below in **Chart 2**. The size of the colored categories represent the total dollars of purchases in that category and the height in that fiscal year represents total purchases of non-paper recycled products. Reports revealed minor fluctuations in most categories; exceptions include uniforms and other. The "other" category includes furniture, animal bedding, outdoor equipment, and housekeeping supplies.

Other Environmental Purchasing Efforts

Some state agencies have excelled beyond buying recycled, and have begun to tackle more sustainable purchasing issues like environmentally preferable purchasing. EPP, or green purchasing, includes a host of attributes that can be considered to decrease the impact of our purchases on the environment. Western Carolina University is utilizing biodiesel in campus vehicles, and Camden County Schools and Gaston County Schools are making their own biodiesel. Kannapolis City Schools are developing an EPP plan of action. Several agencies have reported procuring energy efficient lighting figures, including florescent bulbs and low-mercury fluorescent tubes. Polk County Schools started a recycling program this year, and a few school systems are beginning to use green custodial products.

Other EPP successes in state government this year include continued dialogue between some of the DOA Purchase and Contract engineers and DPPEA to revise product specifications where possible. Two notable efforts include a new contract for neighborhood electric vehicles (similar to golf carts highly utilized on collegiate campuses) and designing new specifications for a green cleaner contract.

Conclusion

The purchase of RC products is a well-established practice in state government, supported by statutory and executive order requirements, as well as the possibility of using government purchasing power to establish state term contracts that offer high quality, affordable RC choices for purchasers. Still, progress must be made to bring agencies to full compliance with the 100 percent RC paper goal.

Several key agencies could, with a few significant purchasing decisions, substantially increase the overall performance of state government in recycled paper purchasing. Converting the current $279.3 million in virgin paper purchases to recycled paper will allow North Carolina state government to contribute substantially to the strength of recycling markets. As a major player in the collection of paper for recycling, state government stands to benefit directly from improved markets. The use of recycled products will also help North Carolina achieve its environmental goals by reducing natural resource, energy and water usage, and preventing air and water pollution.

The following recommendations may help state government meet goals set forth both in EO 156 and General Statutes, and increase overall RC purchases. According to previous recommendations, DPPEA worked on reinvigorating NC Project Green via a revitalization of the website and communication with former participants. Training sessions were conducted for a few purchasing organizations, including

department purchasers and local school unit procurement professionals. According to reporting agencies, administrative support increased over the last year. DPPEA made continual efforts to share RE3 with universities, community colleges, and high schools across the state. Other efforts included participation in the Carolina Recycling Association's Collegiate Conference and other meetings, where higher education schools met to discuss recycling and sustainability efforts.

Recommendations

I. **NC Procurement Professionals should communicate their interest in procuring green products to DOA's Purchase and Contracts Division.** Educational sessions reveal that government-purchasing professionals are interested in increased green product choices available on contract. While some university purchasing offices have management support and are interested in developing specifications and policies, most can not dedicate time to designing internal green policies or searching for EPP contract language and would be interested in utilizing pre-negotiated state contracts. They also need assistance justifying price differentials for more durable and healthier products.
   - Evaluate products in terms of broad environmental impacts including: durability, energy efficiency, performance, RC and recyclability, toxicity, biodegradability, local manufacturers, and packaging.
   - Engage P&C regarding products and contractual services that take into account environmental impact.

II. Increase efforts to achieve the 100 percent goal. A renewed emphasis and commitment to meet the statutory and executive goals, combined with a targeted campaign of outreach to agencies purchasing a high level of virgin paper could augment change. In particular, P&C and DPPEA should seek more RC paper vendors in order to have more competitively priced RC paper on state contract.

Agencies that Purchased 100 Percent Recycled Paper in FY 07

Administration, Dept. of
Alexander County Schools
Asheboro City Schools
Central Carolina Community College
Central Piedmont Community College
Crime Control & Public Safety, Dept. of
Currituck County Board of Education
Davidson County Schools
Durham Technical Community College
Fayetteville Tech Community College
Guilford County Schools
Lenoir County Public Schools
Madison County Schools
Pamlico County Schools
Randolph Community College
Stokes County Schools
UNC Charlotte
Wilson Technical Community College

Agencies that Failed to Report Data for FY 07

Alleghany County Board of Education
Auditor, Office of State
Beaufort County Community College
Beaufort County Schools
Bladen Community College
Bladen County Schools
Brunswick Community College
Cabarrus County Schools
Carteret County Schools
Catawba County Schools
Cherokee County Schools
Clay County Board of Education
Clinton City Schools
Coastal Carolina Community College
Columbus County Schools
Cultural Resources, Dept. of
Dare County Schools
Davidson County Community College
Edgecombe Community College
Elizabeth City State University
Fayetteville State University
Franklin County Schools
Gates County Public Schools
Graham County Schools
Harnett County Schools
Hertford County Schools
Hoke County Board of Education
Hyde County Board of Education
Iredell-Statesville Schools
Jackson County Public Schools
James Sprunt Community College
Johnston County Schools
Kings Mountain District Schools
Lieutenant Governor's Office
Martin Community College
Mayland Community College
McDowell County Schools
McDowell Technical Community College
Mooresville Graded School District
NC Central University
NC School of Science & Mathematics
NC School of the Arts
NC State University
Northampton County Schools
Office of Information Technology Services
Pasquotank County Schools
Person County Schools
Roanoke-Chowan Community College
Robeson County Public Schools
Shelby City Schools
Southeastern Community College
Stanly Community College
Surry County Schools
UNC Hospitals
UNC Pembroke
Wake Technical Community College
Warren County Schools
Watauga County Schools
Whiteville City Schools
Wilkes Community College
Wilkes County Schools

*Completed the 2006 State Agency Source Reduction, Recycling, and Composting Report

State Agency Source Reduction, Recycling, and Composting Efforts

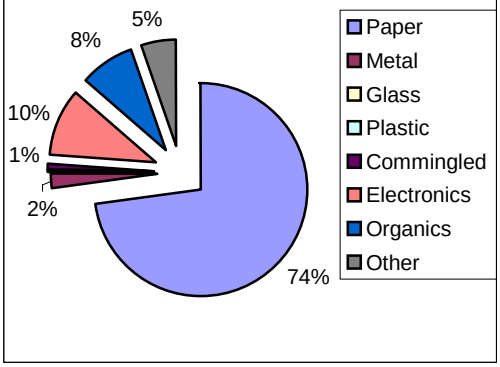
State agencies are directed to recycle by state law - N.C. General Statute 143 and by Executive Order 156. The Division of Pollution Prevention and Environmental Assistance suspended reporting for a few years, but in 2005 started a new baseline for state recycling trends. Fifty-one agencies reported data, which constitutes half of the required reporting entities and represents a 10 percent increase from last year. Universities and community colleges are heavily represented, accounting for 33 reports.

Agency departments pose a difficult challenge in reporting because they often have several regional offices to gather data from, and many work in leased facilities and share buildings with non-state businesses. Departments make up 25 percent of the required reports. More than twice as many state employees work in regional office across than the Capital area. This year eight agency departments reported, twice as many as last year. The Department of Transportation filed a complete report, and a complete summary of their solid waste and recycling program is included in this Solid Waste Management Annual Report.

The majority of agency offices located in the Raleigh-area are included under one contract for recycling and solid waste collection, managed by the Department of Administration's Facilities Management. Facilities Management gathers data from the collection companies and completes this report for agencies in the capital region.

Recycling Performance. In fiscal year 2007, state agencies collectively diverted 58,888 tons from disposal in landfills and incinerators. Respondents reported recycling 42,826 tons of paper, 1,411 tons of metals, 18 tons of glass, 33 tons of plastic, 552 of commingled containers, 4,894 tons of organics, and 3,135 tons of other materials, as demonstrated in Figure 1. The commingled containers category was added this year because expanding markets across the state are able to handle mixed materials. This is a great improvement, as simple programs have the highest participation rate.

Chart 1. 2007 Recycling Breakout



Based on FY 2007 data, the agency recycling rate for all wastes managed during the year was 43 percent. This is a 16 percent increase from the 2006 report. There was also an enormous increase in the 'paper' and 'electronics' categories. Six agencies reported recycling tonnages this year but did not include solid waste tonnages, including DOA.

Figure 1. DOT Recycling Tonnages

Material	Tons
Paper	1106
Metal	1753
Glass	21
Plastic	25
Electronics	106
Organics	10477
Other	209499
Total Tons Recycled	222987
Recycling Rate	94%

This data is extremely variable, and drawing comparisons is difficult because reporting behaviors are not consistent year to year. For example, last year the data reported by Facilities Management represented 6 percent of the total recycling tonnage. This year, they account for less than two percent. Department of Transportation, however, generated 77 percent of all recycling tonnage. In order to draw some conclusions and demonstrate a few comparisons in this year's report, DOT's data is not included in the charts and overall recycling rate for the state. DOT's data is displayed in Figure 1, and a summary of its activities are included in this Solid Waste Report.

Data was collected for electronics recycling for the third year in a row. Encouragingly, nearly half the agencies have a contract set up with a computer-recycling vendor, and in FY 2007 collected 6,125 tons of electronics. This does not include data from DOA or the State Surplus Office. Most agencies report using the statewide electronics-recycling contract (www.doa.state.nc.us/PandC/926a.htm) to complement recycling through state surplus. A handful of agencies reported other vendors they work with, all of which are listed in our online directory at www.p2pays.org/dmrm. A few claim to work in conjunction with their local government to dispose of

electronics and one or two donated to local schools. Agencies and local governments are becoming keenly aware of the need to recycle electronic materials, bearing in mind their contribution of hazardous substances to landfills and the opportunity to reclaim valuable resources from electronic products.

Solid Waste and Program Costs

Approximately 104,052 tons of solid waste were landfilled for state agencies in FY 2007, including DOT figures, costing about $7.6 million in collection and disposal fees at an average cost of just under $165 per ton. This falls short of the 134,599 tons reported in 1999 costing $11.75 million, but it is an 11 percent increase from last year. While the overall cost of disposal decreased by over $2 million dollars from last year, the cost per ton actually increased by $42. This number is extremely fickle depending on how complete agency reports are.

Calculating the total cost of solid waste and recycling programs is difficult, and respondents may need training to review this computation. This year additional calculations were included to more accurately compute the expense of recycling programs. In order to determine the true cost or cost avoided, agencies must submit complete reports. The reliability of this data also depends on how in-depth the reporting agencies examine their program fees.

Agencies are asked to report the cost avoided through recycling, calculated by multiplying the recycling tonnage by the cost per ton of solid waste. While most appeared to do this from the data, some agencies reported tremendous differences in their cost avoided through recycling. Those discrepancies were either miscalculations or took into consideration other costs of the program that were not supplied in the report. The total cost avoided was estimated over $11.2 million, an astounding increase from last year.

While over a third of the reports claim some revenues for the sale of recyclables amounting to almost $250,000, the majority still experienced program costs totally nearly $2.7 million. Program costs include collection, processing, and outreach and education. **The result is an average cost of $11 per ton of recyclables, $154 less than the cost for solid waste disposal**, which exemplifies the savings in recycling. It should be noted that 8 agencies did not include recycling program costs although they did report recycling tonnages. Recycling programs should not have the expectation of zero cost, but can expect that there will be an overall savings by avoiding the higher disposal fees of solid waste. As with most new programs and efforts, there is an upfront cost for containers and initial education, and minimal costs to continue marketing the program.

Administrative Support and Source Reduction

The majority of agencies report that they receive top-down administrative support for recycling efforts, and over half have a lead coordinator for waste reduction and recycling program. Forty-two percent have a waste reduction program, and an equal portion have ongoing educational programs for waste reduction and recycling. Most agencies that routinely host the public at their facilities, such as state parks, highway rest areas, museums, and sports venues, provide recycling opportunities for visitors. Some agencies detailed that limited training is provided but could be improved if upper tier administrative support is gained. Information was generally communicated and distributed via:

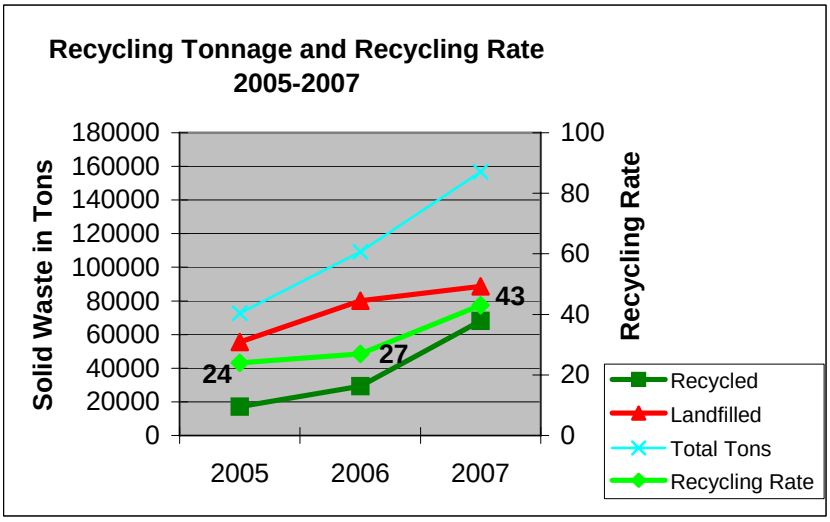
- ✓ Employee email, newspaper, radio, word of mouth and one-on-one education at campus events where promotional items are distributed
- ✓ Website, brochures, student groups, volunteers and volunteer activities
- ✓ Presentations at training sessions and managers meetings, as well as annual reports
- ✓ Recycling policies and procedures listed in materials such as Employee Manuals, printed on campus phone directories, given to residence hall staff, and posted online
- ✓ Posters and signs in break rooms, recycling centers, hallways, and restrooms.

Eighty-five percent of state agencies practice waste reduction at the source, including reducing office paper by eliminating unnecessary reports and forms or converted to electronic format, making fewer copies, double sided printing, using email and voice mail to communicate, and posting announcements on bulletin boards or in break areas. Agencies estimate a 13 ton reduction in paper usage in fiscal year 2007. A third of agencies conducted solid waste assessments of the amount and types of solid waste at its facilities. Some use this reporting process to reevaluate their program. Other agencies conduct site visits, collect landfill invoices, or audit on-site trash dumpsters. The results help in finding the best place to put recycling containers, deciphering which materials are most feasible to recycle, and identifying where waste reduction techniques would be most efficient.

Conclusion

While the revitalization of the recycling report has shown a great percentage of agencies continuing their waste reduction and recycling efforts that were established several years ago, there are still challenges. Some agencies, including community colleges and a few universities, are struggling to recycle basic material like cardboard and aluminum cans. Sometimes this is a market issue. More often, it is a perceived barrier due to lack of education and funding, which stems from insufficient support internally.

Excluding DOT's data, this year's recycling tonnage represents a 133 percent increase from last year, nearing the 71,344 tons reported in 1999. Inconsistencies and inaccurate reports are still a problem, making finite conclusions complicated. For instance, a variable set of agencies report each year, and there is missing data in many reports. In addition, many departments neglect to report for their regional offices. This year the integrity of the data improved with updates to the report form.



Some of the changeability in statistics can be attributed to the inability of agencies to accurately track tonnages. Solid waste and recycling weights are still estimated because collection companies have not integrated onboard truck scales. Exact weights can only be obtained if collection is completed at one facility and the truck is brought across scales to obtain an exact weight, which rarely occurs for some agencies that collect their own materials. For these reasons, figures reported likely underestimate the true quantities and costs of waste being disposed. Incomplete tracking and estimation may also contribute to fluctuations in reported recycling over time.

The unreliability of the data prevents a conclusion that increased recycling tonnage caused a decrease in solid waste being disposed of in the state's landfills. **Overall, this year's 43 recycling rate improved by 16 percent from 2006.** This estimates that agencies are recycling nearly half of their solid waste, and reports indicate they may have achieved some waste reduction through their efforts. Improved awareness of agency solid waste streams and more accurate data collection will make a more reliable comparison possible.

It is encouraging that some agencies have pulled forward as stars in waste reduction and recycling efforts. Many universities provide reuse programs including large-scale collection and redistribution of clothing, furniture, household supplies, and even electronic products. A few universities have conducted sustainability audits over the last year or two, which include energy and water tracking mechanisms as well as waste audits of the campus. With the re-establishment of the recycling report, some community colleges and universities reached out for assistance to restart or revitalize their program. Guilford Technical Community College, UNC Pembroke, and NC A&T State University all contacted DPPEA following the reporting season last year for assistance in reviving their programs.

DPPEA has developed a new outreach and education campaign that is available to all universities and community colleges to help promote recycling programs. In FY 2007, many schools took advantage of the RE3 campaign, utilizing posters and commercials on campus. At annual outreach events from job festivals to Earth Day celebrations, campus coordinators gave out promotional materials to encourage students to visit www.re3.org to learn more about recycling. DPPEA developed new materials to continue promoting the program, including online resources such as a web-blog, new commercials, and more promotional materials, which were all well received and enhanced the efforts of RE3.

Recommendations

Upon review and consideration of the data contained in this report, DPPEA submits the following recommendations to improve the solid waste reduction and recycling efforts of North Carolina state agencies.

I. Use the Source Reduction and Recycling Report Data to Assist Programs Statewide. Tracking the amounts of solid waste disposed annually by state agencies is the best way to determine whether efforts to reduce waste, including recycling programs, are impacting the waste stream. This information, along with data on the costs for collection and disposal, can be used to evaluate the cost efficacy of agencies' waste management strategies, as well as the costs avoided through waste reduction and recycling. To maximize data recovery and assessment, it is recommended that agencies:

- Conduct waste assessments at their constituent facilities, offices, and institutions.
- Require full accounting for all costs associated with solid waste collection and disposal services.

II. Develop a means to communicate your recycling program. Programs are ineffective if they are not visible and not explained to employees. This may be as simple as quarterly email reminders of what is accepted at the various bins in your facility, and where the bins are located (i.e. by the copy machine, in the staff lounge, in the lobby, etc.). Depending on the work environment, such efforts may include a full-fledged outreach and education program. DPPEA makes materials available for promotional initiatives, including posters, stickers, and other advertising tools through the RE3 program at www.re3.org.

North Carolina Department of Environment and Natural Resources
Division of Pollution Prevention and Environmental Assistance
1639 Mail Service Center
Raleigh, North Carolina 27699-1639

Phone: (919) 715-6500 or (800) 763-0163
Fax: (919) 715-6794
E-mail: Rachel.Eckert@ncmail.net
Web site: www.p2pays.org

The Division of Pollution Prevention and Environmental Assistance provides free, non-regulatory technical assistance and training on methods to eliminate, reduce or recycle wastes before they become pollutants or require disposal. Contact DPPEA for more information about this document or waste reduction.

CHAPTER 8 – Department of Transportation
NCDOT REDUCE/REUSE/RECYCLE Report

NCDOT SECRETARY LYNDO TIPPETT, ***Human beings are considered the "highest order" on earth. This title is more than an honor; it carries a special Responsibility. As living creatures, we have a moral obligation to do more than preserve our existing resources. We must set an example for the good of our successors—our children and grandchildren.***

State Highway Administrator W. F. Rosser, P.E. (Bill)
As our Department redefines our Mission Statement - "Connecting people and places in North Carolina safely and efficiently with accountability and environmental sensitivity" - we can reinforce our 3R Program Recycle/Reduce/Reuse to help us meet our mission and commitment to our State and to the quality of life that we enjoy.

N.C. DMV Commissioner William C. Gore Jr.
One of DMV's important functions is working with the Division of Air Quality and the Environmental Protection Administration to reduce the pollutants coming from the vehicles we drive on our roads and highways. We take great pride in doing all we can to preserve the quality of life for future North Carolinians.

NCDOT 3R Program Tree

Source Reduction
New Technology

Source Reduction
Procurement

Source Reduction
New Design

Source Reduction
Planning

Reuse
Materials

Reuse
Composting

Reuse
Items

Reuse
Waste Exchange

Reuse
Swap Shop Surplus

Recycle
Paper/Aluminum
Plastic/Cardboard

Recycle
Purchasing
Buy Recycle

Benefits

- More Efficient Operation
- Saves Money
- Great Public Relations
- Environmental Sustainability
- Compliance

NCDOT Annual 3R Program Report
2006-2007

PART I. EDUCATION ON WASTE REDUCTION AND RECYCLING

Effective education is the key to a successful waste reduction program.

In regard to the past fiscal year July 1, 2006- June 30, 2007

1. Does NCDOT have top down support for a recycling program?
   Yes
2. Does NCDOT have a lead coordinator for waste reduction and recycling efforts?
   Yes
3. Does NCDOT have a waste reduction position, office, or program?
   Yes
4. Does NCDOT provide waste reduction and recycling opportunities for visitors?
   Yes, NCDOT hosts members of the public at its facilities highway rest stops.
5. Does NCDOT have an ongoing educational and promotional program for waste reduction and recycling?
   Yes
6. If yes, how was it communicated and how was information distributed?
   Majority of the information was communicated and distributed electronically by: Email, Web site http://www.ncdot.org/environment/3R/ , employee news letter (In The Loop), and Special event days (Earth Day/America Recyclers Day) as well as management and staff meetings.

Recycling and Solid Waste Management Report Fiscal Year 2006

NCDOT continues to look for efforts to utilize recycled and solid waste materials that are in highway construction projects, specifically:

- Rubber from tires for pavement, subbase materials, and other appropriate applications
- General recycled materials for guardrail posts, right of way fenceposts, and sign supports
- Recycling technology, including but not limited to “hot in-place” asphalt recycling.

NCDOT also continues to strive for better tracking and reporting of the recycled materials utilized in projects:

- Fly Ash - The use of fly ash as a concrete additive is increasing, and will continue to do so, as the price of cement climbs. This creates a higher market for ash than embankment fills and puts additional limits on availability of potential material for fill projects. Much usage is likely still going unreported. Efforts continue to track down these volumes and develop means to better track these uses in the future.
- Millings - The recycling of millings is now being calculated using actual mix designs and recycling percentages stated in these designs. This will allow the report to portray a more accurate and inclusive picture of total asphalt recycling across the state in both construction and maintenance operations.
- Maintenance personnel across the state continue to reuse and recycle products including: 45,331 pounds of guardrail, 1250 feet of silt fence and posts, 940 feet of reinforced concrete pipe, and over 1400 tons of stockpiled soil, mulch, gravel, and rubble. These numbers will surely grow as we improve our reporting and tracking system in the coming years.

Website

For up-to-date information on NCDOT’s use of recycled materials, visit
http://www.doh.dot.state.nc.us/preconstruct/highway/dsn_srvc/value/recycle/

PART II. SOURCE REDUCTION (WASTE PREVENTION) OF WASTE

North Carolina places source reduction (waste prevention) and reuse at the top of the hierarchy of preferred methods for managing solid waste. Executive Order 156 requires state agencies to practice waste reduction.

