

*July 1, 2009
to
July 1, 2019*

Catawba County Ten Year Solid Waste Management Plan / Three Year Update

DRAFT



June 2009



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08.00713

Brookford • Catawba • Claremont
Conover • Hickory • Long View
Maiden • Newton

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Executive Summary

McGill Associates, P.A., with the assistance of the Catawba County Utilities & Engineering Department and the County's eight (8) incorporated municipalities, has prepared this three-year update to the ten-year Solid Waste Management Plan in accordance with N.C. General Statute 130A-309.09A (b). Its purpose is to meet Catawba County's solid waste disposal and waste reduction needs as well as protect the public health and environment. The planning area includes Catawba County and the Cities/Towns of Brookford, Catawba, Claremont, Conover, Hickory, Long View, Maiden and Newton. The ten-year Solid Waste Management Plan update presents a look at recent and current solid waste disposal and waste reduction practices in the County and provides for the future management and reduction of solid waste.

From the County's baseline year (FY 1989-90) disposal rate of 1.51 tons per capita to the most recently recorded year (FY 2007-08), Catawba County has reduced its annual per capita rate to 1.22 tons per capita, a reduction of approximately 19.2%. As a comparison, the statewide per capita disposal rate was 1.24 for FY 2007-08. This reduced rate meets the County's goal of 15% reduction set in the 2006 report for FY 2007-08. This accomplishment is a tribute to the hard work and dedication of all Solid Waste personnel of the County and its municipalities. The State's original goal of 40% reduction in waste disposal is not feasible for Catawba County; however, the County is pursuing aggressive goals of furthering the reduction to 22% below the baseline by FY 2013-14 and 25% below the baseline by FY 2018-19. This corresponds to per capita rates of 1.18 and 1.13 tons by June 30, 2014 and 2019, respectively.

In order to realize its goals, the County must divert additional waste from the landfill by various means, including but not limited to education, source reduction, recycling, reuse, mulching, composting and the collection of household hazardous wastes. The required amount of waste to be diverted is calculated by comparing the projected waste disposal for the proposed rate versus the baseline disposal rate. To do this, the baseline rate of 1.51 tons per capita was applied to population projections for FY 2013-14 and FY 2018-19, resulting in the "no action" disposal tonnages of, 253,037 and 268,895 tons, respectively. Subtracting tonnages calculated based on proposed per capita rates for the same population projections from the baseline tonnage, Catawba County must divert 55,299 tons by FY 2013-14 and 67,669 tons by FY 2018-19. These proposed diversion tonnages do not account for the progress made by the County in the years between the baseline year and the present.

Considering the possibility that the per capita rates remain unchanged from the most current (FY 2007-08) rate of 1.22 to the planning years FY 2013-14 and FY 2018-19, the County would dispose of 204,440 and 217,252 tons in those years. This translates to diverting an additional 6,703 tons by June 30, 2014, and 16,027 tons by June 30, 2019 above the current diversion amounts.

Catawba County's long-range vision is for a comprehensive waste management program that would provide disposal capacity, waste collection services, and waste reduction programs to all members of the community at an equitable price and a community that understands the economic and environmental benefits of waste reduction and proper waste disposal.

Introduction

This plan is provided to protect public health and the environment of Catawba County, at the same time meeting guidelines of the N.C. General Statute 130A-309.09A (b). Also, written to aid Catawba County in fulfilling visionary goals of public safety and environmental awareness, by disposing of all waste generated in Catawba County in the most effective and efficient manner achievable. The sections of this plan are ordered as listed in the General Statute.

Through the diligent implementation of this comprehensive solid waste management plan the Catawba County planning area provides for the management of solid waste and its reduction for the next ten years. The Planning area includes Catawba County and the following municipalities: Brookford, Catawba, Claremont, Conover, Hickory, Longview, Maiden, and Newton. These municipalities have resolved to participate in the plan and will be included in all references to Catawba County.

Catawba County and the municipalities goal is to establish a comprehensive, integrated, efficient, and effective waste management program to meet the needs of the community. This program would provide disposal capacity, waste collection services, and waste reduction processes to all the members of the county at a fair price. Initial steps have been taken at the Blackburn MSW Landfill Facility with the continued development of the landfill. A newly developed cell (Unit 3, Phase 1) was permitted for operation in May 2009. This will provide the community a disposal area for the next five (5) years out of the seventy-four (74) year life expectancy for this facility. Along with the development of a successful solid waste program it has been an ongoing goal of Catawba County and the municipalities to minimize the improper disposal of waste and reduce the number of illegal dumpsites.

The County's obligation to the community is to evaluate new methods of waste reduction, reuse, and recycling and to adopt new procedures when economically feasible. The community has benefited from the County's willingness to undertake this beneficial service. One of the most successful waste reductions methods adopted to date is the recycling program. The community has the option of contracting with the franchise hauler or dropping off at the convenience centers strategically located around the county their recyclable material.

One of Catawba County's objectives is to create a community that understands the environmental benefits of recycling, waste reduction and proper waste disposal. The county foresees some financial expenditure, but intends to keep costs at a reasonable level. In order to achieve the objectives, the County established the following Planning Area Goals:

Planning Area Goals

- Goal 1.** Provide everyone in the community with waste disposal capacity, waste collection services, and waste reduction opportunities.
- Goal 2.** Increase the efficiency and cost-effectiveness of the solid waste program.
- Goal 3.** Meet the established local waste reduction goals.
- Goal 4.** Decrease improper waste disposal.
- Goal 5.** Protect public health and environment.

Section 1 – Geographic and Waste Stream Evaluation

Geographic Area

This solid waste management plan covers Catawba County and its eight (8