In regard to the past fiscal year July 1, 2006 - June 30, 2007

1. Did most of NCDOT employees practice one or more techniques for reducing waste at the source?
   Yes
2. Did NCDOT conduct solid waste assessments of the amount and types of solid waste at its facilities?
   No

Questions 3-5 relates to office paper waste reduction carried out in NCDOT facilities from July 1, 2006 - June 30, 2007.

3. Did your facilities take action to reduce office paper (copy paper, letterhead, envelopes, and packaging) waste?
   Yes
4. If yes, what percentage of your facilities took action to reduce office paper waste?
   70%
5. Which techniques did your agency practice to reduce office paper waste?
   Eliminated unnecessary reports and reduced report size.
   Yes

a. Eliminated unnecessary forms or converted to electronic format.
   Yes
b. Made fewer copies.
   Yes
c. Printed or copied documents on both sides of the paper.
   Yes
d. Used electronic mail and voice mail.
   Yes
e. Post announcements on bulletin boards or in break areas.

NCDOT Secretary Lyndo Tippett recognizes the Swap Shop Program as the overall winner in the category of Environmental Sustainability at the 8th Annual CPI Conference

Reuse - NCDOT Swap Shop/ Property Request

This is an expansion program of the NCDOT 3R Program that provides a formalized process, to all NCDOT employees, to review and exchange surplus items and materials within NCDOT state-wide before disposing of it through State Surplus Properties. This also provides a formalized process for any Department within NCDOT state- wide to communicate to all other Departments a need of an item (s) or material (s). To view item (s) that are in the process of being surplus or item (s) that are needed by other Departments go to our NCDOT web site using Internet Explorer https://intranet.dot.state.nc.us/portal.

PART III. RECYCLING AND COMPOSTING INFORMATION

NCDOT has embraced Recycling through out the entire state of North Carolina. The growth in Recycling Programs throughout NCDOT reflects the common-sense instinct of its employees to conserve resources and save on operating cost in there own back yard. Transforming waste materials into useable resources; Recycling provides NCDOT and North Carolina with several major benefits:

- Recycling conserves Energy and Water.
- Recycling conserves Natural Resources and Landfill Space.
- Recycling programs can be cost-competitive with solid waste landfilling and incineration.
- Recycling reduces Pollution.
- Recycling creates jobs and reduces costs in manufacturing sectors that are an important part of our economy.

1. PAPER: newspaper, cardboard, magazines, office paper, mixed paper, computer printout, telephone books, hardback books, etc.

1105.6 tons recycled- office papers, telephone books and cardboard

NCDOT 2006 –2007 Paper Recycling Program Environmental Impact

- 7,687,236 Gallons of Water Saved
- 4,507,531 Kilowatt Hours of Energy Saved
- 511,893 Gallons of Oil Saved
- 3,383 Cubic Yards of Landfill Space Saved

2. **METAL: aluminum cans, steel cans, scrap metal, white goods, etc.**

1752.5 tons recycled-, highway signs, scrap metal, and aluminum cans

3. GLASS CONTAINERS: clear, brown, green, and mixed glass.

20.7 tons recycled- clear, green, brown glass bottles

4. PLASTIC: PETE (#1), HDPE (#2), six-pack rings (LDPE, or #4), mixed plastic, etc.

25.3 tons recycled- plastic jugs, buckets, and bottles

5. **ORGANIC MATERIALS: wooden pallets, other wood, yard waste, food scraps, used cooking grease, animal manure, etc.**

10,477.4 tons recycled - pallets, yards waste, and wood mulch

6. **OTHER MATERIALS: lead-acid batteries commingled materials, textiles/fabrics, motor oil, tires, asphalt, etc.**

640,498.7 tons recycled-oil, tires, and asphalt

7. **ELECTRONICS: monitors, computers, printers, copiers, televisions, etc.**

106.3 tons recycled- computers, monitors, and printers.

8. **GRAND TOTAL POUNDS RECYCLED/COMPOSTED:**
   653,986.5 tons

NCDOT Transit Division (Rail, Ferry, and Aviation Division)
3R Program – Reuse Program

Rail Division within NCDOT leads the way in reuse and recycling with cost savings exceeding well over several hundreds of thousands of dollars this year.

Ferry Division reuses and recycles nearly everything in maintaining their ferries.

Aviation reuse and recycle programs keep their waste stream down to a minimum.

PART IV. SOLID WASTE DISPOSAL AND COST INFORMATION
Enter NCDOT solid waste disposal and cost information for July 1, 2006-June 30, 2007

1. Total tons of solid waste disposed by land filling or incineration
   75,659 tons

2. Total costs for solid waste collection and disposal
   $ 2,723,757.00

3. Total tons recycled or composted
   653,986.5 tons

4. Total solid waste collection and disposal costs avoided through recycling, reusing and composting
   $ 23,350,392

5. Total revenues from sale of recycled materials and compost products
   $ 127,272

Comments:

NCDOT focus over the past year has moved further up the hierarchy of waste management by implementing and educating its employees on Reuse and Source Reduction practices. NCDOT programs contributing to the increase in source reduction, reuse, and recycling are attributed to:

- 2006 NCDOT Business Plan included goals of:
  5% Reduction in Waste Stream
  10% Increase in Recycling
- Increasing specifications to allow more reuse of asphalt, hot & place technology, and HiCAMS reporting.
- Elimination of mass printing of many manuals and placing multiple documents and forms on-line for our customers and employees to use.

NCDOT source reduction, reuse, and recycling numbers should continue to improve as the Department seeks better reporting and accounting methods of its waste stream.

APPENDIX A-1: PUBLIC AND PRIVATE MUNICIPAL SOLID WASTE LANDFILLS, DESCENDING ORDER OF TONS, FY 2006-2007

PERMIT #	FACILITY	TONS						FACILITY TYPE
		2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
1304	BFI-CHARLOTTE MTR SPEEDWAY LANDFILL V	1,026,065	1,116,525	1,080,396	1,072,224	1,255,717	1,248,755	MSWLF
8202	WI-SAMPSON COUNTY DISPOSAL INC	613,534	775,052	940,344	849,094	866,528	981,779	MSWLF
6204	UWHARRIE ENV. REG. LANDFILL	671,808	700,619	706,997	729,158	760,704	729,708	MSWLF
0803	EAST CAROLINA REG LANDFILL	443,058	396,601	574,897	507,877	519,758	556,607	MSWLF
9209	WAKE COUNTY LANDFILL-NORTH	375,365	349,902	367,681	371,635	434,566	440,445	MSWLF
1403	FOOTHILLS ENVIRONMENTAL LANDFILL	170,687	198,767	187,696	203,788	219,353	379,118	MSWLF
3402	HANES MILL ROAD LANDFILL	287,953	274,119	238,948	274,561	266,504	276,116	MSWLF
0403	CHAMBERS DEVELOPMENT MSWLF	216,576	225,788	234,976	288,249	262,093	273,112	MSWLF
2509	CRSWMA - LONG TERM REGIONAL LANDFILL	174,864	183,703	204,988	211,127	236,436	232,555	MSWLF
6504	NEW HANOVER COUNTY LANDFILL	117,637	117,867	187,387	171,425	245,781	199,633	MSWLF
7304	UPPER PIEDMONT REG LANDFILL	217,643	239,251	219,366	238,823	244,695	198,233	MSWLF
2601	CUMBERLAND COUNTY LANDFILL	129,407	130,812	123,416	173,797	171,151	177,756	MSWLF
4903	IREDELL COUNTY SANITARY LF	121,253	128,291	134,241	149,417	162,637	167,950	MSWLF
1803	CATAWBA COUNTY LANDFILL	164,469	165,142	164,590	168,140	167,988	165,384	MSWLF
6019	MECKLENBURG COUNTY LANDFILL	82,031	93,011	120,260	140,348	158,035	165,239	MSWLF
6709	ONSLOW COUNTY SUBTITLE D LANDFILL	104,967	107,639	120,106	131,685	141,239	142,155	MSWLF
1107	BUNCOMBE COUNTY MSW LANDFILL	146,690	160,863	170,170	173,774	122,034	117,215	MSWLF
5103	JOHNSTON COUNTY LANDFILL	93,267	97,593	103,501	108,751	109,822	113,684	MSWLF
3606	GASTON COUNTY LANDFILL	72,704	86,228	65,903	70,905	97,159	108,616	MSWLF
6505-I	NEW HANOVER WASTE-TO-ENERGY FACILITY	120,751	123,823	74,984	104,755	70,974	107,837	MSWLF
2906	DAVIDSON CO MSW LINED LANDFILL	100,991	93,351	96,265	104,040	100,574	103,997	MSWLF
4112	GREENSBORO, CITY OF	259,080	251,505	237,057	219,090	201,396	101,965	MSWLF
4104	HIGH POINT CITY OF - LANDFILL	148,546	156,155	139,743	99,207	85,889	99,820	MSWLF

APPENDIX A-1: PUBLIC AND PRIVATE MUNICIPAL SOLID WASTE LANDFILLS, DESCENDING ORDER OF TONS, FY 2006-2007

PERMIT #	FACILITY	TONS						FACILITY TYPE
		2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
8003	ROWAN COUNTY LANDFILL	69,131	73,350	79,166	75,524	98,548	94,642	MSWLF
2301	CLEVELAND COUNTY LANDFILL OPEN	69,495	86,717	94,600	94,667	90,761	91,211	MSWLF
7904	ROCKINGHAM COUNTY LANDFILL	79,675	79,800	77,027	89,388	89,212	90,072	MSWLF
7803	ROBESON COUNTY LANDFILL	86,678	93,423	106,336	95,585	89,296	90,005	MSWLF
0104	AUSTIN QUARTER SWM FACILITY	90,027	97,059	95,056	82,685	74,163	84,078	MSWLF
9606	WAYNE COUNTY LANDFILL	88,437	88,943	94,800	92,938	92,481	81,030	MSWLF
8606	SURRY COUNTY MSWLF	50,087	51,565	64,828	69,190	80,985	79,601	MSWLF
4407	HAYWOOD CO WHITE OAK LANDFILL	48,893	49,580	42,580	56,055	42,790	58,455	MSWLF
9704	WILKES COUNTY MSWLF	60,635	60,114	61,686	61,649	57,391	58,121	MSWLF
6801	ORANGE COUNTY LANDFILL	56,577	56,925	57,143	56,308	57,570	57,301	MSWLF
5409	LENOIR COUNTY MSW LANDFILL				33,323	43,600	56,692	MSWLF
8401	ALBEMARLE, CITY OF-LANDFILL	40,397	41,494	43,505	49,910	49,424	46,614	MSWLF
6708	CAMP LEJEUNE MSW LANDFILL	47,433	40,054	48,972	49,418	50,802	46,612	MSWLF
5503	LINCOLN COUNTY LANDFILL	41,231	44,125	45,558	52,013	45,935	45,090	MSWLF
8807	TRANSYLVANIA COUNTY LANDFILL	22,495	24,034	26,496	28,303	26,732	28,090	MSWLF
5703	MACON COUNTY LANDFILL OPEN	37,041	38,145	27,889	27,746	27,783	27,517	MSWLF
0501	ASHE COUNTY LANDFILL	22,598	22,528	22,342	21,704	22,643	22,922	MSWLF
2002	CHEROKEE COUNTY MSW FACILITY	19,179	18,977	19,124	18,631	20,113	19,687	MSWLF
TOTAL TONS		**6,789,353**	**7,139,441**	**7,501,017**	**7,616,903**	**7,961,262**	**8,165,420**	

APPENDIX A-1: PUBLIC AND PRIVATE CONSTRUCTION AND DEMOLITION LANDFILLS, DESCENDING ORDER OF TONS, FY 2006-2007

PERMIT #	FACILITY	TONS						FACILITY TYPE
		2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
9228	RED ROCK DISPOSAL, LLC	33,984	166,165	143,815	168,931	183,704	200,361	CDLF
9231	MATERIAL RECOVERY/ BROWNFIELD RD C&D LA			59,505	141,043	148,244	154,814	CDLF
4103	GREENSBORO, CITY OF	201,856	162,190	143,319	126,427	145,871	130,951	CDLF
6013	NORTH MECKLENBURG C&D LANDFILL	181,045	192,669	172,186	180,578	119,795	129,209	CDLF
1306	HIGHWAY 49 C&D LANDFILL AND RECYCLING	57,453	61,571	85,975	101,695	112,072	116,544	CDLF
2608	FORT BRAGG C&D LANDFILL	138,914	50,441	50,324	189,861	218,565	105,986	CDLF
3412	OLD SALISBURY ROAD CDLF	104,808	103,277	110,229	117,119	102,059	101,390	CDLF
9230	HWY 55 C & D LANDFILL, LLC		41,177	80,279	72,421	69,182	92,916	CDLF
5504	BFI-LAKE NORMAN LANDFILL	121,364	74,612	85,398	85,247	112,369	89,781	CDLF
1007	BRUNSWICK COUNTY CDLF	31,829	42,009	51,994	63,913	76,390	71,402	CDLF
1302	CABARRUS COUNTY CDLF	29,666	31,622	25,570	31,461	158,626	67,811	CDLF
1107	BUNCOMBE COUNTY C&D UNIT	24,238	8,209	29,889	39,252	58,730	66,388	CDLF
7407	C & D LANDFILL INC.	25,687	39,769	40,607	54,373	59,339	62,341	CDLF
2301	CLEVELAND COUNTY CDLF	14,913	62,119	24,638	25,762	25,155	60,056	CDLF
4903	IREDELL COUNTY C&D UNIT	43,806	43,783	53,758	54,252	51,545	58,094	CDLF
9226	SHOTWELL LANDFILL INC.	22,919	21,946	30,094	30,204	36,600	56,192	CDLF
3606	GASTON COUNTY C&D LANDFILL	39,604	33,799	43,913	50,427	47,529	52,869	CDLF
0105	COBLES C&D LANDFILL	79,036	78,328	57,962	57,825	55,849	49,981	CDLF
1803	CATAWBA COUNTY C&D UNIT		27,291	31,920	30,106	40,246	49,733	CDLF
2601	CUMBERLAND COUNTY C&D UNIT	14,024	13,506	22,901	30,245	40,163	46,198	CDLF
8003	ROWAN COUNTY C&D UNIT			12,171	35,070	38,939	45,673	CDLF
9003	GRIFFIN FARMS CDLF	20,763	26,604	32,381	33,639	42,747	42,844	CDLF
5101	JOHNSTON COUNTY C&D LANDFILL	42,548	38,774	33,853	31,233	39,646	40,832	CDLF

APPENDIX A-1: PUBLIC AND PRIVATE CONSTRUCTION AND DEMOLITION LANDFILLS, DESCENDING ORDER OF TONS, FY 2006-2007

PERMIT #	FACILITY	TONS						FACILITY TYPE
		2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
4116	WCA OF HIGHPOINT, LLC			17,948	100,237	114,093	37,018	CDLF
6301	MOORE COUNTY C&D LANDFILL	26,675	24,807	26,237	29,823	36,406	36,125	CDLF
9601	WAYNE COUNTY CDLF	39,537	31,563	24,481	31,616	28,569	30,382	CDLF
9809	WILSON COUNTY WESTSIDE C&D LANDFILL				22,137	31,442	28,725	CDLF
2803	DARE COUNTY C&D LANDFILL	24,306	31,038	40,225	32,390	15,368	28,608	CDLF
9001	UNION COUNTY C&D	31,443	27,498	24,897	20,278	27,859	27,989	CDLF
8401	ALBEMARLE, CITY OF, CDLF	28,262	29,362	34,503	30,318	28,413	27,324	CDLF
7803	ROBESON COUNTY CDLF	10,922	10,946	10,431	11,058	31,801	25,529	CDLF
3901	GRANVILLE COUNTY CDLF	29,599	24,128	24,063	24,579	31,260	25,446	CDLF
4501	HENDERSON COUNTY C&D LANDFILL	13,082	13,378	17,554	12,628	11,450	20,966	CDLF
9214	BFI-HOLLY SPRINGS DISPOSAL INC	150,523	36,146	37,584	46,975	54,771	20,458	CDLF
4302	HARNETT COUNTY CDLF	16,291	15,766	22,316	24,200	20,115	20,312	CDLF
1203	BURKE COUNTY CDLF	19,314	14,348	16,633	18,631	19,339	19,742	CDLF
8103	RUTHERFORD COUNTY C&D	18,291	16,316	24,173	20,604	21,768	19,291	CDLF
7002	PASQUOTANK COUNTY C&D LANDFILL	6,753	12,575	21,795	20,129	23,710	18,029	CDLF
6801	ORANGE COUNTY C&D UNIT	27,729	20,231	17,328	16,084	16,157	16,546	CDLF
6403	NASH COUNTY C&D LANDFILL	38,963	14,925	17,023	11,928	18,690	15,692	CDLF
5403	LENOIR COUNTY CDLF	39,373	31,680	28,698	25,576	19,191	15,009	CDLF
8301	SCOTLAND COUNTY CDLF	24,867	23,613	24,545	23,874	16,078	14,971	CDLF
8602	SURRY COUNTY C&D LANDFILL	17,403	13,910	14,814	13,680	16,260	13,744	CDLF
4303	HARNETT CO ANDERSON CRK C&D LANDFILL	7,690	6,751	10,538	10,695	13,237	13,160	CDLF
7606	GOLD HILL ROAD C&D DEBRIS LANDFILL	7,471	9,980	15,418	12,401	13,327	12,913	CDLF
2906	DAVIDSON COUNTY CDLF	3,670	8,077	11,707	10,638	7,999	12,725	CDLF
5503	LINCOLN COUNTY C&D UNIT	14,635	18,730	16,337	16,097	10,351	10,787	CDLF

APPENDIX A-1: PUBLIC AND PRIVATE CONSTRUCTION AND DEMOLITION LANDFILLS, DESCENDING ORDER OF TONS, FY 2006-2007

PERMIT #	FACILITY	TONS						FACILITY TYPE
		2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
5704	HIGHLANDS C&D LANDFILL	8,962	11,075	9,601	9,463	9,383	9,801	CDLF
3301	EDGCOMBE COUNTY CDLF	18,507	18,639	19,977	11,778	7,670	9,254	CDLF
5301	LEE COUNTY C&D LANDFILL	7,868	8,114	9,247	7,637	7,767	6,434	CDLF
5901	MARTIN COUNTY C&D LANDFILL	3,572	3,829	4,410	3,567	9,518	5,957	CDLF
4204	HALIFAX COUNTY CDLF	3,481	4,451	5,724	4,707	6,957	5,267	CDLF
0603	AVERY COUNTY C&D LANDFILL	3,164	2,472	2,830	3,855	3,460	4,950	CDLF
0104	AUSTIN QUARTER C&D UNIT	5,319	4,735	5,866	4,783	5,102	4,694	CDLF
5803	MADISON COUNTY C&D UNIT	5,501	3,933	4,180	14,803	6,327	4,647	CDLF
10002	YANCEY-MITCHELL C&D LANDFILL	2,809	3,443	4,557	6,519	5,851	4,508	CDLF
0905	BLADEN COUNTY C&D LANDFILL	6,859	4,562	3,861	5,469	5,309	4,221	CDLF
0201	ALEXANDER COUNTY CDLF	3,664	4,435	3,566	1,556	2,444	2,474	CDLF
4002	GREENE COUNTY CDLF	2,446	1,837	1,684	1,627	2,635	2,311	CDLF
9404	WASHINGTON COUNTY C&D LANDFILL	973	1,116	4,681	2,268	1,856	1,512	CDLF
4407	HAYWOOD COUNTY C&D UNIT			10,116	7,498	15,594	1,216	CDLF
8202	WI-SAMPSON COUNTY C&D UNIT	2,724	9,666	545	3,623	2,357	1,087	CDLF
8603	SURRY COUNTY C&D LANDFILL	4,308	3,245	2,519	3,448	1,359	196	CDLF
TOTAL TONS		**1,905,412**	**1,841,180**	**2,015,293**	**2,430,263**	**2,704,608**	**2,472,388**	

APPENDIX A-2: INCINERATION FACILITIES, DESCENDING ORDER OF TONS, FY 2006-2007

		TONS					
PERMIT #	**FACILITY**	**2001-2002**	**2002-2003**	**2003-2004**	**2004-2005**	**2005-2006**	**2006-2007**
6505-I	NEW HANOVER WASTE-TO-ENERGY FACILITY	120,751	123,823	74,984	104,755	70,974	107,837
TOTAL TONS		**120,751**	**123,823**	**74,984**	**104,755**	**70,974**	**107,837**

APPENDIX A-3: PRIVATE INDUSTRIAL LANDFILLS, DESCENDING ORDER OF TONS, FY 2006-2007

PERMIT #	FACILITY	TONS					
		2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
7302	CAROLINA POWER & LIGHT CO	587,579	604,673	601,271	424,991	366,747	420,957
4406	BLUE RIDGE PAPER PRODUCTS, INC.	238,262	248,125	262,223	278,181	304,512	315,997
2402	INTERNATIONAL PAPER	563,087	410,897	0	73,473		137,899
9401	WEYERHAEUSER	88,631	94,243	107,389	111,463	129,729	85,423
4204	HALIFAX COAL ASH LANDFILL	1,303	4,061	2,246	2,362	3,232	5,453
9703	LOUISANA-PACIFIC CORPORATION	3,289	3,607	4,846	3,135	2,568	3,130
1804	DUKE POWER/MARSHALL STEAM PLT	1,497	520	366	685	1,064	3,045
1809	DUKE POWER/MARSHALL STEAM PLT FGD						2,548
6004	DUKE POWER COMPANY	1,065	2,954	1,621	4,287	2,327	2,333
3405	R J REYNOLDS	41,243	23,707				1,570
7602	EVEREADY BATTERY	676	849	401	538	590	956
5603	COLLINS & AIKMAN	1,465	4,748	5,292	6,724	3,472	0
3413-TEMP	ATLANTIC SCRAP AND PROCESSING	24,432	10,536	0	0		0
8504	DUKE ENERGY CORPORATION- BELEWS CR						0
2502	WEYERHAEUSER	16,653	1,494	0	0		0
8505	DUKE ENERGY CORP.- BELEWS CREEK FGD						0
8503	DUKE POWER/BELEWS CREEK ST PLT	273,667	274,974	97,830	0		0
TOTAL TONS		**1,842,848**	**1,685,388**	**1,083,484**	**905,838**	**814,240**	**979,311**

APPENDIX A-4: TRANSFER STATIONS AND MIXED WASTE PROCESSING FACILITIES, FY 2006-2007

PERMIT #	FACILITY	2006-2007	DISPOSAL DESTINATION	PERMIT #
0202-T	ALEXANDER CO. TRANSFER STATION	22,171	FOOTHILLS ENVIRONMENTAL LANDFILL	1403
0303-T	ALLEGHANY COUNTY TRANSFER FACILITY	9,512	BFI-CHARLOTTE MTR SPEEDWAY LANDFILL V	1304
0703-T	ARS - BEAUFORT TRANSFER STATION	57,331	EAST CAROLINA REG LANDFILL	0803
0602-T	AVERY COUNTY TRANSFER STATION	13,632	BRISTOL LANDFILL, VA	
4118-T	BISHOP ROAD TRANSFER STATION	199,487	UWHARRIE ENV. REG. LANDFILL	6204
0904-T	BLADEN COUNTY TRANSFER STATION	21,338	WI-SAMPSON COUNTY DISPOSAL INC	8202
1010-T	BRUNSWICK COUNTY TRANSFER STATION	83,625	WI-SAMPSON COUNTY DISPOSAL INC	8202
1108-T	BUNCOME COUNTY TRANSFER STATION	42,345	BUNCOMBE COUNTY MSW LANDFILL	1107
1205-T	BURKE COUNTY TRANSFER FACILITY	57,950	FOOTHILLS ENVIRONMENTAL LANDFILL	1403
1604	CARTERET COUNTY TRANSFER STATION	117,651	CRSWMA - LONG TERM REGIONAL LANDFILL	2509
9211-T	CARY TOWN OF - TRANSFER STATION	2,502	SOUTH WAKE TRANSFER STATION	9221-T
9211-T	CARY TOWN OF - TRANSFER STATION	23,802	WI-SAMPSON COUNTY DISPOSAL INC	8202
2510-T	CHERRY POINT TRANSFER STATION	6,442	CRSWMA - LONG TERM REGIONAL LANDFILL	2509
7605-T	CITY OF ASHEBORO RECYCLING/SOLID WASTE TRA	19,541	UWHARRIE ENV. REG. LANDFILL	6204
3212-T	CITY OF DURHAM TRANSFER STATION	183,190	BRUNSWICK LANDFILL, VA	
2609	CITY OF FAYETTEVILLE/ WASTE INDUSTRIES TRANS	94,980	WI-SAMPSON COUNTY DISPOSAL INC	8202
6405-T	CITY OF ROCKY MOUNT TRANSFER STATION #2	97,311	BRUNSWICK LANDFILL, VA	
2202-T	CLAY COUNTY TRANSFER STATION	5,751	PINEBLUFF LANDFILL, GA	
2403-T	COLUMBUS COUNTY TRANSFER STATION	43,047	WI-SAMPSON COUNTY DISPOSAL INC	8202

APPENDIX A-4: TRANSFER STATIONS AND MIXED WASTE PROCESSING FACILITIES, FY 2006-2007

PERMIT #	FACILITY	2006-2007	DISPOSAL DESTINATION	PERMIT #
2703-T	CURRITUCK TRANSFER STATION	34,878	EAST CAROLINA REG LANDFILL	0803
9224	D.H. GRIFFIN RECLAMATION CENTER	74,652	MATERIAL RECOVERY/ BROWNFIELD RD C&D LAND	9231
9224	D.H. GRIFFIN RECLAMATION CENTER	2,780	BFI-HOLLY SPRINGS DISPOSAL INC	9214
2804-T	DARE COUNTY TRANSFER STATION	57,587	EAST CAROLINA REG LANDFILL	0803
2805-T	DARE COUNTY TRANSFER STATION	22,104	EAST CAROLINA REG LANDFILL	0803
5407-T	DUPONT KINSTON TRANSFER FACILITY	306	LENOIR COUNTY MSW LANDFILL	5409
5407-T	DUPONT KINSTON TRANSFER FACILITY	4,003	EAST CAROLINA REG LANDFILL	0803
8004-T	EAST SPENCER WASTE TRANSFER FACILITY	52,375	UWHARRIE ENV. REG. LANDFILL	6204
8004-T	EAST SPENCER WASTE TRANSFER FACILITY	9,173	BFI-CHARLOTTE MTR SPEEDWAY LANDFILL V	1304
7903-T	EDEN, CITY OF TRANSFER STATION	4,966	ROCKINGHAM COUNTY LANDFILL	7904
3302-T	EDGCOMBE COUNTY TRANSFER STATION	26,344	EAST CAROLINA REG LANDFILL	0803
7406-T	EJE RECYCLING TRANSFER STATION	401	C & D LANDFILL INC.	7407
7406-T	EJE RECYCLING TRANSFER STATION	7,726	EAST CAROLINA REG LANDFILL	0803
2606-T	FORT BRAGG TRANSFER STATION	1,077	CUMBERLAND COUNTY LANDFILL	2601
2606-T	FORT BRAGG TRANSFER STATION	26,228	UWHARRIE ENV. REG. LANDFILL	6204
3502-T	FRANKLIN COUNTY TRANSFER STATON	15,236	UPPER PIEDMONT REG LANDFILL	7304
3502-T	FRANKLIN COUNTY TRANSFER STATON	1,177	BRUNSWICK LANDFILL, VA	
9607-T	GOLDSBORO TRANSFER STATION	11,054	WAYNE COUNTY LANDFILL	9606
3803	GRAHAM COUNTY TRANSFER STATION	7,366	PINEBLUFF LANDFILL, GA	

APPENDIX A-4: TRANSFER STATIONS AND MIXED WASTE PROCESSING FACILITIES, FY 2006-2007

PERMIT #	FACILITY	2006-2007	DISPOSAL DESTINATION	PERMIT #
4307-T	HARNETT CNTY-DUNN/ERWIN TRANSFER STATION	43,187	UWHARRIE ENV. REG. LANDFILL	6204
4305-T	HARNETT COUNTY TRANSFER STATION	10,938	UWHARRIE ENV. REG. LANDFILL	6204
4408	HAYWOOD COUNTY MWP FACILITY	35,924	HAYWOOD CO WHITE OAK LANDFILL	4407
4504-T	HENDERSON COUNTY TRANSFER FACILITY	68,507	PALMETTO LANDFILL, SC	
4602-T	HERTFORD COUNTY TRANSFER STATION	1,092	EAST CAROLINA REG LANDFILL	0803
4702	HOKE COUNTY TRANSFER STATION	28,896	UWHARRIE ENV. REG. LANDFILL	6204
4904-T	IREDELL COUNTY TRANSFER STATION	42,858	IREDELL COUNTY SANITARY LF	4903
4904-T	IREDELL COUNTY TRANSFER STATION	1,880	IREDELL COUNTY C&D UNIT	4903
5003-T	JACKSON COUNTY SCOTT CREEK TRANSFER STATIO	33,889	R&B LANDFILL	
5803-T	MADISON COUNTY TRANSFER	9,538	BFI, CARTER VALLEY	
5602-T	McDOWELL CO TRANSFER FACILITY	33,675	BFI-CHARLOTTE MTR SPEEDWAY LANDFILL V	1304
9234	MRR WAKE TRANSFER STA, LLC	5,615	BFI-HOLLY SPRINGS DISPOSAL INC	9214
9234	MRR WAKE TRANSFER STA, LLC	52,347	MATERIAL RECOVERY/ BROWNFIELD RD C&D LAND	9231
5408-T	ONSLOW CONTAINER SERVICE, INC.	26,022	EAST CAROLINA REG LANDFILL	0803
3416-T	OVERDALE ROAD TRANSFER STATION	132,701	UWHARRIE ENV. REG. LANDFILL	6204
3416-T	OVERDALE ROAD TRANSFER STATION	714	FOOTHILLS ENVIRONMENTAL LANDFILL	1403
6903-T	PAMLICO COUNTY TRANSFER STATION	8,542	CRSWMA - LONG TERM REGIONAL LANDFILL	2509
7003-T	PASQUOTANK COUNTY TRANSFER STATION	22,829	EAST CAROLINA REG LANDFILL	0803
9227-T	PCM CONSTRUCTION SERVICE- N RALEIGH C&D TRA	14,917	ROWLAND DEMO LANDFILL	92M

APPENDIX A-4: TRANSFER STATIONS AND MIXED WASTE PROCESSING FACILITIES, FY 2006-2007

PERMIT #	FACILITY	2006-2007	DISPOSAL DESTINATION	PERMIT #
9227-T	PCM CONSTRUCTION SERVICE- N RALEIGH C&D TRA	38,410	RED ROCK DISPOSAL, LLC	9228
9229	PCM CONSTRUCTION SERVICES-APEX TRANSFER ST	3,833	CURRIN BROTHERS LANDFILL	92N
9229	PCM CONSTRUCTION SERVICES-APEX TRANSFER ST	56,960	RED ROCK DISPOSAL, LLC	9228
7103-T	PENDER CO TRANSFER STATION	25,603	WI-SAMPSON COUNTY DISPOSAL INC	8202
7202-T	PERQUIMANS-CHOWAN-GATES TRANSFER	24,408	EAST CAROLINA REG LANDFILL	0803
7503-T	POLK COUNTY TRANSFER STATION	1,378	PALMETTO LANDFILL, SC	
7503-T	POLK COUNTY TRANSFER STATION	10,512	UNION COUNTY LANDFILL, SC	
6014	QUEEN CITY TRANSFER STATION	106,260	UNION COUNTY LANDFILL, SC	
6014	QUEEN CITY TRANSFER STATION	54,700	PALMETTO LANDFILL, SC	
6014	QUEEN CITY TRANSFER STATION	23,325	UWHARRIE ENV. REG. LANDFILL	6204
6014	QUEEN CITY TRANSFER STATION	13,021	FOOTHILLS ENVIRONMENTAL LANDFILL	1403
7603-T	RANDOLPH COUNTY TRANSFER FACILITY	65,772	BFI-CHARLOTTE MTR SPEEDWAY LANDFILL V	1304
9608	RECYCLED MATERIALS, INC.	3	WAYNE COUNTY LANDFILL	9606
7902-T	REIDSVILLE, CITY OF TRANSFER FACILITY	6,582	UPPER PIEDMONT REG LANDFILL	7304
7703-T	RICHMOND COUNTY TRANSFER STATION	43,332	UWHARRIE ENV. REG. LANDFILL	6204
8104-T	RUTHERFORD COUNTY TRANSFER FACILITY	45,113	PALMETTO LANDFILL, SC	
8302-T	SCOTLAND COUNTY T.S.	25,711	UWHARRIE ENV. REG. LANDFILL	6204
2705	SOUNDSIDE RECYCLING & MATERIALS, INC	9,312	EAST CAROLINA REG LANDFILL	0803
2705	SOUNDSIDE RECYCLING & MATERIALS, INC	636	JOHN C. HOLLAND ENTERPRISES	

APPENDIX A-4: TRANSFER STATIONS AND MIXED WASTE PROCESSING FACILITIES, FY 2006-2007

PERMIT #	FACILITY	2006-2007	DISPOSAL DESTINATION	PERMIT #
9221-T	SOUTH WAKE TRANSFER STATION	99,701	WI-SAMPSON COUNTY DISPOSAL INC	8202
9221-T	SOUTH WAKE TRANSFER STATION	49,642	WAKE COUNTY LANDFILL-NORTH	9209
3214-T	STONE PARK COURT TRANSFER STATION	64,254	WI-SAMPSON COUNTY DISPOSAL INC	8202
3214-T	STONE PARK COURT TRANSFER STATION	25,781	RED ROCK DISPOSAL, LLC	9228
8603-T	SURRY COUNTY TRANSFER STATION	29,272	SURRY COUNTY MSWLF	8606
8702-T	SWAIN COUNTY TRANSFER FACILITY	8,702	PINEBLUFF LANDFILL, GA	
2101-T	TOWN OF EDENTON TRANSFER STATION	4,276	EAST CAROLINA REG LANDFILL	0803
	TRIBAL TRANSFER STATION	25	PALMETTO LANDFILL, SC	
9005-T	UNION COUNTY TRANSFER STATION	80,463	CHAMBERS DEVELOPMENT MSWLF	0403
6302	UWHARRIE ENV INC/MOORE CTY TRANSFER STATIO	57,721	UWHARRIE ENV. REG. LANDFILL	6204
6202-MRF	UWHARRIE ENVIRONMENTAL MRF	16,190	UWHARRIE ENV. REG. LANDFILL	6204
9302-T	WARREN COUNTY TRANSFER STATION	35	UPPER PIEDMONT REG LANDFILL	7304
9302-T	WARREN COUNTY TRANSFER STATION	8,040	BRUNSWICK LANDFILL, VA	
9808-T	WASTE INDUSTRIES- BLK. CRK. RD. TRANSFER	26,805	BRUNSWICK LANDFILL, VA	
9808-T	WASTE INDUSTRIES- BLK. CRK. RD. TRANSFER	76,124	WI-SAMPSON COUNTY DISPOSAL INC	8202
9217	WASTE INDUSTRIES CROSSWINDS PARK TRANSFER	198	WI-SAMPSON COUNTY DISPOSAL INC	8202
9806-T	WASTE INDUSTRIES WILSON TRANSFER ST.	26,805	BRUNSWICK LANDFILL, VA	
9806-T	WASTE INDUSTRIES WILSON TRANSFER ST.	72,124	WI-SAMPSON COUNTY DISPOSAL INC	8202
9102-T	WASTE INDUSTRIES-VANCE COUNTY	10,900	BRUNSWICK LANDFILL, VA	

APPENDIX A-4: TRANSFER STATIONS AND MIXED WASTE PROCESSING FACILITIES, FY 2006-2007

PERMIT #	FACILITY	2006-2007	DISPOSAL DESTINATION	PERMIT #
9102-T	WASTE INDUSTRIES-VANCE COUNTY	37,650	UPPER PIEDMONT REG LANDFILL	7304
1903-T	WASTE MAN. - CHATHAM CO TRANSFER STATION	32,079	WI-SAMPSON COUNTY DISPOSAL INC	8202
5304-T	WASTE MAN. - LEE CO.TRANSFER STATION	62,731	WI-SAMPSON COUNTY DISPOSAL INC	8202
1104	WASTE MANAGEMENT OF ASHEVILLE	151,662	PALMETTO LANDFILL, SC	
3608	WASTE MANAGEMENT OF CAROLINAS	156,643	PALMETTO LANDFILL, SC	
9215-T	WASTE MANAGEMENT OF RAL-DUR	90,324	WI-SAMPSON COUNTY DISPOSAL INC	8202
9215-T	WASTE MANAGEMENT OF RAL-DUR	1,859	BRUNSWICK LANDFILL, VA	
9503-T	WATAUGA CO TRANSFER FACILITY	50,038	IRIS GLENN LANDFILL, TN	
4205-T	WELDON, TOWN OF, TRANSFER STATION	123,221	BRUNSWICK LANDFILL, VA	
4205-T	WELDON, TOWN OF, TRANSFER STATION	1,056	EAST CAROLINA REG LANDFILL	0803
9903-T	YADKIN COUNTY TRANSFER FACILITY	18,105	BFI-CHARLOTTE MTR SPEEDWAY LANDFILL V	1304
10003-T	YANCEY-MITCHELL TRANSFER STATION	25,353	PALMETTO LANDFILL, SC	
TOTAL TONS		**3,997,757**		

Facilities without permit numbers listed are either temporary or out of state facilities.

APPENDIX A-5: TIRE MONOFILLS IN DESCENDING ORDER OF TONS, FY 2006-2007

PERMIT #	FACILITY	TONS					FACILITY TYPE
		2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
4304	CENTRAL CAROLINA TIRE MONOFILL	71,112	77,672	79,710	86,142	84,965	TIRELF
1303	US TIRE DISPOSAL	152,432	13,282	18,139	22,440	29,484	TIRELF
TOTAL TONS		**223,544**	**90,954**	**97,849**	**108,582**	**114,448**	

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2006-2007

COUNTY	POPULATION	MSW TONS MANAGED	MSW TONS DISPOSED				BASE YEAR PER CAPITA	PER CAPITA RATE	%CHANGE FROM 1991-1992
	JULY 2006	1991-1992	2003-2004	2004-2005	2005-2006	2006-2007	1991-1992	2006-2007	2006-2007**
ALAMANCE	139,786	99,302	143,358	163,266	166,815	156,903	0.91	1.12	23%
ALEXANDER	36,296	25,716	26,126	25,301	24,614	24,082	0.90	0.66	-26%
ALLEGHANY	11,012	14,131	8,193	8,828	9,594	9,804	1.45	0.89	-39%
ANSON	25,371	14,229	24,796	24,587	23,580	23,919	0.61	0.94	55%
ASHE	25,774	18,089	22,367	22,281	22,798	23,188	0.81	0.90	11%
AVERY	18,174	11,130	18,406	19,396	18,045	20,042	0.74	1.10	49%
BEAUFORT	46,346	41,796	70,668	58,588	60,670	66,996	0.99	1.45	46%
BERTIE	19,355	17,372	36,922	27,036	27,474	22,230	0.86	1.15	34%
BLADEN	32,870	25,048	31,482	30,178	30,666	36,815	0.86	1.12	30%
BRUNSWICK	94,964	78,123	140,371	158,103	172,389	188,573	1.48	1.99	34%
BUNCOMBE	221,320	159,040	319,594	332,213	301,430	322,738	0.90	1.46	62%
BURKE	88,663	78,006	85,273	86,867	87,160	90,757	1.02	1.02	0%
CABARRUS	157,179	95,215	254,210	286,070	434,268	361,884	0.94	2.30	145%
CALDWELL	79,298	65,532	79,633	91,879	96,882	95,174	0.92	1.20	30%
CAMDEN	9,284	1,850	4,326	3,500	5,070	5,365	0.31	0.58	86%
CARTERET	63,558	86,894	101,592	100,409	122,886	119,201	1.62	1.88	16%
CASWELL	23,523	5,136	9,672	5,380	5,879	6,795	0.25	0.29	16%
CATAWBA	151,128	151,559	196,758	198,555	208,837	215,196	1.26	1.42	13%
CHATHAM	57,707	33,235	39,984	38,166	40,117	40,351	0.84	0.70	-17%
CHEROKEE	26,816	16,020	19,132	18,679	20,113	19,687	0.78	0.73	-6%
CHOWAN	14,664	13,692	24,102	18,360	20,655	16,356	0.99	1.12	13%
CLAY	10,144	4,172	5,283	5,737	5,269	5,924	0.57	0.58	2%
CLEVELAND	96,714	73,138	120,048	121,404	117,031	154,382	0.86	1.60	86%

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2006-2007

COUNTY	POPULATION	MSW TONS MANAGED	MSW TONS DISPOSED				BASE YEAR PER CAPITA	PER CAPITA RATE	%CHANGE FROM 1991-1992
	JULY 2006	1991-1992	2003-2004	2004-2005	2005-2006	2006-2007	1991-1992	2006-2007	2006-2007**
COLUMBUS	54,656	45,199	52,358	44,629	45,299	44,529	0.91	0.81	-10%
CRAVEN	95,558	86,549	94,147	100,073	105,031	101,074	1.05	1.06	1%
CUMBERLAND	306,545	227,302	358,348	510,574	560,404	449,790	0.81	1.47	81%
CURRITUCK	23,518	13,792	43,358	38,295	37,085	31,288	1.00	1.33	33%
DARE	34,674	51,300	127,088	95,513	99,299	110,980	2.23	3.20	44%
DAVIDSON	155,348	139,617	167,005	141,483	141,205	133,739	1.08	0.86	-20%
DAVIE	39,836	19,348	33,983	36,094	39,046	39,052	0.68	0.98	44%
DUPLIN	52,710	33,310	56,243	44,883	46,833	48,311	0.82	0.92	12%
DURHAM	246,824	218,972	294,086	308,097	292,730	310,443	1.17	1.26	8%
EDGECOMBE	52,644	71,471	64,041	53,735	47,224	60,042	1.25	1.14	-9%
FORSYTH	331,859	304,290	550,614	539,006	564,037	538,108	1.14	1.62	42%
FRANKLIN	55,315	28,702	50,129	45,922	38,476	38,866	0.76	0.70	-8%
GASTON	197,232	165,100	226,625	232,948	239,157	250,611	0.93	1.27	37%
GATES	11,602	5,897	6,473	5,680	7,028	5,969	0.63	0.51	-18%
GRAHAM	8,109	4,508	6,464	6,581	7,161	7,498	0.62	0.92	49%
GRANVILLE	53,840	54,548	69,579	68,754	74,764	71,823	1.39	1.33	-4%
GREENE	20,833	7,428	6,789	7,775	7,685	6,560	0.48	0.31	-34%
GUILFORD	449,078	471,541	659,224	653,690	703,606	701,461	1.35	1.56	16%
HALIFAX	55,606	54,907	42,186	53,374	55,944	58,047	0.98	1.04	7%
HARNETT	103,714	69,073	85,390	90,619	90,784	93,217	1.01	0.90	-11%
HAYWOOD	56,662	57,842	55,627	66,387	60,800	72,186	1.21	1.27	5%
HENDERSON	100,107	81,498	116,840	119,866	133,618	123,284	1.14	1.23	8%
HERTFORD	23,878	14,288	24,984	36,138	30,577	47,109	0.63	1.97	213%

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2006-2007

COUNTY	POPULATION	MSW TONS MANAGED	MSW TONS DISPOSED				BASE YEAR PER CAPITA	PER CAPITA RATE	%CHANGE FROM 1991-1992
	JULY 2006	1991-1992	2003-2004	2004-2005	2005-2006	2006-2007	1991-1992	2006-2007	2006-2007**
HOKE	42,202	18,331	31,269	28,968	29,925	28,441	0.80	0.67	-16%
HYDE	5,511	2,762	9,874	7,482	7,219	6,864	0.50	1.25	149%
IREDELL	145,234	114,539	191,086	208,136	231,821	237,068	1.19	1.63	37%
JACKSON	36,312	18,661	41,448	48,679	52,674	41,461	0.68	1.14	68%
JOHNSTON	151,589	74,169	186,255	157,678	170,051	189,647	0.88	1.25	42%
JONES	10,318	4,360	3,008	2,917	2,803	3,788	0.47	0.37	-22%
LEE	55,282	48,341	67,941	76,971	70,320	68,358	1.16	1.24	7%
LENOIR	58,172	67,693	89,217	80,419	77,513	96,192	1.17	1.65	41%
LINCOLN	71,302	44,442	89,475	100,386	101,878	93,816	0.87	1.32	51%
MACON	33,076	19,738	35,388	37,209	37,167	37,318	0.82	1.13	38%
MADISON	20,454	11,676	13,654	24,340	15,677	14,775	0.68	0.72	6%
MARTIN	24,396	30,112	17,038	20,336	28,121	24,630	1.19	1.01	-15%
MCDOWELL	43,632	29,180	38,065	39,935	39,325	39,670	0.82	0.91	11%
MECKLENBURG	826,893	677,573	1,280,887	1,285,489	1,506,405	1,543,924	1.29	1.87	45%
MITCHELL	15,906	15,768	14,500	16,761	18,008	16,983	1.11	1.07	-4%
MONTGOMERY	27,506	28,873	46,175	46,063	47,145	32,124	1.23	1.17	-5%
MOORE	82,292	74,062	90,359	95,034	99,097	101,611	1.23	1.23	0%
NASH	92,220	84,594	114,139	110,941	116,431	105,847	1.09	1.15	5%
NEW HANOVER	184,120	157,647	264,387	279,268	333,313	322,844	1.28	1.75	37%
NORTHAMPTON	21,524	19,528	29,323	15,359	16,806	14,714	0.94	0.68	-27%
ONSLOW	161,212	158,344	181,006	189,905	200,160	190,664	1.04	1.18	14%
ORANGE	123,766	131,067	88,062	90,486	93,805	88,060	1.36	0.71	-48%
PAMLICO	13,097	8,541	12,451	9,036	10,195	11,790	0.75	0.90	20%

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2006-2007

COUNTY	POPULATION	MSW TONS MANAGED	MSW TONS DISPOSED				BASE YEAR PER CAPITA	PER CAPITA RATE	%CHANGE FROM 1991-1992
	JULY 2006	1991-1992	2003-2004	2004-2005	2005-2006	2006-2007	1991-1992	2006-2007	2006-2007**
PASQUOTANK	39,956	30,150	39,926	39,099	41,734	38,834	0.97	0.97	0%
PENDER	48,724	18,188	30,586	33,845	36,448	39,082	0.60	0.80	34%
PERQUIMANS	12,442	7,520	15,278	13,065	12,743	12,561	0.73	1.01	38%
PERSON	37,448	24,249	35,014	34,732	34,837	37,856	0.80	1.01	26%
PITT	146,403	132,896	148,664	160,067	168,957	167,721	1.21	1.15	-5%
POLK	19,080	9,327	13,353	15,254	18,818	23,234	0.63	1.22	93%
RANDOLPH	138,586	78,663	127,792	124,035	119,466	113,624	0.73	0.82	12%
RICHMOND	46,700	60,752	76,304	92,606	71,854	71,727	1.35	1.54	14%
ROBESON	129,048	104,700	129,897	117,786	133,002	130,578	0.99	1.01	2%
ROCKINGHAM	91,830	71,481	97,642	98,556	98,604	99,472	0.83	1.08	31%
ROWAN	134,540	90,081	131,386	147,880	141,922	155,407	0.80	1.16	44%
RUTHERFORD	63,178	89,175	72,756	71,101	67,036	84,300	1.56	1.33	-14%
SAMPSON	64,057	33,545	54,907	50,182	52,238	52,671	0.70	0.82	17%
SCOTLAND	36,994	39,867	45,112	45,618	34,703	33,609	1.17	0.91	-22%
STANLY	59,128	69,288	83,181	83,933	80,912	75,409	1.32	1.28	-3%
STOKES	46,335	17,976	15,656	11,259	11,176	11,112	0.47	0.24	-49%
SURRY	72,990	73,595	83,583	90,567	100,363	94,096	1.18	1.29	9%
SWAIN	13,938	5,651	9,343	8,413	8,774	9,137	0.50	0.66	31%
TRANSYLVANIA	30,360	30,072	32,343	37,794	40,073	34,574	1.16	1.14	-2%
TYRRELL	4,240	2,985	2,023	2,699	2,853	2,561	0.79	0.60	-24%
UNION	172,087	77,842	166,124	168,381	205,251	264,469	0.90	1.54	71%
VANCE	43,920	43,267	50,799	53,895	40,809	48,550	1.11	1.11	0%
WAKE	790,007	569,622	915,086	999,535	1,071,971	1,140,479	1.29	1.44	12%

APPENDIX B: COUNTY POPULATION, WASTE DISPOSAL, PER CAPITA RATE AND PERCENT REDUCTION, FY 2006-2007

COUNTY	POPULATION	MSW TONS MANAGED	MSW TONS DISPOSED				BASE YEAR PER CAPITA	PER CAPITA RATE	%CHANGE FROM 1991-1992
	JULY 2006	1991-1992	2003-2004	2004-2005	2005-2006	2006-2007	1991-1992	2006-2007	2006-2007**
WARREN	19,969	10,978	13,656	11,096	10,310	11,014	0.63	0.55	-12%
WASHINGTON	13,360	11,699	18,230	16,976	14,410	11,363	0.84	0.85	1%
WATAUGA	43,410	36,755	53,111	65,132	62,503	63,456	0.99	1.46	48%
WAYNE	114,930	106,149	122,620	127,369	123,445	119,681	1.00	1.04	4%
WILKES	66,925	58,818	61,686	61,649	57,391	58,124	0.97	0.87	-10%
WILSON	77,468	120,870	123,498	127,231	115,018	147,811	1.82	1.91	5%
YADKIN	37,810	20,779	22,651	21,532	20,157	19,183	0.67	0.51	-24%
YANCEY	18,368	15,576	12,356	13,929	12,179	13,195	1.01	0.72	-29%
STATE TOTALS	**8,860,341**	**7,257,428**	**10,713,444**	**11,061,911**	**11,765,855**	**11,865,829**	**1.07**	**1.34**	**25%**

TOTAL ADJUSTED FOR HURRICANE DEBRIS (e.g. FRAN, FLOYD)

***** Percent Change formula: (current year per capita minus base year per capita) divided by base year per capita***

Appendix C
Imports and Exports
FY 1995-1996 through FY 2006-2007

Fiscal Year	Total Tons Exported	Receiving Facility	\Tons Received	Total Tons Imported	Receiving Facility	Tons Received
2006-2007	**1,329,202**(5)	Atlantic Waste Disposal, VA	99	**129,906**(5)	BFI- Charlotte Motor Speedway	25,893
		BFI, Carter Valley, TN	5044		Chambers Development MSWLF	17,235
		Bristol Landfill, VA	14,486		Gaston County Landfill	163
		Brunswick Landfill, VA	448,053		Griffin Farms CDLF	301
		Eagle Point Landfill, GA	9,137		Mecklenburg County Landfill	2752
		Iris Glenn Landfill, TN	56,595		Scotland County CDLF	132
		Lee County Landfill, SC	7,066		Scotland County Transfer Station	109
		Maplewood Landfill, VA	261		Upper Piedmont Regional LF	79,776
		Palmetto Landfill, SC	435,098		Waste Management of Carolinas	3,545
		Pinebluff Landfill, GA	13,410			
		R&B Landfill, GA	139,763			
		Richland Landfill, SC	5,946			
		Southeastern Regional, VA	16,426			
		TIDI Waste Systems, TN	5,061			
		Union County Landfill, SC	170,712			
		WM of Hampton Roads, VA	2,046			
2005-2006	**1,234,307**	Atlantic Waste, VA	32	**137,307(**4**)**	BFI- Lake Norman	18,403
		BFI, Carter Valley, TN	9,311		Chambers Development	55,869
		Bristol Landfill, VA	14,208		Gaston County C&D Landfill	30
		Brunswick Landfill, VA	411,107		Gaston County Landfill	239
		Eagle Point Landfill, GA	8,744		Griffin Farms C&D	510
		Iris Glenn Landfill, TN	53,706		Mecklenburg County Landfill	1944
		Lee County Landfill, SC	10,194		New Hanover Waste to Energy	9
		Maplewood Landfill, VA	361		Upper Piedmont Regional Landfill	56,428
		Palmetto Landfill, SC	538,508		Waste Management of the Carolinas	3,875
		Pinebluff Landfill, GA	13,010			
		R&B Landfill, GA	38,676			
		Union County Landfill, SC	136,450			
2004-2005	**1,161,926**(3)	Atlantic Waste, VA	44,864	**119,202(**3**)**	Chambers Development Landfill	82,535
		BFI- Carter Valley, TN	9,500		Gaston County Landfill	75
		Bristol Landfill, VA	14,314		Griffin Farms C&D Landfill	373
		Brunswick Landfill, VA	370,810		Mecklenburg County Landfill	584
		Eagle Point Landfill, GA	8,398		Piedmont Sanitary Landfill	1,754
		Fort Mill Transfer, SC(3)	52,731		Upper Piedmont Regional Landfill	30,163
		Iris Glenn Landfill, TN	53,126		Waste Management of the Carolinas	3,230
		Maplewood Landfill, VA	364		Transfer	
		Palmetto Landfill, SC	507,307			
		Pinebluff Landfill, GA	14,414			
		R&B Landfill, GA	34,748			
		Union County, SC	51,338			
2003-2004	**1,048,111**	Atlantic Waste Disposal, ,VA	53,898	**108,803**	Charlotte Motor Speedway Landfill	3,567
		Carter Valley, TN	9,356		Lake Norman Landfill	6,452
		Bristol Landfill, VA	13,768		Chambers Development Landfill	61,301
		Brunswick Landfill, VA	377,250		Gaston County Landfill	106
		Eagle Point Landfill, GA	3,046		Griffin Farms C&D Landfill	197
		Iris Glenn Landfill, TN	10,608		Mecklenburg County Landfill	855
		Maplewood Landfill, VA	1,321		New Hanover Waste to Energy	3
		Palmetto Landfill, SC	479,650		Upper Piedmont Landfill	33,733
		Pinebluff Landfill, GA	12,788		Waste Management of the Carolinas	2,589
		R&B Landfill	22,216		Transfer	
		Hampton Roads, VA	4,072			
		Union County Landfill, SC	14,453			

2002-2003	**971,286**[2]	Maplewood Landfill, VA	10,887	**144,116**[2]	BFI- Charlotte Motor Speedway[2]	66,246
		Atlantic Waste, VA	61,912		Chambers Development, Anson Co.[2]	91,990
		BFI, Carter Valley, TN	8,746		Gaston Co. Landfill	127
		Bristol Landfill, VA	13,000		Griffin Farms C&D Landfill, Union Co.	201
		Brunswick Landfill, VA	396,386		Mecklenburg Co. Landfill	1,181
		Iris Glenn Landfill, TN	41,384		New Hanover Waste to Energy	1
		Lee Co. Landfill, SC	31,084		Piedmont Sanitary Landfill, Forsyth Co.	37,264
		Palmetto Landfill, SC	395,418		Upper Piedmont Regional Landfill, Person	10,949
		Pinebluff Landfill, GA	9,839		Co	2,403
		R&B Landfill, GA	2,030		Waste Management of Carolinas, Gaston	
		John C. Holland Enterprises	600		Co.	
2001-2002	**882,247**[1]	Maplewood Landfill, VA	8,844	**117,981**	BFI- Charlotte Motor Speedway	11,645
		Atlantic Waste, VA	36,290		Chambers Development, Anson Co.	48,368
		BFI, Carter Valley, TN	4,789		Gaston Co. Landfill	199
		Bristol Landfill, VA	12,584		GDS Recycling Services, Catawba Co.	486
		Brunswick Landfill, VA	420,627		Griffin Farms C&D Landfill, Union Co.	60
		Danville Transfer, VA	5,327		Mecklenburg Co. Landfill	888
		Iris Glenn Landfill, TN	44,548		Piedmont Sanitary Landfill, Forsyth Co.	49,305
		Lee Co. Landfill, SC	28,515		Upper Piedmont Regional Landfill, Person	2,784
		Palmetto Landfill, SC	312,013		Co	4,246
		Pinebluff Landfill, GA	6,683		Waste Management of Carolinas, Gaston	
		R&B Landfill, GA	2,027		Co.	
2000-2001	**900,743**	Brunswick Landfill, VA	436,264	**21,614**	Chambers Development Landfill, Anson	10,328
		Palmetto Landfill, SC	340,782		Co.	4,659
		Iris Glenn Landfill, TN	44,863		Waste Management, Gaston Co. (transfer)	2,417
		Atlantic Waste, VA	30,275		Addington Upper Piedmont Landfill,	2,407
		Maplewood Landfill, VA	18,541		Person	664
		Bristol Landfill, VA	13,121		Mecklenburg Co. Landfill (CDLF)	639
		Lee Co. Landfill, SC	9,912		Gaston Co. Landfill	441
		Pinebluff Landfill, GA	6,809		Griffin Farms C&D Landfill, Union Co.	59
		R & B Landfill, GA	176		GDS Recycling Services, Catawba Co.	
					Uwharrie Env. MRF, Montgomery Co.	
1999-2000	**1,106,897**	Palmetto Landfill, SC	463,587	**41,840**	Addington Upper Piedmont Landfill,	32,976 (VA)
		Brunswick Landfill, VA	432,645		Person Co.	7,158 (VA)
		Lee Co. Landfill, SC	148,412		Piedmont Sanitary Landfill, Forsyth Co.	640 (SC)
		Iris Glenn Landfill, TN	43,680		Gaston Co. Landfill	565 (SC)
		Bristol Landfill, VA	14,001		Griffin Farms C&D Landfill, Union Co.	377 (SC)
		Pinebluff Landfill, GA	4,572		GDS Recycling Services, Catawba Co.	101 (SC)
					Uwharrie Env. MRF, Montgomery Co	15 (SC)
					Mecklenburg Co. Landfill	8 (SC)
					Uwharrie Env. Landfill, Montgomery Co.	
1998-1999	**1,166,875**	Palmetto Landfill, SC	446,858	**74,185**	Addington Upper Piedmont Landfill,	53,798
		Brunswick Landfill, VA	382,479		Person	(VA)
		Lee Co. Landfill, SC	277,246		Piedmont Sanitary Landfill, Forsyth Co.	19,251 (VA)
		Iris Glenn Landfill, TN	41,612		Griffin Farms C&D, Union Co.	594 (SC)
		Bristol Landfill, VA	14,766		Gaston Co. Landfill	418 (SC)
		Pinebluff Landfill, GA	3,914		Uwharrie Env. MRF, Montgomery Co.	67 (SC)
					New Hanover Waste to Energy	57 (MD)
1997-1998	**629,415**	Palmetto Landfill, SC	422,248	**87,393**	Piedmont Sanitary Landfill, Forsyth Co.	80,570 (VA)
		Brunswick Landfill, VA	190,890		Addington Upper Piedmont Landfill,	6,194 (VA)
		Lee Co. Landfill, SC	16,277		Person Co.	
					Union Co. Landfill	629 (SC)
1996-1997	**280,400**	Palmetto Landfill, SC	280,400	**103,510**	Piedmont Sanitary Landfill, Forsyth Co.	103,120 (VA)
					Union County Landfill	390 (SC)
1995-1996	**111,097**	Palmetto Landfill, SC	111,097	**88,982**	Piedmont Sanitary Landfill, Forsyth Co.	88,982 (VA)

[1] This does not include 73,911 tons from Mecklenburg County that were exported to the Fort Mill Transfer Station in South Carolina and then imported to a landfill in North Carolina.

(2) This does not including 77,217 tons from Mecklenburg County that was exported to the Fort Mill Transfer Station in South Carolina and imported back to landfills in North Carolina.

(3) This does not include 99,065 tons of Municipal Solid Waste from Mecklenburg County that was exported to the Fort Mill Transfer Station in South Carolina and then imported back into North Carolina to the BFI- Charlotte Motor Speedway Landfill. The Total also does not include an additional 16,847 tons of construction and demolition material from Mecklenburg County sent to the Fort Mill Transfer Station and imported back to North Carolina to the BFI- Lake Norman Construction and Demolition Landfill.

(4) This does not include 107,888 tons from Mecklenburg County that was exported to the Fort Mill Transfer station in South Carolina and then imported back into NC to the Charlotte Motor Speedway Landfill.

(5) This does not include 113,360 tons from Mecklenburg County that was exported to the Fort Mill Transfer station in South Carolina and then imported back into NC to the Charlotte Motor Speedway Landfill and Chambers Development Landfill .and the Lake Norman C&D Landfill.

APPENDIX D – Municipal Solid Waste Landfill Capacity by Facility

Municipal Solid Waste Landfill Capacity

AUSTIN QUARTER SWM FACILITY 01-04

County: ALAMANCE

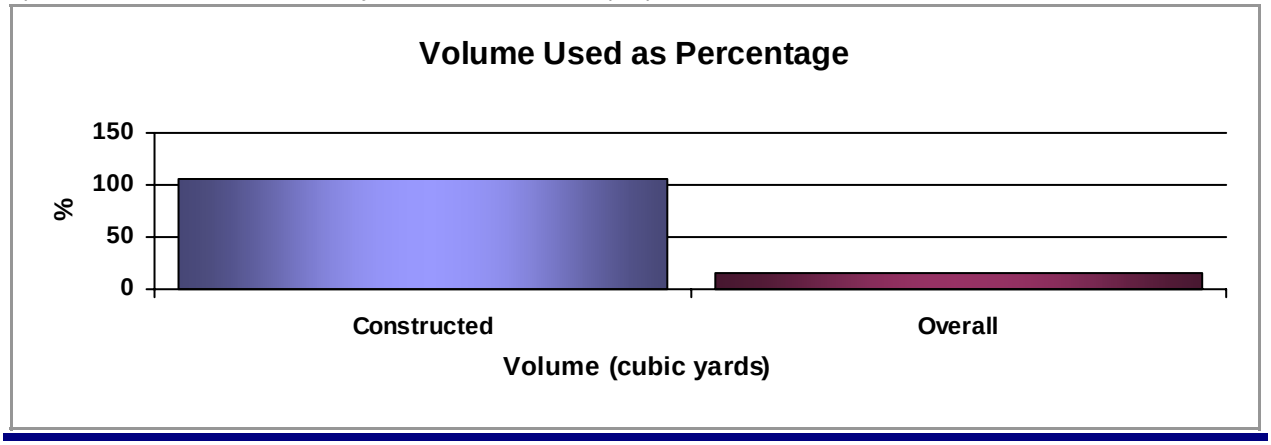
	Opened:	Surveyed:	Years Open:
Dates	3/18/1994	4/5/2007	13.0

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,048,397.00	80,345.57	84,078.37

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,589,525.00	1,492,281.00	10,000,000.00
Remaining Airspace (cubic yard)		-97,244.00	8,410,475.00
Compaction Density (tons/cubic yard)	0.66		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	-64,138.86	5,547,265.23
Remaining Capacity in Years (Avg TPY):	-0.80	69.04
Remaining Capacity in Years (2006-2007 TPY):	-0.76	65.98

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 376-0411.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
Remaining Capacity in Years =
Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CHAMBERS DEVELOPMENT MSWLF 04-03

County: ANSON

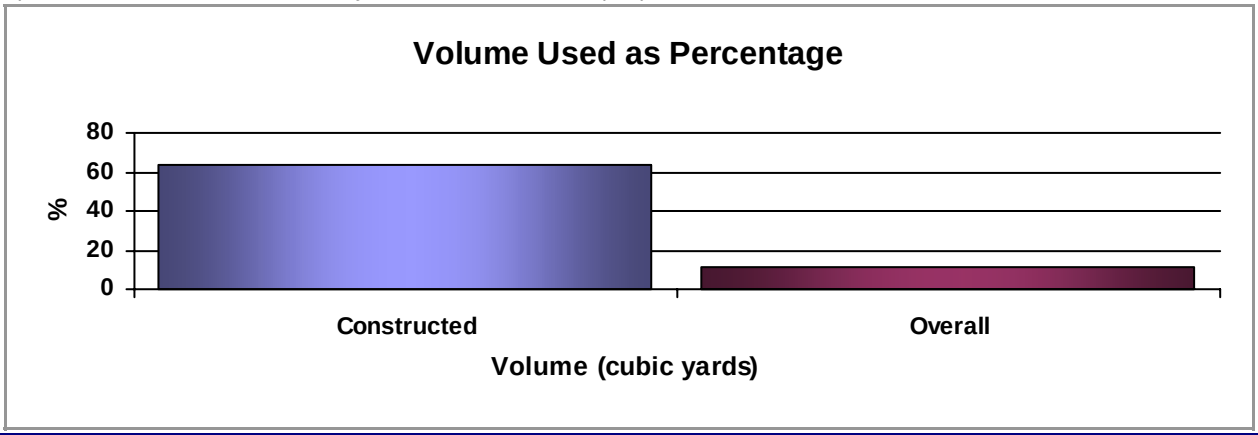
	Opened:	Surveyed:	Years Open:
Dates	12/12/2000	2/19/2007	6.2

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,858,972.00	300,437.84	273,112.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,112,468.00	3,300,000.00	19,310,000.00
Remaining Airspace (cubic yard)		1,187,532.00	17,197,532.00
Compaction Density (tons/cubic yard)	0.88		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	1,045,028.25	15,133,829.46
Remaining Capacity in Years (Avg TPY):	3.48	50.37
Remaining Capacity in Years (2006-2007 TPY):	3.83	55.41

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 694-6900.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

ASHE COUNTY LANDFILL 05-01

County: ASHE

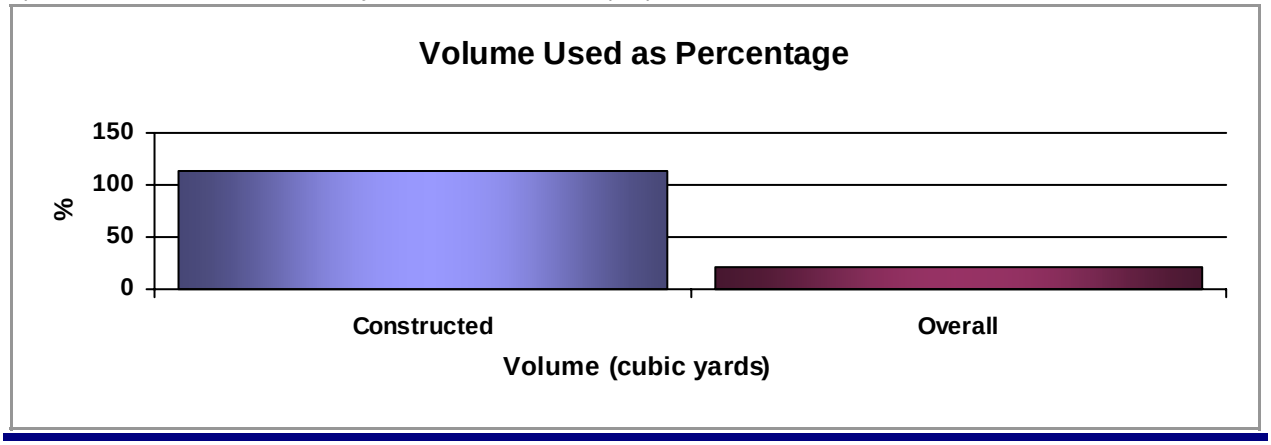
	Opened:	Surveyed:	Years Open:
Dates	11/1/1993	6/25/2007	13.6

	Total:	Avg per Year:	2006-2007:
Tons Disposed	234,254.25	17,167.21	22,921.61

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	482,848.00	427,000.00	2,340,000.00
Remaining Airspace (cubic yard)		-55,848.00	1,857,152.00
Compaction Density (tons/cubic yard)	0.49		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	-27,094.72	900,999.38
Remaining Capacity in Years (Avg TPY):	-1.58	52.48
Remaining Capacity in Years (2006-2007 TPY):	-1.18	39.31

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 246-3721.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

EAST CAROLINA REG LANDFILL 08-03

County: BERTIE

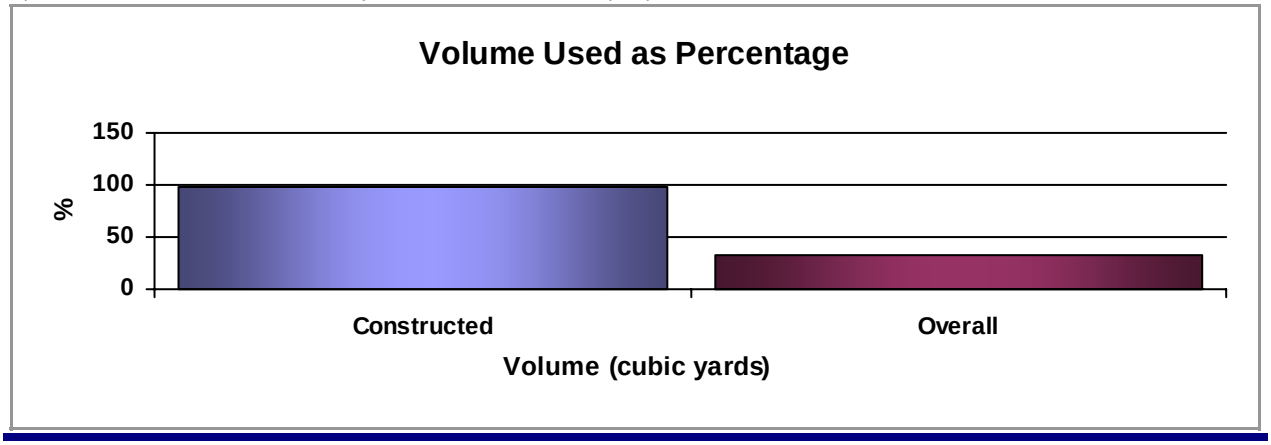
	Opened:	Surveyed:	Years Open:
Dates	8/6/1993	3/6/2007	13.6

	Total:	Avg per Year:	2006-2007:
Tons Disposed	5,944,603.54	437,755.33	556,607.55

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	8,100,463.00	8,267,000.00	24,200,000.00
Remaining Airspace (cubic yard)		166,537.00	16,099,537.00
Compaction Density (tons/cubic yard)	0.73		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	122,214.80	11,814,801.78
Remaining Capacity in Years (Avg TPY):	0.28	26.99
Remaining Capacity in Years (2006-2007 TPY):	0.22	21.23

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (252) 348-3322.



Calculations

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Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

BUNCOMBE COUNTY MSW LANDFILL 11-07

County: BUNCOMBE

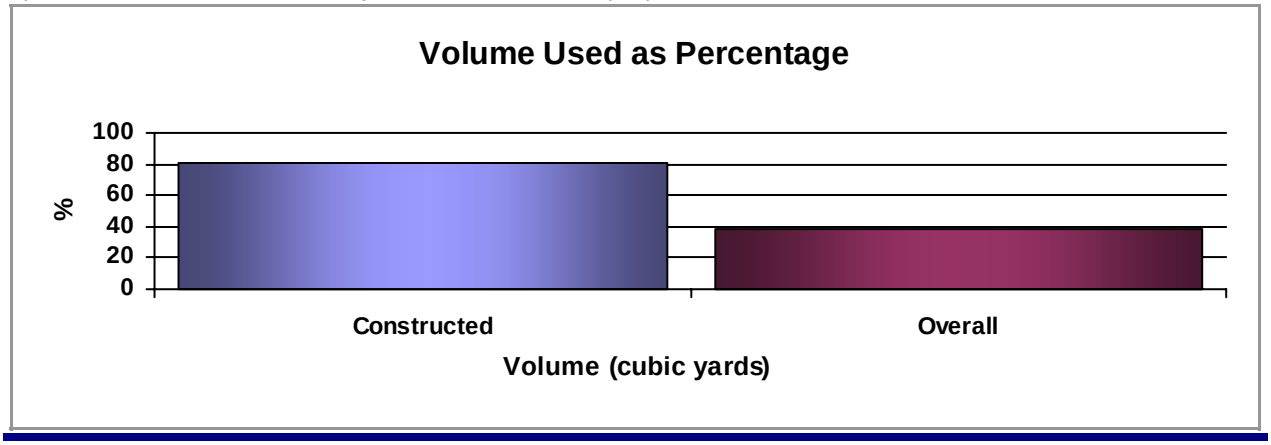
	Opened:	Surveyed:	Years Open:
Dates	9/29/1997	3/27/2007	9.5

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,295,433.00	136,513.82	117,215.33

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,616,288.00	3,255,999.00	6,803,056.00
Remaining Airspace (cubic yard)		639,711.00	4,186,768.00
Compaction Density (tons/cubic yard)	0.50		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	316,747.52	2,073,042.96
Remaining Capacity in Years (Avg TPY):	2.32	15.19
Remaining Capacity in Years (2006-2007 TPY):	2.70	17.69

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (828) 250-4830.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CHARLOTTE MOTOR SPEEDWAY LANDFILL V 13-04

County: CABARRUS

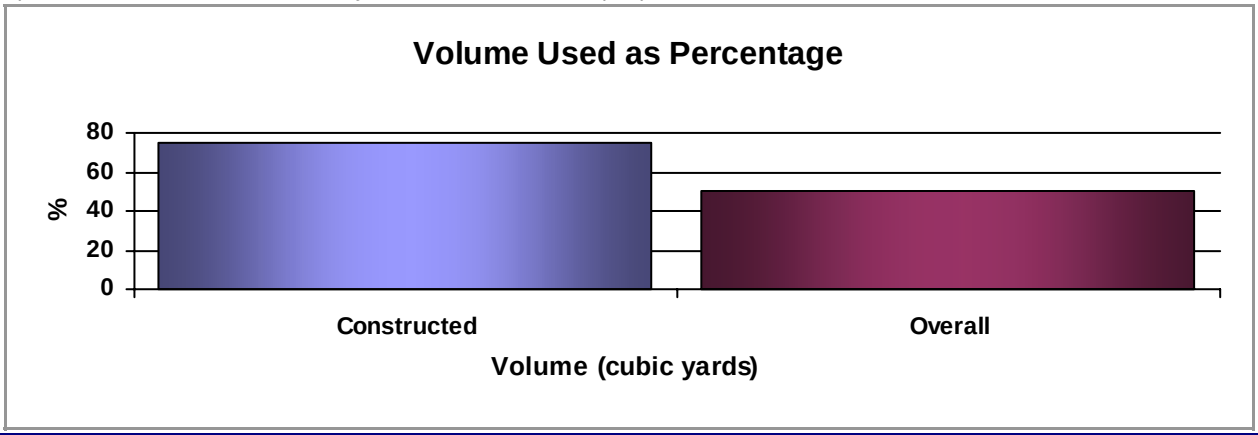
	Opened:	Surveyed:	Years Open:
Dates	3/6/1992	2/23/2007	15.0

	Total:	Avg per Year:	2006-2007:
Tons Disposed	21,467,920.00	1,434,270.67	1,247,753.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	23,083,785.00	30,731,035.00	46,331,035.00
Remaining Airspace (cubic yard)		7,647,250.00	23,247,250.00
Compaction Density (tons/cubic yard)	0.93		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	7,111,942.48	21,619,942.45
Remaining Capacity in Years (Avg TPY):	4.96	15.07
Remaining Capacity in Years (2006-2007 TPY):	5.70	17.33

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 262-6002.



Calculations

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Constructed = Landfill Volume Constructed and Permitted to Operate
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Municipal Solid Waste Landfill Capacity

FOOTHILLS ENVIRONMENTAL LANDFILL 14-03

County: CALDWELL

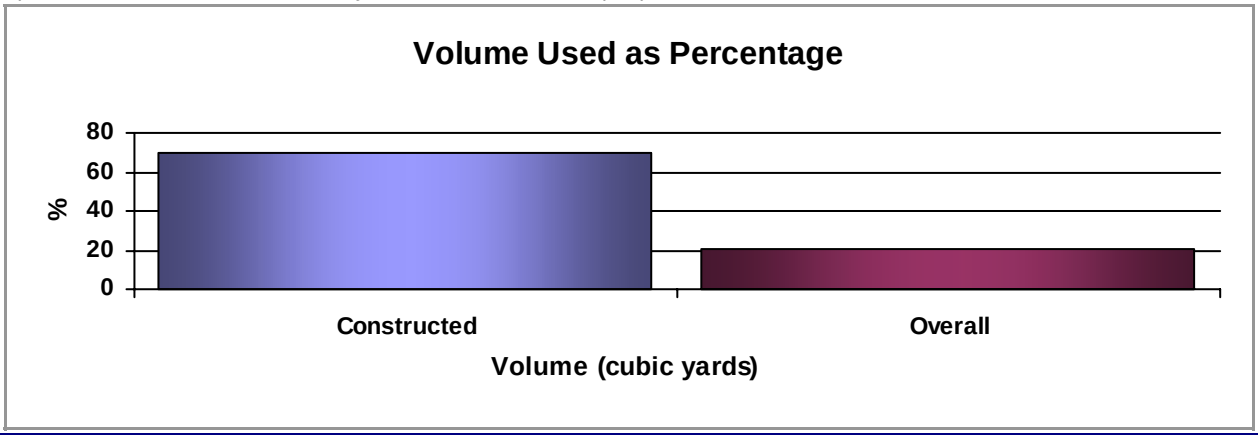
	Opened:	Surveyed:	Years Open:
Dates	8/26/1998	3/8/2007	8.5

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,445,105.00	169,391.72	379,118.89

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,939,466.00	2,800,000.00	9,680,000.00
Remaining Airspace (cubic yard)		860,534.00	7,740,534.00
Compaction Density (tons/cubic yard)	0.75		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	641,187.82	5,767,507.34
Remaining Capacity in Years (Avg TPY):	3.79	34.05
Remaining Capacity in Years (2006-2007 TPY):	1.69	15.21

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (828) 757-0965.



Calculations

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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CATAWBA COUNTY LANDFILL 18-03

County: CATAWBA

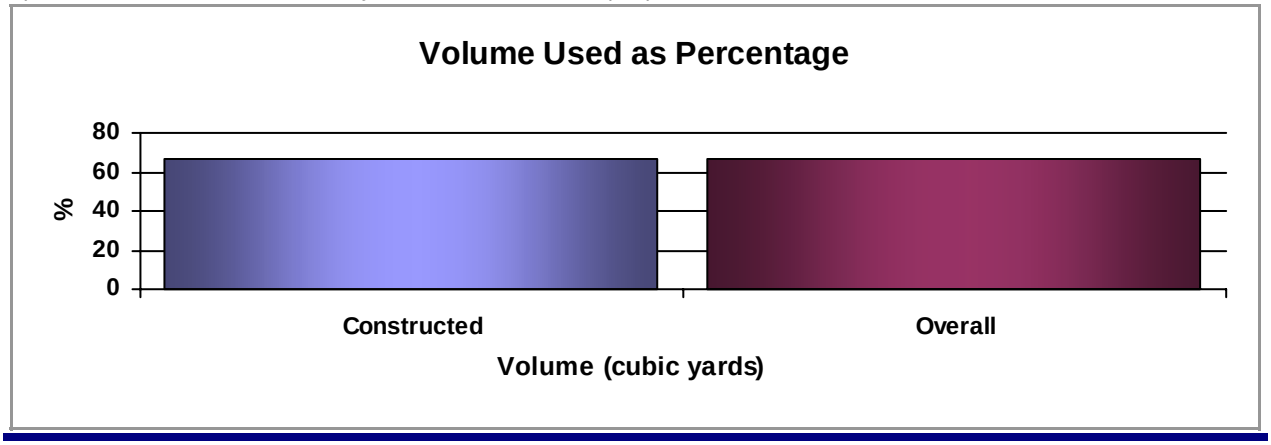
	Opened:	Surveyed:	Years Open:
Dates	12/30/1997	5/14/2007	9.4

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,566,978.93	167,252.79	165,383.65

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,990,119.00	4,515,000.00	4,515,000.00
Remaining Airspace (cubic yard)		1,524,881.00	1,524,881.00
Compaction Density (tons/cubic yard)	0.52		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	799,117.49	799,117.49
Remaining Capacity in Years (Avg TPY):	4.78	4.78
Remaining Capacity in Years (2006-2007 TPY):	4.83	4.83

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (828) 465-1348.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CHEROKEE COUNTY MSW FACILITY 20-02

County: CHEROKEE

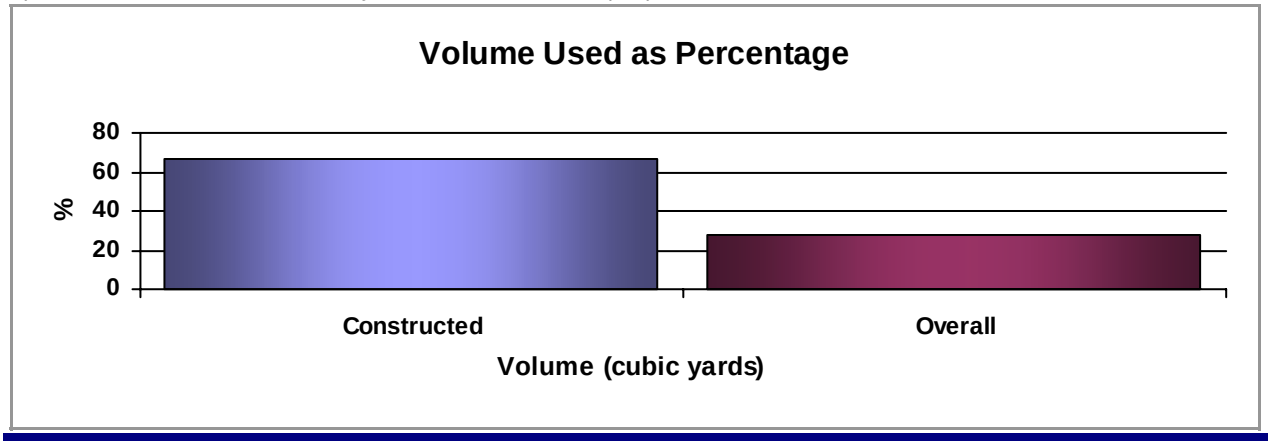
	Opened:	Surveyed:	Years Open:
Dates	1/9/1998	6/6/2006	8.4

	Total:	Avg per Year:	2006-2007:
Tons Disposed	160,721.00	19,121.61	20,113.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	309,560.00	465,479.00	1,127,940.00
Remaining Airspace (cubic yard)		155,919.00	818,380.00
Compaction Density (tons/cubic yard)	0.52		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	80,951.86	424,896.15
Remaining Capacity in Years (Avg TPY):	4.23	22.22
Remaining Capacity in Years (2006-2007 TPY):	4.02	21.13

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (828) 837-2621.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CLEVELAND COUNTY LANDFILL 23-01

County: CLEVELAND

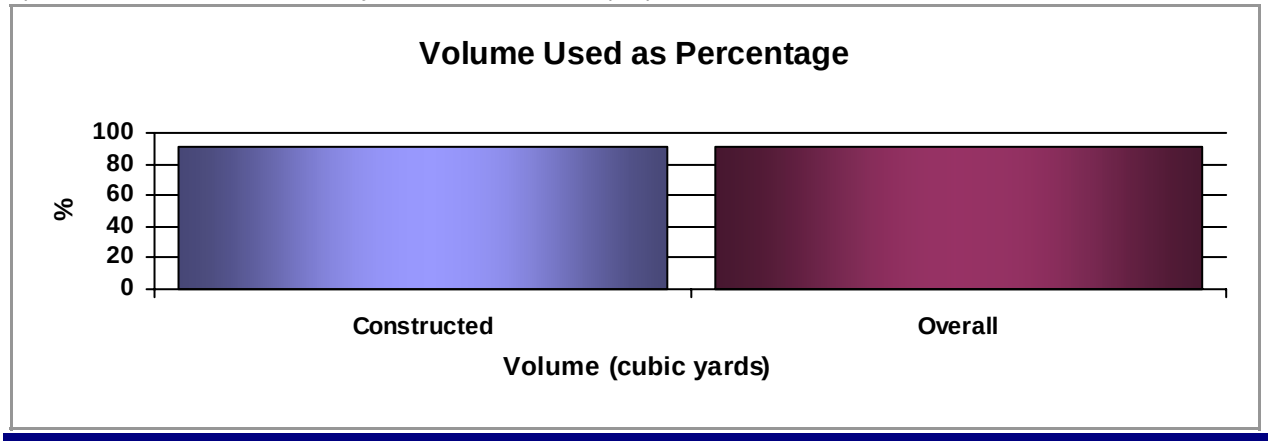
	Opened:	Surveyed:	Years Open:
Dates	7/27/1998	6/20/2007	8.9

	Total:	Avg per Year:	2006-2007:
Tons Disposed	729,790.95	82,017.28	91,210.57

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,467,827.00	1,613,364.00	1,613,364.00
Remaining Airspace (cubic yard)		145,537.00	145,537.00
Compaction Density (tons/cubic yard)	0.50		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	72,359.74	72,359.74
Remaining Capacity in Years (Avg TPY):	0.88	0.88
Remaining Capacity in Years (2006-2007 TPY):	0.79	0.79

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 476-3166.



Calculations

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Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CRSWMA - LONG TERM REGIONAL LANDFILL 25-09

County: CRAVEN

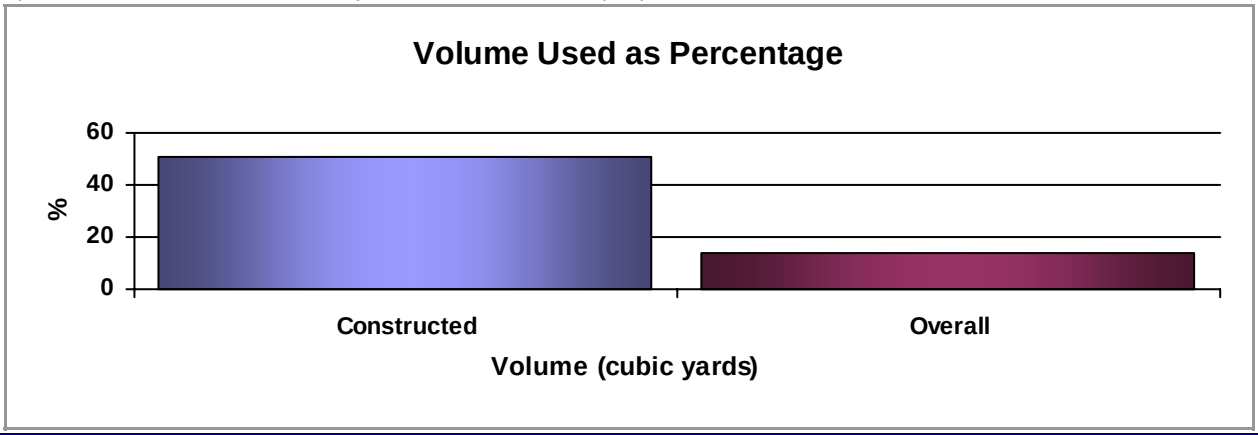
	Opened:	Surveyed:	Years Open:
Dates	8/25/1999	7/2/2007	7.9

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,524,665.00	194,171.51	232,555.80

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,157,742.00	4,242,023.00	15,500,000.00
Remaining Airspace (cubic yard)		2,084,281.00	13,342,258.00
Compaction Density (tons/cubic yard)	0.71		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	1,472,757.30	9,427,667.35
Remaining Capacity in Years (Avg TPY):	7.58	48.55
Remaining Capacity in Years (2006-2007 TPY):	6.33	40.54

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (252) 633-1564.



Calculations

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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CUMBERLAND COUNTY LANDFILL 26-01

County: CUMBERLAND

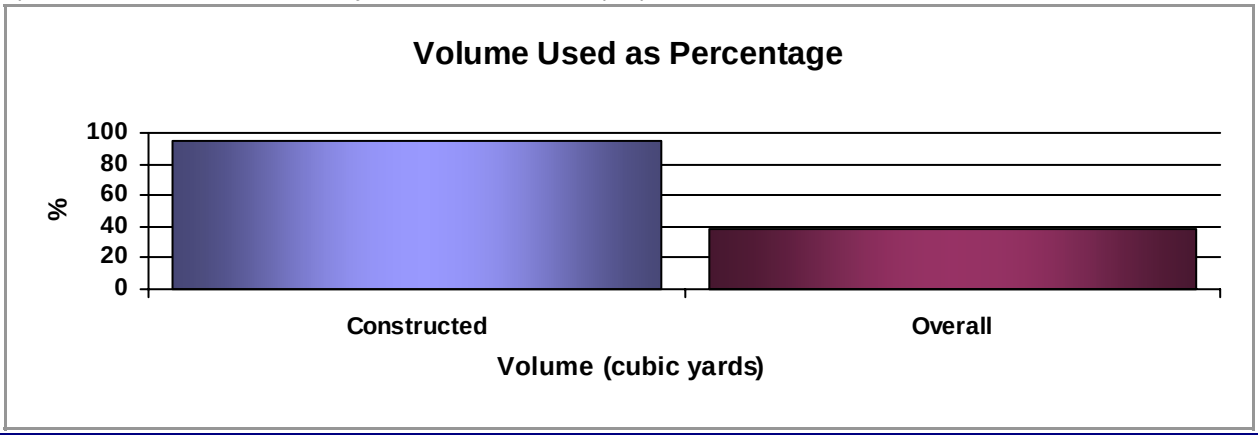
	Opened:	Surveyed:	Years Open:
Dates	12/17/1997	4/16/2007	9.3

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,368,967.00	146,761.14	177,755.76

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,236,315.00	2,350,400.00	5,782,175.00
Remaining Airspace (cubic yard)		114,085.00	3,545,860.00
Compaction Density (tons/cubic yard)	0.61		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	69,837.48	2,170,608.94
Remaining Capacity in Years (Avg TPY):	0.48	14.79
Remaining Capacity in Years (2006-2007 TPY):	0.39	12.21

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (910) 321-6830.



Calculations

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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

DAVIDSON CO MSW LINED LANDFILL 29-06

County: DAVIDSON

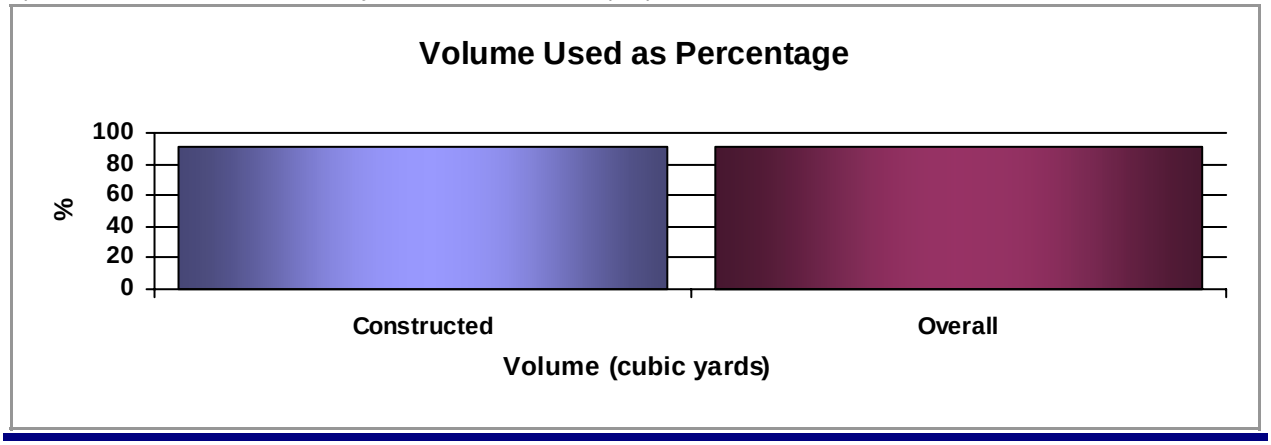
	Opened:	Surveyed:	Years Open:
Dates	10/1/1994	5/7/2007	12.6

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,212,850.00	96,282.00	103,997.20

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,220,908.00	2,425,000.00	2,425,000.00
Remaining Airspace (cubic yard)		204,092.00	204,092.00
Compaction Density (tons/cubic yard)	0.55		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	111,455.76	111,455.76
Remaining Capacity in Years (Avg TPY):	1.16	1.16
Remaining Capacity in Years (2006-2007 TPY):	1.07	1.07

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 242-2284.



Calculations

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Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Remaining Capacity in Years =
Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

HANES MILL ROAD LANDFILL 34-02

County: FORSYTH

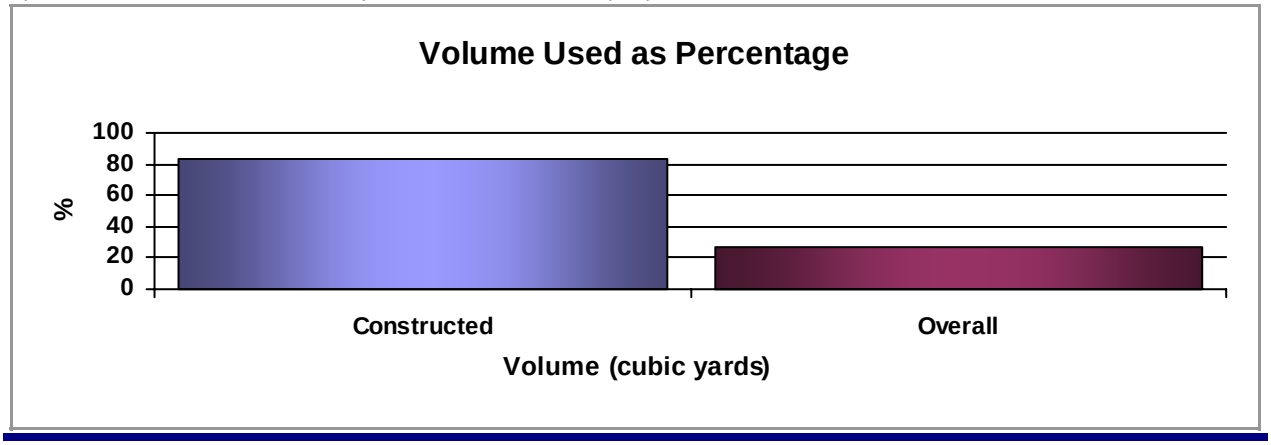
	Opened:	Surveyed:	Years Open:
Dates	4/7/1997	1/10/2007	9.8

	Total:	Avg per Year:	2006-2007:
Tons Disposed	2,791,467.00	285,998.13	276,116.22

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	4,337,200.00	5,170,216.00	16,446,816.00
Remaining Airspace (cubic yard)		833,016.00	12,109,616.00
Compaction Density (tons/cubic yard)	0.64		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	536,137.76	7,793,874.72
Remaining Capacity in Years (Avg TPY):	1.87	27.25
Remaining Capacity in Years (2006-2007 TPY):	1.94	28.23

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 727-8418.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
Remaining Capacity in Years =
Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

GASTON COUNTY LANDFILL 36-06

County: GASTON

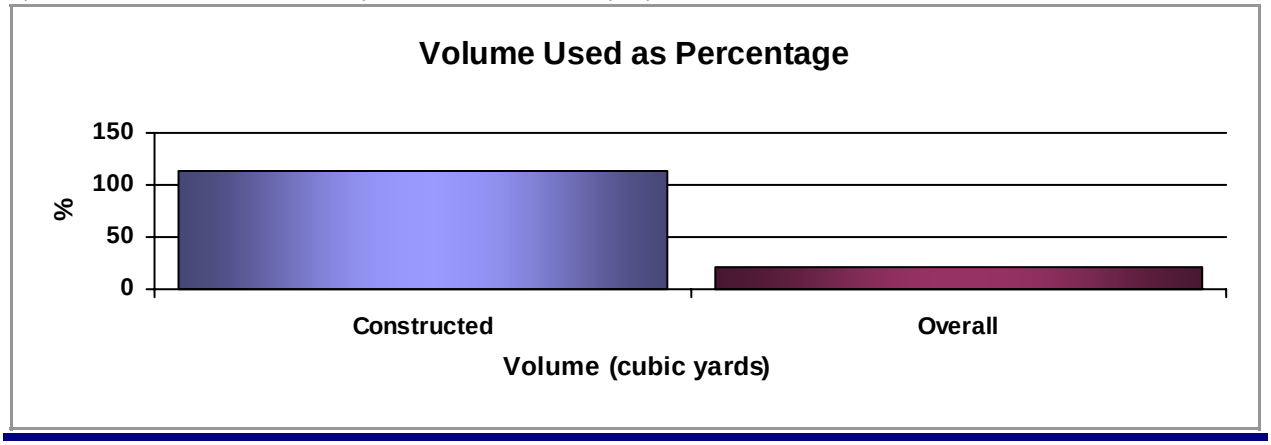
	Opened:	Surveyed:	Years Open:
Dates	7/1/1997	5/29/2007	9.9

	Total:	Avg per Year:	2006-2007:
Tons Disposed	857,260.00	86,519.54	108,616.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,613,254.00	1,428,000.00	7,441,200.00
Remaining Airspace (cubic yard)		-185,254.00	5,827,946.00
Compaction Density (tons/cubic yard)	0.53		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	-98,441.31	3,096,886.78
Remaining Capacity in Years (Avg TPY):	-1.14	35.79
Remaining Capacity in Years (2006-2007 TPY):	-0.91	28.51

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 922-0267.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CITY OF HIGH POINT LANDFILL 41-04

County: GUILFORD

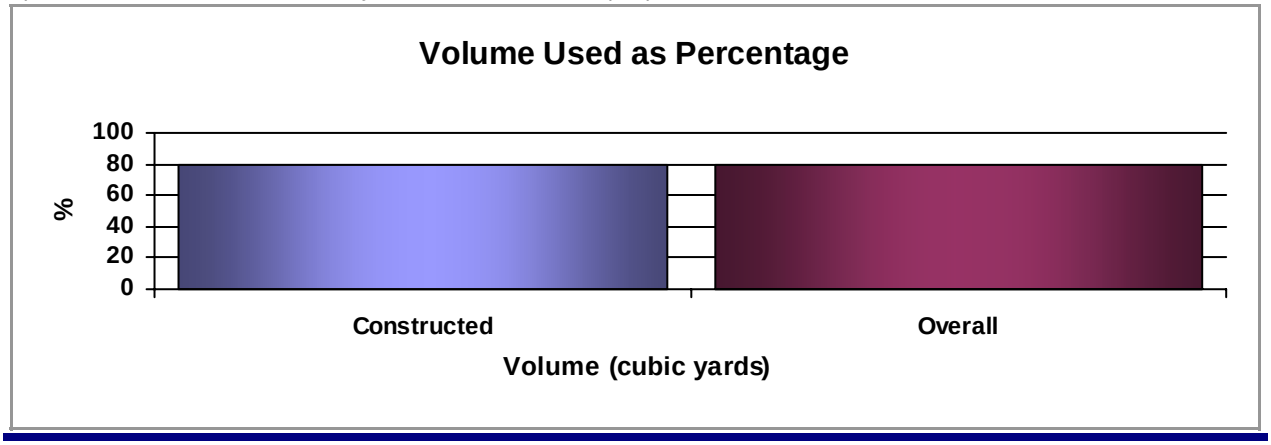
	Opened:	Surveyed:	Years Open:
Dates	10/1/1993	5/7/2007	13.6

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,615,167.00	118,795.76	99,820.12

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,742,281.00	3,442,281.00	3,442,281.00
Remaining Airspace (cubic yard)		700,000.00	700,000.00
Compaction Density (tons/cubic yard)	0.59		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	412,290.68	412,290.68
Remaining Capacity in Years (Avg TPY):	3.47	3.47
Remaining Capacity in Years (2006-2007 TPY):	4.13	4.13

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 883-3215.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CITY OF GREENSBORO 41-12

County: GUILFORD

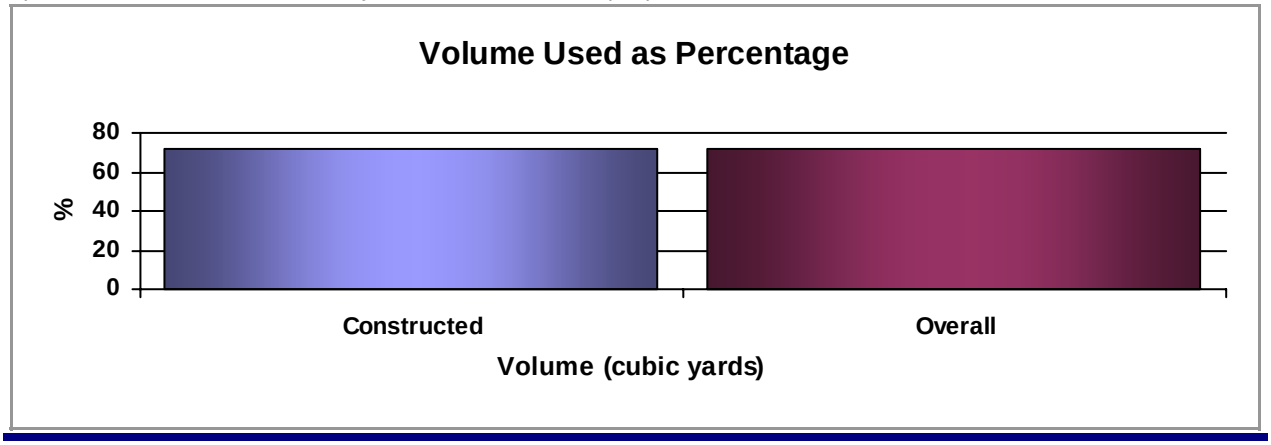
	Opened:	Surveyed:	Years Open:
Dates	12/9/1997	3/15/2007	9.3

	Total:	Avg per Year:	2006-2007:
Tons Disposed	2,158,305.00	233,024.21	101,965.29

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	3,680,000.00	5,113,682.00	5,113,682.00
Remaining Airspace (cubic yard)		1,433,682.00	1,433,682.00
Compaction Density (tons/cubic yard)	0.59		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	840,848.65	840,848.65
Remaining Capacity in Years (Avg TPY):	3.61	3.61
Remaining Capacity in Years (2006-2007 TPY):	8.25	8.25

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 373-7660.



Calculations

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Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity in Years =
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

HAYWOOD CO WHITE OAK LANDFILL 44-07

County: HAYWOOD

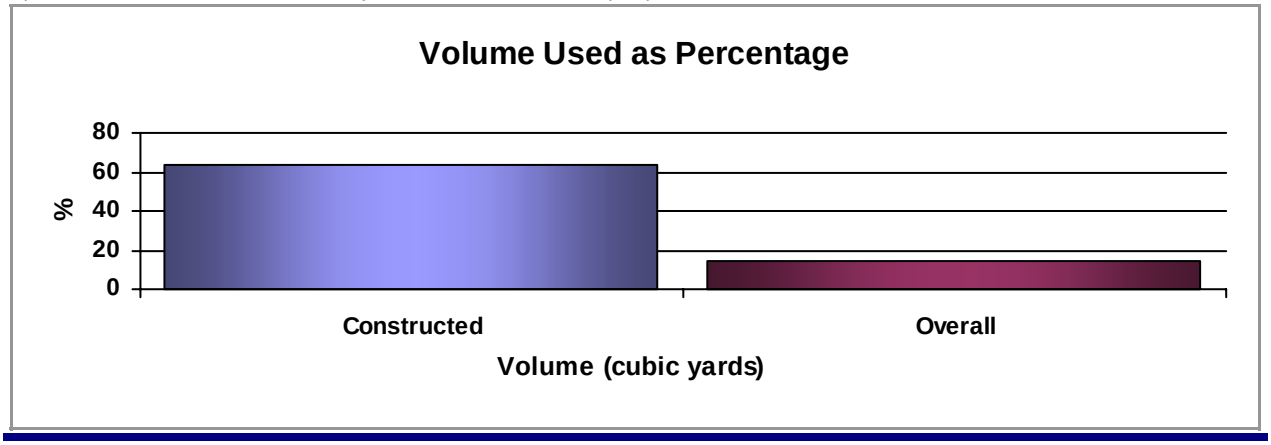
	Opened:	Surveyed:	Years Open:
Dates	10/15/1993	7/3/2007	13.7

	Total:	Avg per Year:	2006-2007:
Tons Disposed	611,316.39	44,576.42	58,455.37

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,161,600.00	1,819,337.00	8,335,231.00
Remaining Airspace (cubic yard)		657,737.00	7,173,631.00
Compaction Density (tons/cubic yard)	0.53		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	346,147.91	3,775,273.94
Remaining Capacity in Years (Avg TPY):	7.77	84.69
Remaining Capacity in Years (2006-2007 TPY):	5.92	64.58

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (828) 627-8042.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

IREDELL COUNTY SANITARY LANDFILL 49-03

County: IREDELL

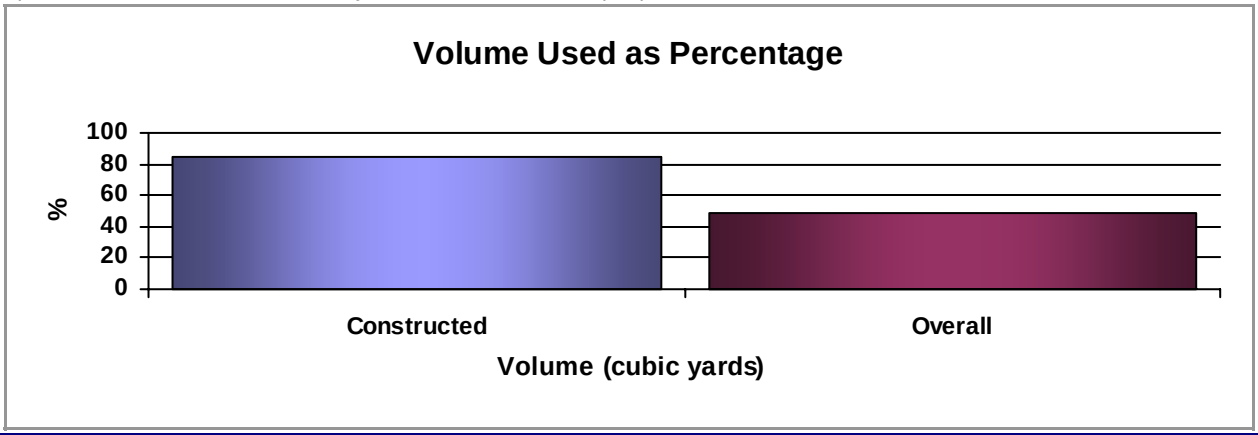
	Opened:	Surveyed:	Years Open:
Dates	10/8/1993	6/22/2007	13.7

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,775,650.00	129,581.65	167,949.53

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	3,250,529.00	3,863,570.00	6,661,380.00
Remaining Airspace (cubic yard)		613,041.00	3,410,851.00
Compaction Density (tons/cubic yard)	0.55		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	334,882.80	1,863,228.29
Remaining Capacity in Years (Avg TPY):	2.58	14.38
Remaining Capacity in Years (2006-2007 TPY):	1.99	11.09

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 878-5430.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

JOHNSTON COUNTY LANDFILL 51-03

County: JOHNSTON

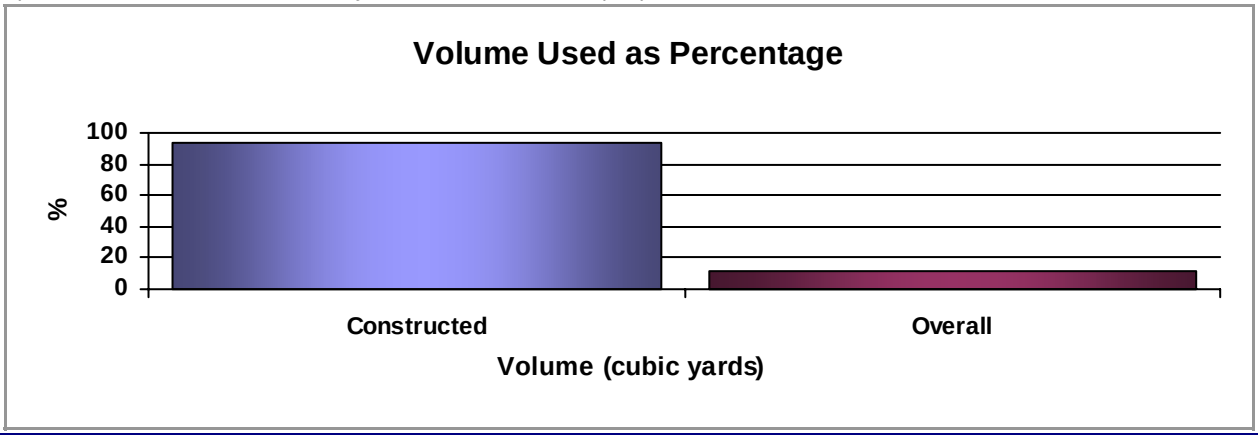
	Opened:	Surveyed:	Years Open:
Dates	10/1/1997	5/20/2007	9.6

	Total:	Avg per Year:	2006-2007:
Tons Disposed	984,581.00	102,222.35	113,684.27

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,028,437.00	2,173,982.00	18,367,420.00
Remaining Airspace (cubic yard)		145,545.00	16,338,983.00
Compaction Density (tons/cubic yard)	0.49		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	70,645.94	7,930,762.56
Remaining Capacity in Years (Avg TPY):	0.69	77.58
Remaining Capacity in Years (2006-2007 TPY):	0.62	69.76

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (919) 938-4750.



Calculations

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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

LENOIR COUNTY MSW LANDFILL 54-09

County: LENOIR

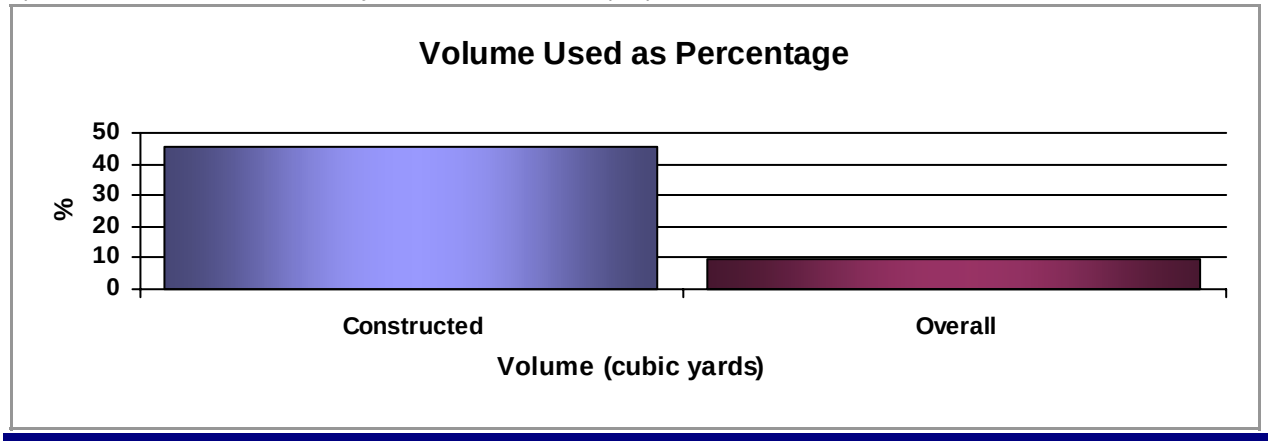
	Opened:	Surveyed:	Years Open:
Dates	7/1/2004	6/18/2007	3.0

	Total:	Avg per Year:	2006-2007:
Tons Disposed	133,843.37	45,181.41	56,691.91

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	287,105.00	635,000.00	3,000,000.00
Remaining Airspace (cubic yard)		347,895.00	2,712,895.00
Compaction Density (tons/cubic yard)	0.47		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	162,182.61	1,264,704.58
Remaining Capacity in Years (Avg TPY):	3.59	27.99
Remaining Capacity in Years (2006-2007 TPY):	2.86	22.31

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (252) 566-5408.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
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Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

LINCOLN COUNTY LANDFILL 55-03

County: LINCOLN

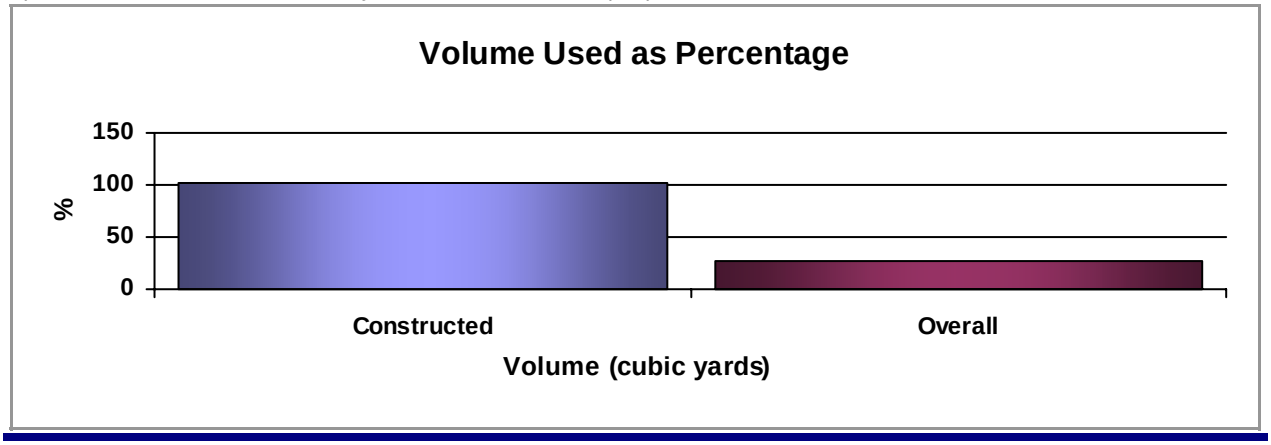
	Opened:	Surveyed:	Years Open:
Dates	5/22/1993	6/14/2007	14.1

	Total:	Avg per Year:	2006-2007:
Tons Disposed	589,379.06	41,914.08	45,090.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,304,448.00	1,270,000.00	4,889,800.00
Remaining Airspace (cubic yard)		-34,448.00	3,585,352.00
Compaction Density (tons/cubic yard)	0.45		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	-15,564.38	1,619,942.99
Remaining Capacity in Years (Avg TPY):	-0.37	38.65
Remaining Capacity in Years (2006-2007 TPY):	-0.35	35.93

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 732-9030.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

MACON COUNTY LANDFILL OPEN 57-03

County: MACON

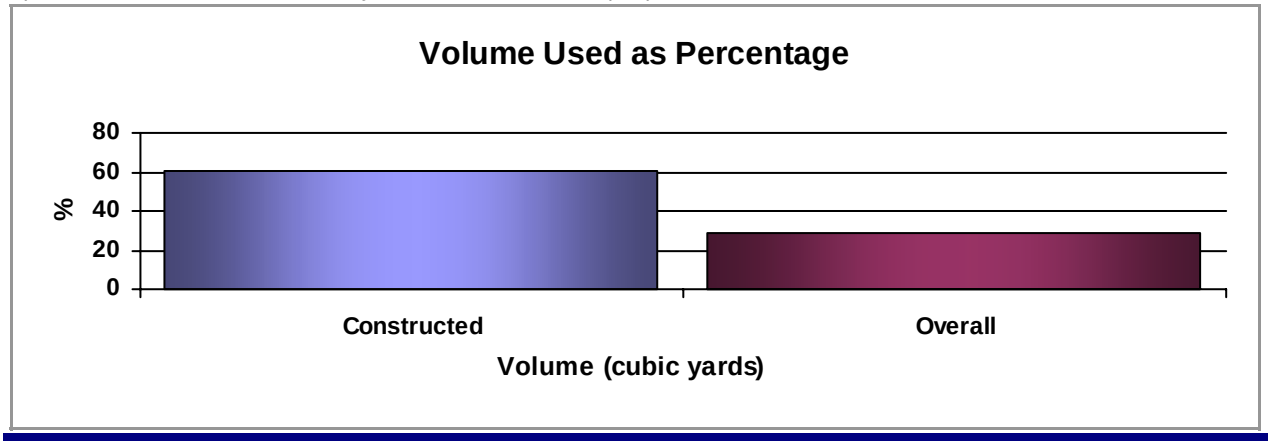
	Opened:	Surveyed:	Years Open:
Dates	5/1/1992	5/16/2007	15.0

	Total:	Avg per Year:	2006-2007:
Tons Disposed	412,564.00	27,432.91	27,517.41

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	773,119.00	1,279,949.00	2,723,049.00
Remaining Airspace (cubic yard)		506,830.00	1,949,930.00
Compaction Density (tons/cubic yard)	0.53		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	270,462.65	1,040,552.52
Remaining Capacity in Years (Avg TPY):	9.86	37.93
Remaining Capacity in Years (2006-2007 TPY):	9.83	37.81

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (828) 349-2100.



Calculations

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Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
Remaining Capacity in Years =
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

MECKLENBURG COUNTY LANDFILL 60-19

County: MECKLENBURG

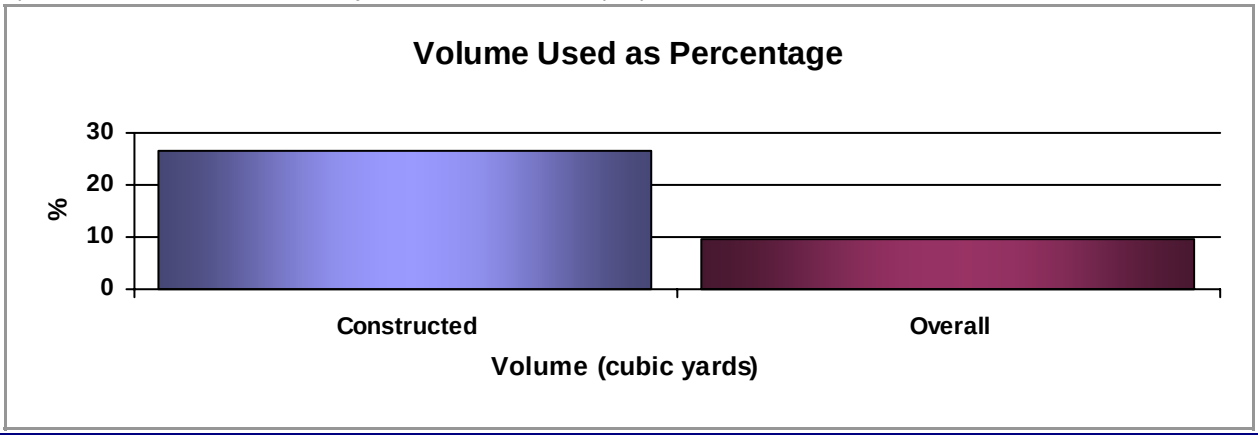
	Opened:	Surveyed:	Years Open:
Dates	4/11/2000	1/29/2007	6.8

	Total:	Avg per Year:	2006-2007:
Tons Disposed	782,780.00	115,100.80	165,239.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,500,495.00	5,659,985.00	15,900,000.00
Remaining Airspace (cubic yard)		4,159,490.00	14,399,505.00
Compaction Density (tons/cubic yard)	0.52		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	2,169,927.65	7,511,950.74
Remaining Capacity in Years (Avg TPY):	18.85	65.26
Remaining Capacity in Years (2006-2007 TPY):	13.13	45.46

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 336-5371.



Calculations

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Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
Remaining Capacity in Years =
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

UWHARRIE ENVIRONMENTAL LANDFILL 62-04

County: MONTGOMERY

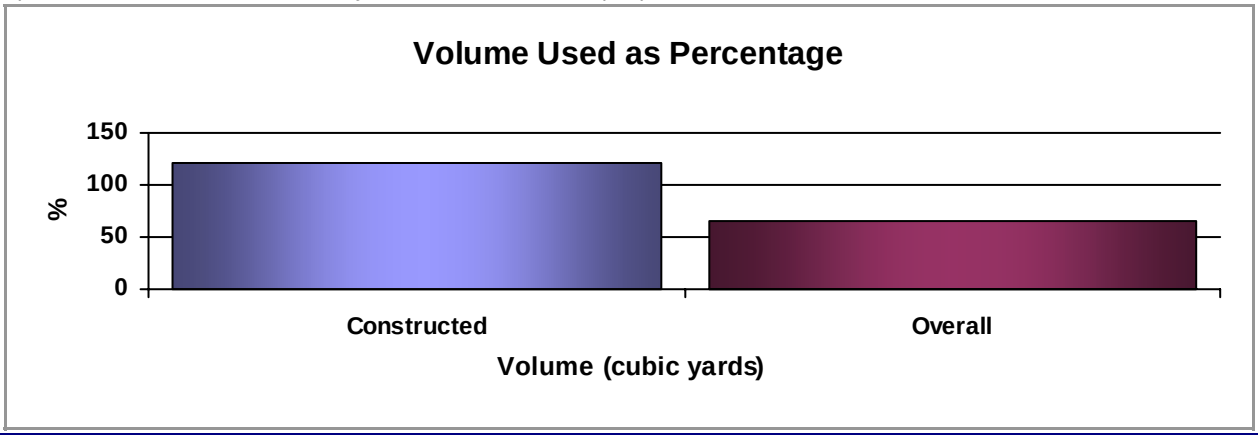
	Opened:	Surveyed:	Years Open:
Dates	12/11/1995	3/3/2007	11.2

	Total:	Avg per Year:	2006-2007:
Tons Disposed	6,081,379.36	541,761.91	714,466.67

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	9,507,981.00	7,889,000.00	14,402,000.00
Remaining Airspace (cubic yard)		-1,618,981.00	4,894,019.00
Compaction Density (tons/cubic yard)	0.64		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	-1,035,512.97	3,130,253.01
Remaining Capacity in Years (Avg TPY):	-1.91	5.78
Remaining Capacity in Years (2006-2007 TPY):	-1.45	4.38

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (910) 576-3697.



Calculations

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Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

NEW HANOVER COUNTY LANDFILL 65-04

County: NEW HANOVER

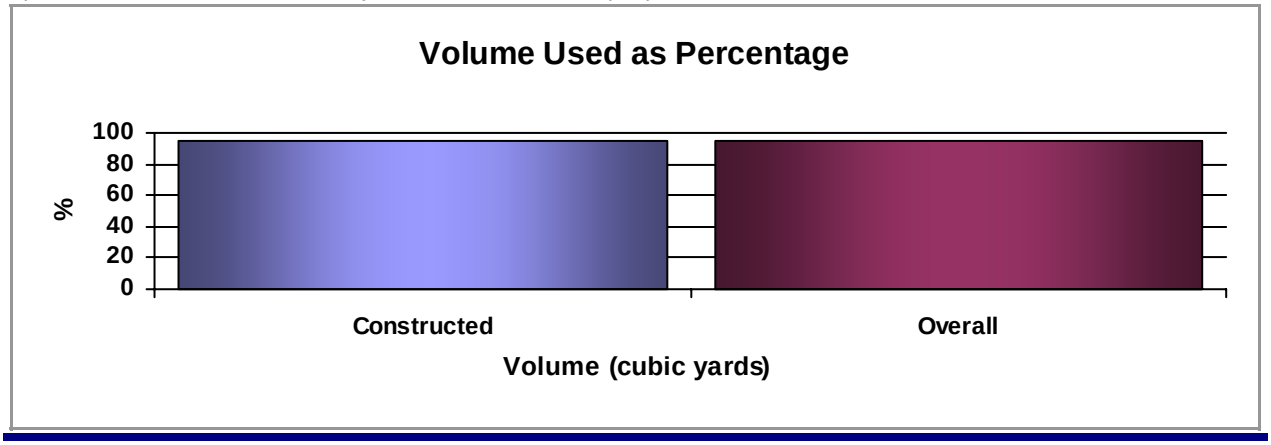
	Opened:	Surveyed:	Years Open:
Dates	8/24/1981	5/20/2007	25.7

	Total:	Avg per Year:	2006-2007:
Tons Disposed	3,857,079.00	149,872.14	199,633.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	5,354,217.00	5,666,734.00	5,666,734.00
Remaining Airspace (cubic yard)		312,517.00	312,517.00
Compaction Density (tons/cubic yard)	0.72		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	225,131.47	225,131.47
Remaining Capacity in Years (Avg TPY):	1.50	1.50
Remaining Capacity in Years (2006-2007 TPY):	1.13	1.13

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (910) 798-4402.



Calculations

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Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
Remaining Capacity in Years =
Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CAMP LEJEUNE MSW LANDFILL 67-08

County: ONSLOW

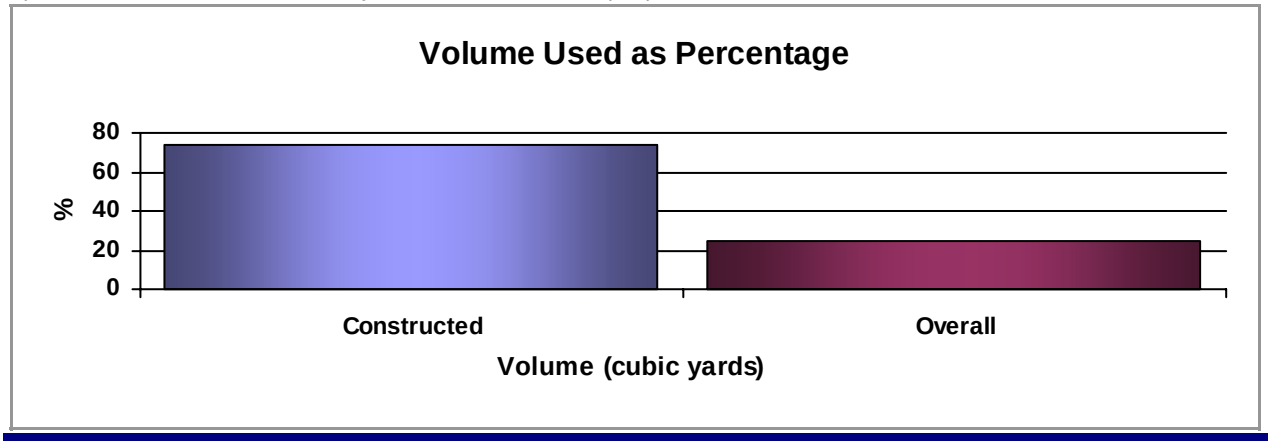
	Opened:	Surveyed:	Years Open:
Dates	1/1/1998	7/17/2007	9.5

	Total:	Avg per Year:	2006-2007:
Tons Disposed	436,101.02	45,719.26	46,612.12

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	989,197.00	1,331,000.00	4,089,000.00
Remaining Airspace (cubic yard)		341,803.00	3,099,803.00
Compaction Density (tons/cubic yard)	0.44		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	150,688.53	1,366,590.53
Remaining Capacity in Years (Avg TPY):	3.30	29.89
Remaining Capacity in Years (2006-2007 TPY):	3.23	29.32

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (910) 451-5003.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
Remaining Capacity in Years =
Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

ONSLOW COUNTY SUBTITLE D LANDFILL 67-09

County: ONSLOW

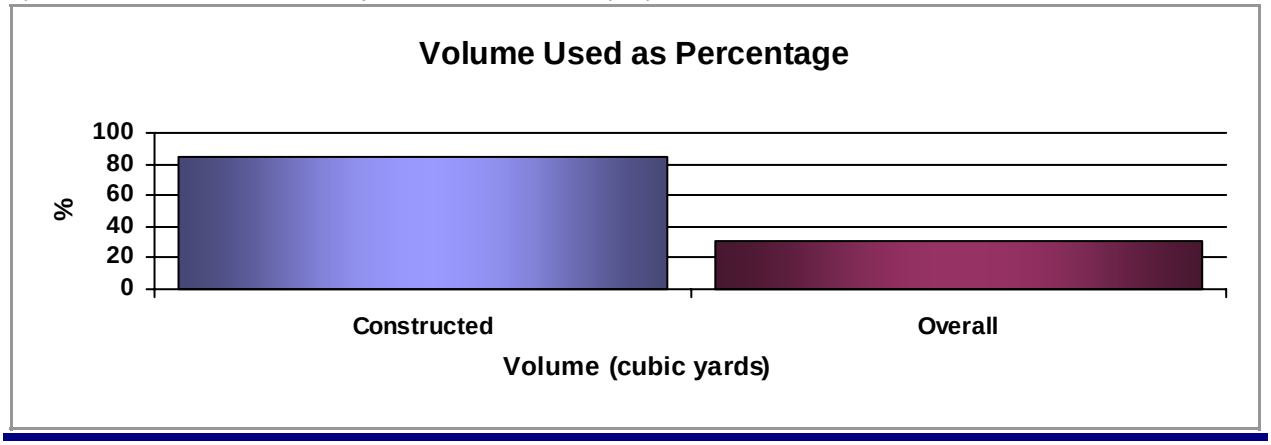
	Opened:	Surveyed:	Years Open:
Dates	1/1/1998	2/15/2007	9.1

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,067,453.00	117,012.97	142,155.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,725,695.00	2,028,575.00	5,712,666.00
Remaining Airspace (cubic yard)		302,880.00	3,986,971.00
Compaction Density (tons/cubic yard)	0.62		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	187,350.70	2,466,197.19
Remaining Capacity in Years (Avg TPY):	1.60	21.08
Remaining Capacity in Years (2006-2007 TPY):	1.32	17.35

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (910) 989-2107.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

ORANGE COUNTY LANDFILL 68-01

County: ORANGE

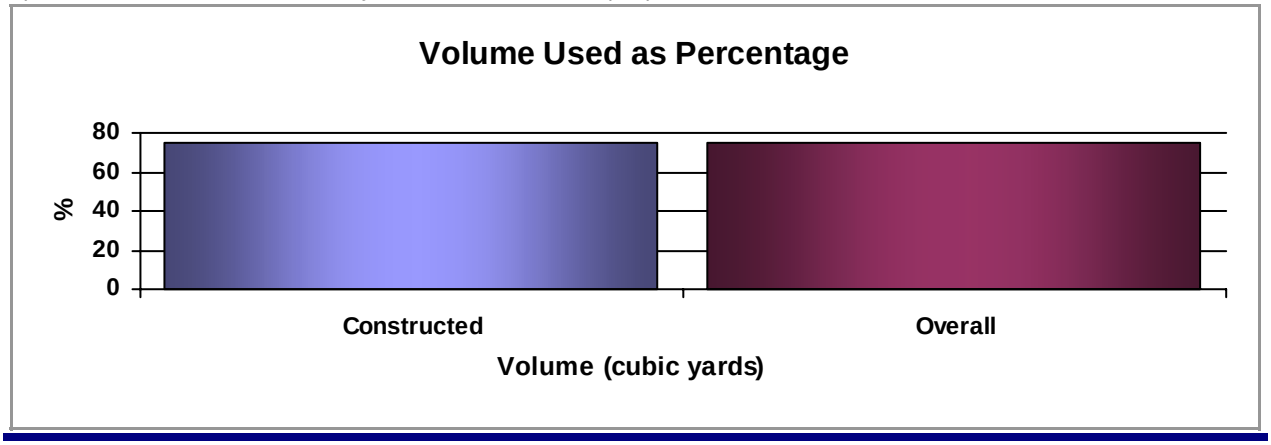
	Opened:	Surveyed:	Years Open:
Dates	7/1/1995	4/5/2007	11.8

	Total:	Avg per Year:	2006-2007:
Tons Disposed	687,125.00	58,420.02	57,301.25

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,200,000.00	1,604,000.00	1,604,000.00
Remaining Airspace (cubic yard)		404,000.00	404,000.00
Compaction Density (tons/cubic yard)	0.57		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	231,332.08	231,332.08
Remaining Capacity in Years (Avg TPY):	3.96	3.96
Remaining Capacity in Years (2006-2007 TPY):	4.04	4.04

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (919) 968-2885.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

UPPER PIEDMONT REGIONAL LANDFILL 73-04

County: PERSON

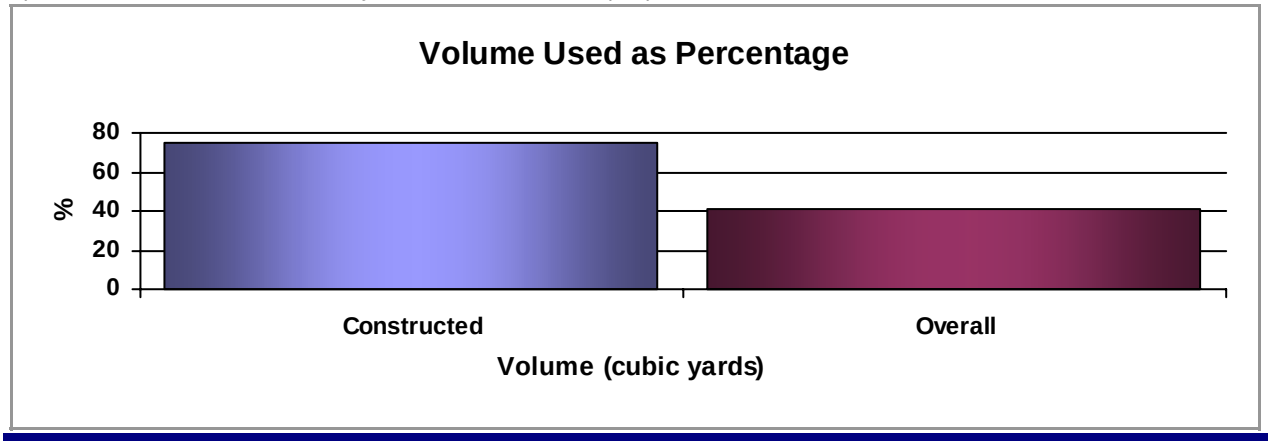
	Opened:	Surveyed:	Years Open:
Dates	7/30/1997	3/6/2007	9.6

	Total:	Avg per Year:	2006-2007:
Tons Disposed	2,128,972.00	221,793.22	198,232.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	3,451,129.00	4,600,000.00	8,500,000.00
Remaining Airspace (cubic yard)		1,148,871.00	5,048,871.00
Compaction Density (tons/cubic yard)	0.62		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	708,728.71	3,114,605.39
Remaining Capacity in Years (Avg TPY):	3.20	14.04
Remaining Capacity in Years (2006-2007 TPY):	3.58	15.71

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 364-3699.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

ROBESON COUNTY LANDFILL 78-03

County: ROBESON

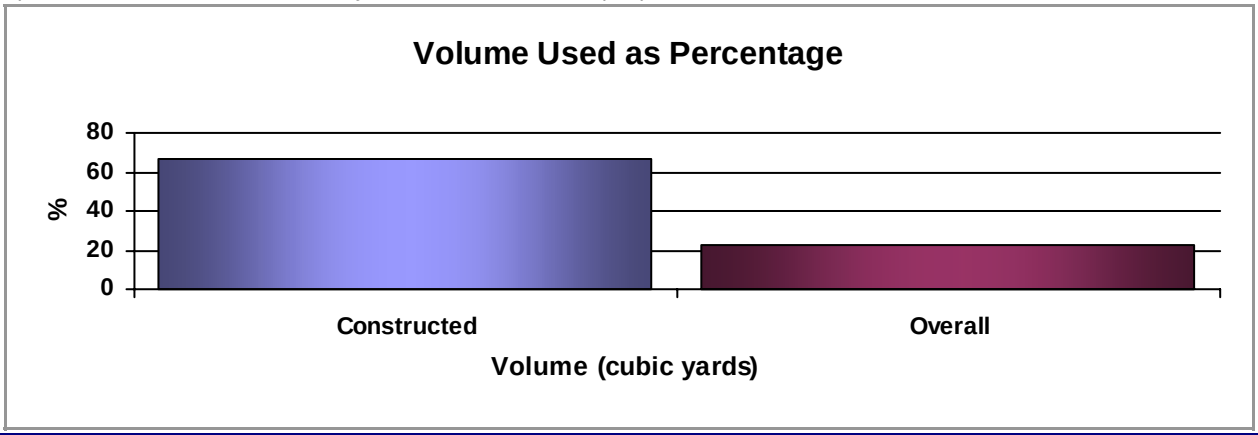
	Opened:	Surveyed:	Years Open:
Dates	1/1/1998	5/20/2007	9.4

	Total:	Avg per Year:	2006-2007:
Tons Disposed	882,802.00	94,116.59	90,004.85

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,340,843.00	2,000,000.00	6,000,000.00
Remaining Airspace (cubic yard)		659,157.00	4,659,157.00
Compaction Density (tons/cubic yard)	0.66		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	433,984.53	3,067,557.59
Remaining Capacity in Years (Avg TPY):	4.61	32.59
Remaining Capacity in Years (2006-2007 TPY):	4.82	34.08

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (800) 682-2014.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

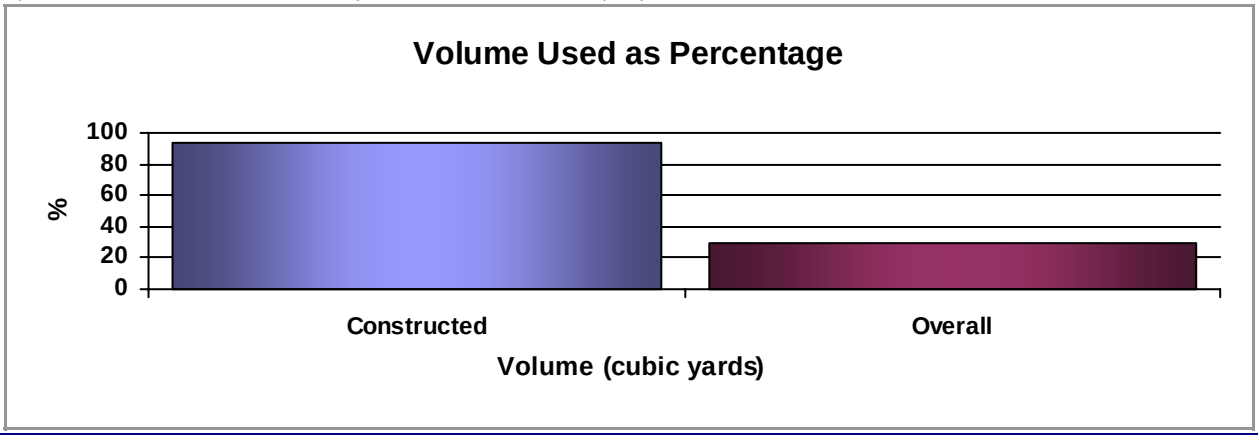
ROCKINGHAM COUNTY LANDFILL 79-04

County: ROCKINGHAM

	Opened:	**Surveyed:**	**Years Open:**
Dates	5/5/1995	2/24/2007	11.8
	Total:	**Avg per Year:**	**2006-2007:**
Tons Disposed	897,340.00	75,991.99	90,072.10
	Used:	**Constructed:**	**Overall:**
Volume Airspace (cubic yard)	1,742,570.00	1,865,268.00	5,870,000.00
Remaining Airspace (cubic yard)		122,698.00	4,127,430.00
Compaction Density (tons/cubic yard)	0.51		

	Constructed:	**Overall:**
Remaining Capacity for Tons of Waste:	63,183.59	2,125,428.55
Remaining Capacity in Years (Avg TPY):	0.83	27.97
Remaining Capacity in Years (2006-2007 TPY):	0.70	23.60

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 427-5421.



Calculations

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Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

ROWAN COUNTY LANDFILL 80-03

County: ROWAN

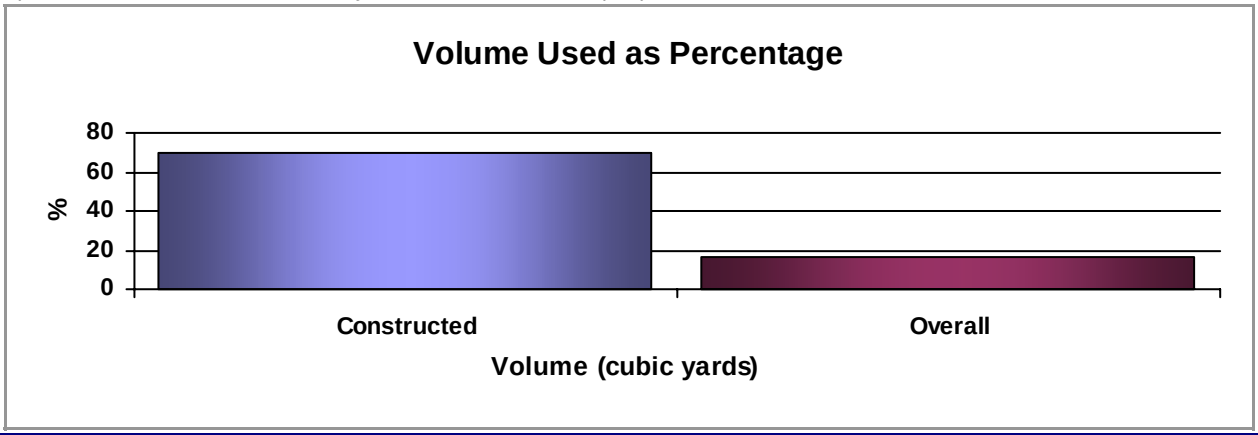
	Opened:	Surveyed:	Years Open:
Dates	12/1/1989	6/4/2007	17.5

	Total:	Avg per Year:	2006-2007:
Tons Disposed	1,312,064.52	74,950.20	94,641.93

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	2,413,612.30	3,451,834.00	15,071,000.00
Remaining Airspace (cubic yard)		1,038,221.70	12,657,387.70
Compaction Density (tons/cubic yard)	0.54		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	564,388.02	6,880,686.40
Remaining Capacity in Years (Avg TPY):	7.53	91.80
Remaining Capacity in Years (2006-2007 TPY):	5.96	72.70

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 216-8606.



Calculations

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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

WI-SAMPSON COUNTY DISPOSAL INC 82-02

County: SAMPSON

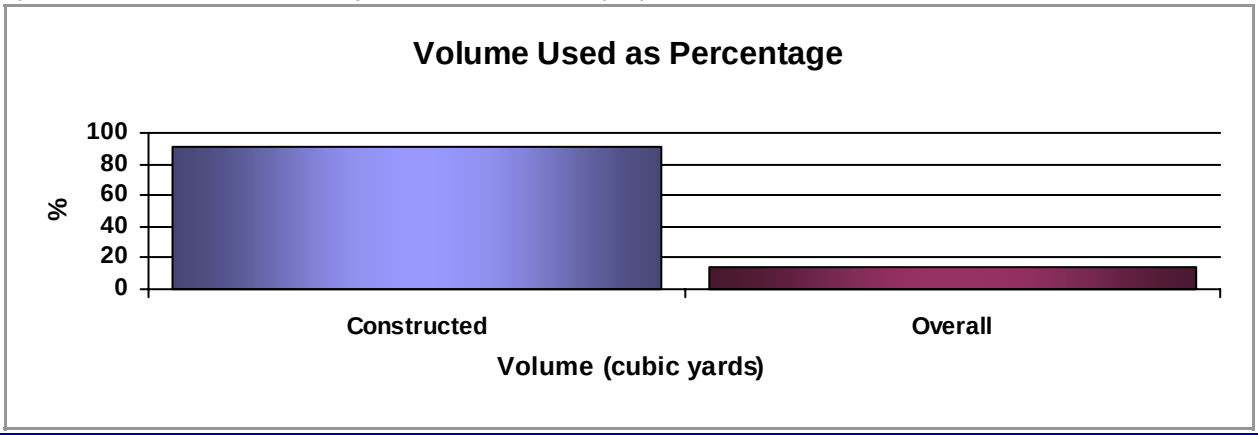
	Opened:	Surveyed:	Years Open:
Dates	2/22/1999	2/16/2007	8.0

	Total:	Avg per Year:	2006-2007:
Tons Disposed	5,465,915.00	684,645.22	981,777.79

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	7,056,766.00	7,800,000.00	50,000,000.00
Remaining Airspace (cubic yard)		743,234.00	42,943,234.00
Compaction Density (tons/cubic yard)	0.77		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	575,682.10	33,262,271.54
Remaining Capacity in Years (Avg TPY):	0.84	48.58
Remaining Capacity in Years (2006-2007 TPY):	0.59	33.88

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (910) 525-4132.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

CITY OF ALBEMARLE 84-01

County: STANLY

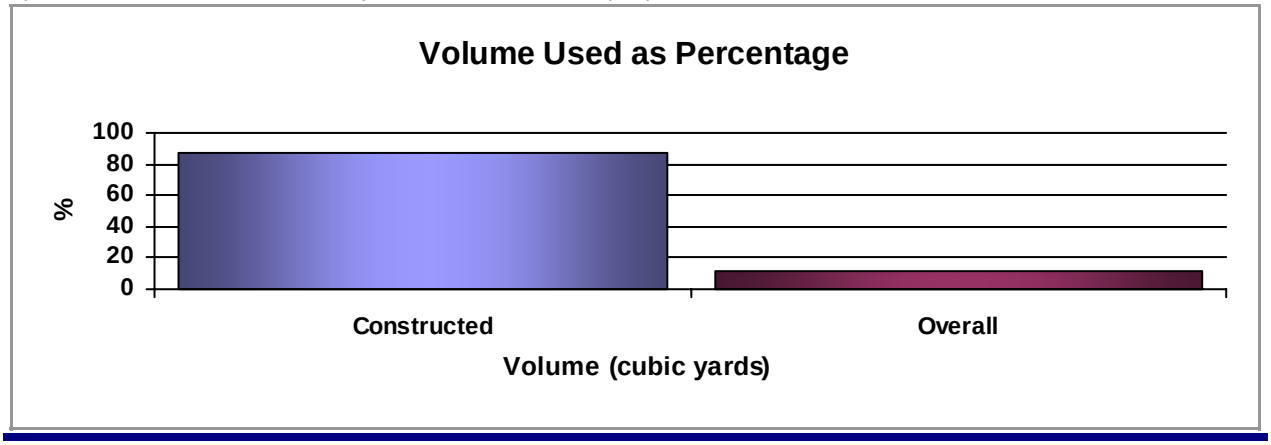
	Opened:	Surveyed:	Years Open:
Dates	5/20/1999	6/26/2007	8.1

	Total:	Avg per Year:	2006-2007:
Tons Disposed	353,453.00	43,629.17	46,614.27

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	591,655.00	683,555.00	4,970,844.00
Remaining Airspace (cubic yard)		91,900.00	4,379,189.00
Compaction Density (tons/cubic yard)	0.60		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	54,900.80	2,616,114.95
Remaining Capacity in Years (Avg TPY):	1.26	59.96
Remaining Capacity in Years (2006-2007 TPY):	1.18	56.12

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (704) 984-9674.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
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Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

SURRY COUNTY MSWLF 86-06

County: SURRY

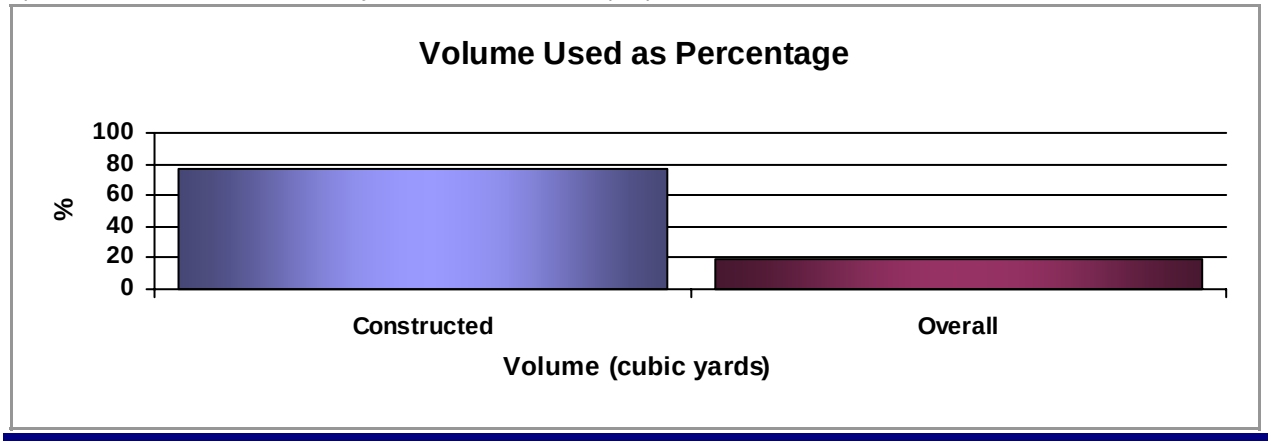
	Opened:	Surveyed:	Years Open:
Dates	12/1/1998	7/26/2007	8.6

	Total:	Avg per Year:	2006-2007:
Tons Disposed	572,707.00	66,217.55	79,601.46

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,008,115.00	1,301,000.00	5,212,000.00
Remaining Airspace (cubic yard)		292,885.00	4,203,885.00
Compaction Density (tons/cubic yard)	0.57		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	166,387.06	2,388,214.01
Remaining Capacity in Years (Avg TPY):	2.51	36.07
Remaining Capacity in Years (2006-2007 TPY):	2.09	30.00

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 401-8375.



Calculations

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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
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Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

TRANSYLVANIA COUNTY LANDFILL 88-07

County: TRANSYLVANIA

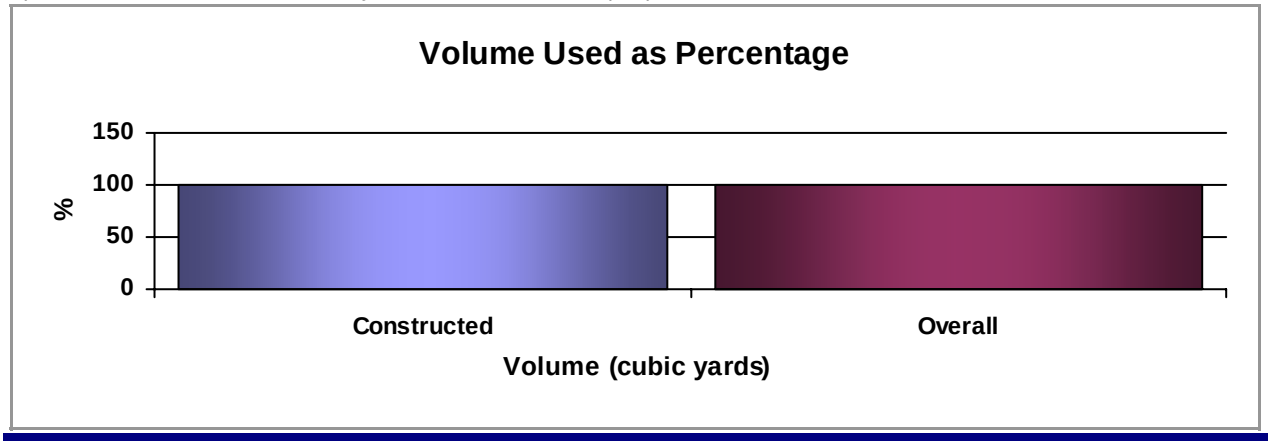
	Opened:	Surveyed:	Years Open:
Dates	6/13/1990	8/3/2007	17.1

	Total:	Avg per Year:	2006-2007:
Tons Disposed	297,353.00	17,349.55	28,090.00

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	521,646.00	522,000.00	522,000.00
Remaining Airspace (cubic yard)		354.00	354.00
Compaction Density (tons/cubic yard)	0.57		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	201.79	201.79
Remaining Capacity in Years (Avg TPY):	0.01	0.01
Remaining Capacity in Years (2006-2007 TPY):	0.01	0.01

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (828) 884-6830.



Calculations

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Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

WAKE COUNTY LANDFILL-NORTH 92-09

County: WAKE

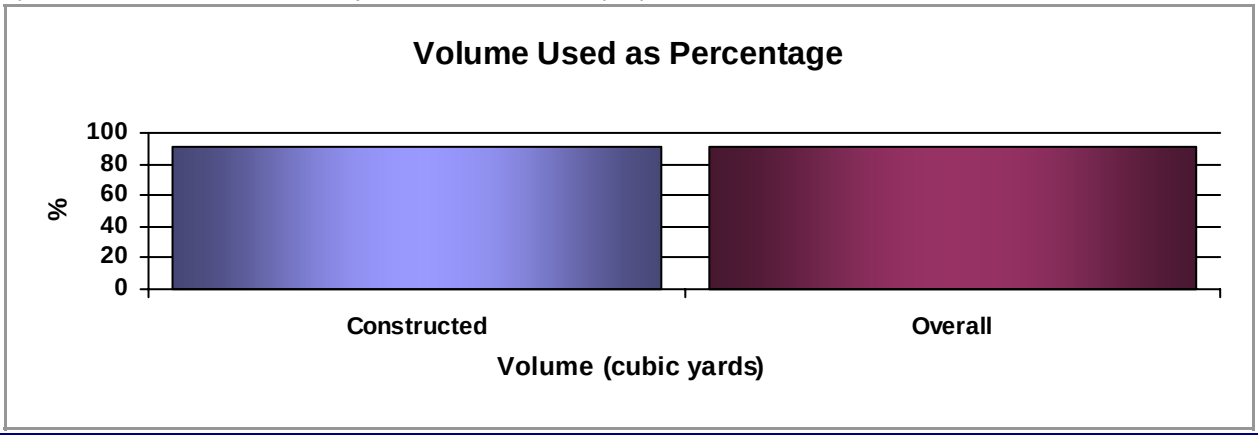
	Opened:	Surveyed:	Years Open:
Dates	7/1/1998	11/12/2007	9.4

	Total:	Avg per Year:	2006-2007:
Tons Disposed	5,215,001.15	556,790.17	440,444.60

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	7,156,480.00	7,900,000.00	7,900,000.00
Remaining Airspace (cubic yard)		743,520.00	743,520.00
Compaction Density (tons/cubic yard)	0.73		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	541,810.73	541,810.73
Remaining Capacity in Years (Avg TPY):	0.97	0.97
Remaining Capacity in Years (2006-2007 TPY):	1.23	1.23

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (919) 856-6202.



Calculations

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Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

WAYNE COUNTY LANDFILL 96-06

County: WAYNE

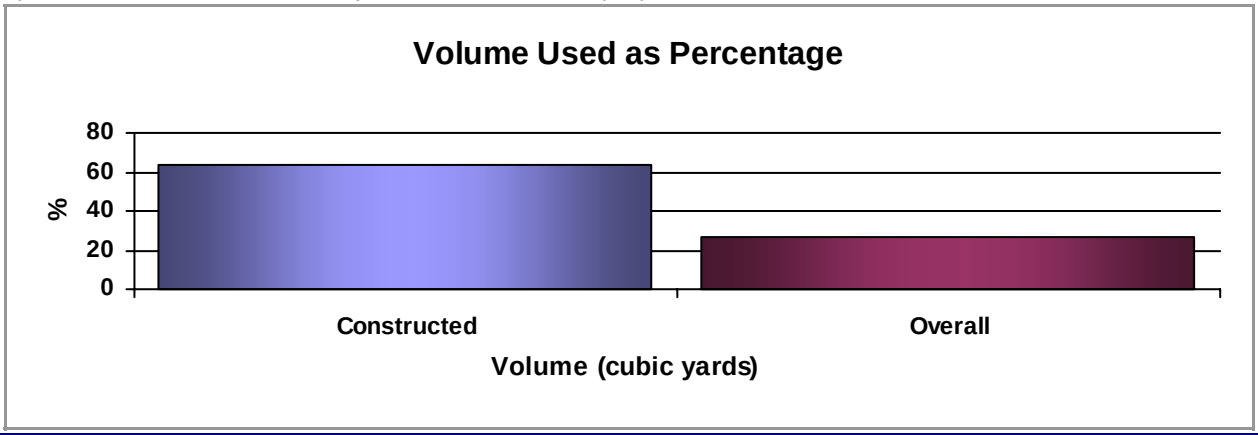
	Opened:	Surveyed:	Years Open:
Dates	1/26/1998	1/1/2007	8.9

	Total:	Avg per Year:	2006-2007:
Tons Disposed	775,984.67	86,887.92	81,029.72

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,314,632.00	2,082,000.00	5,000,000.00
Remaining Airspace (cubic yard)		767,368.00	3,685,368.00
Compaction Density (tons/cubic yard)	0.59		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	452,952.46	2,175,353.31
Remaining Capacity in Years (Avg TPY):	5.21	25.04
Remaining Capacity in Years (2006-2007 TPY):	5.59	26.85

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (919) 689-2994.



Calculations

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Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design

Municipal Solid Waste Landfill Capacity

WILKES COUNTY MSWLF 97-04

County: WILKES

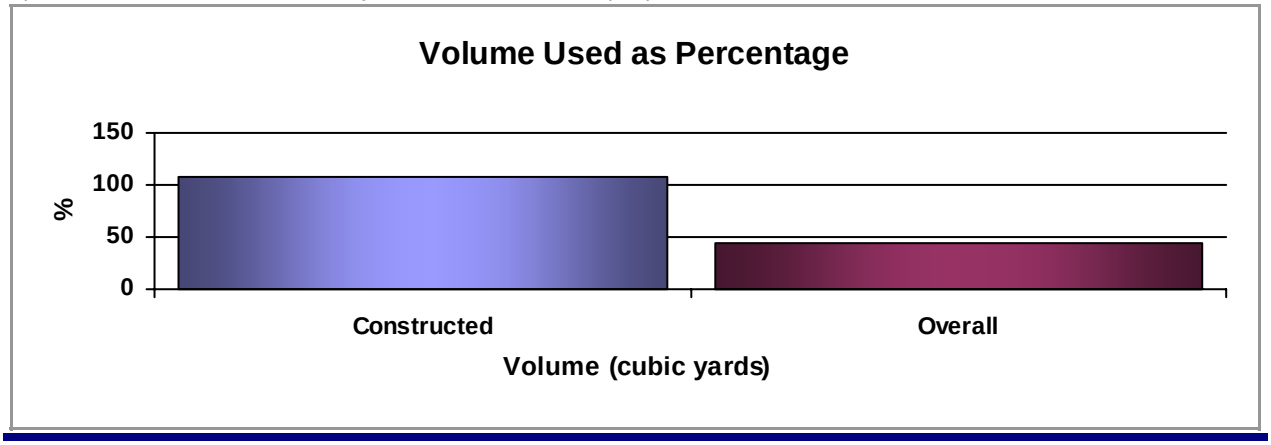
	Opened:	Surveyed:	Years Open:
Dates	10/7/1993	8/1/2007	13.8

	Total:	Avg per Year:	2006-2007:
Tons Disposed	692,955.25	50,158.92	58,121.22

	Used:	Constructed:	Overall:
Volume Airspace (cubic yard)	1,507,582.00	1,406,578.00	3,473,509.00
Remaining Airspace (cubic yard)		-101,004.00	1,965,927.00
Compaction Density (tons/cubic yard)	0.46		

	Constructed:	Overall:
Remaining Capacity for Tons of Waste:	-46,426.17	903,632.06
Remaining Capacity in Years (Avg TPY):	-0.93	18.02
Remaining Capacity in Years (2006-2007 TPY):	-0.80	15.55

Note: These figures are based on current tonnage and compaction density and do not account for future growth or changes in operations. Please contact the facility for more information at: (336) 696-3867.



Calculations

Average Tons Disposed Per Year = Total Tons Disposed / Years Open
Remaining Airspace = Total Volume Airspace – Volume of Airspace Used
Compaction Density = Total Tons Disposed / Volume of Airspace Used
Remaining Capacity for Tons of Waste = Remaining Airspace x Compaction Density
Remaining Capacity in Years =
Remaining Capacity for Tons of Waste / Average Tons Disposed Per Year
Remaining Capacity for Tons of Waste / 2006-2007 Tons Disposed
Constructed = Landfill Volume Constructed and Permitted to Operate
Overall = Total Volume for the Landfill Site at Final Design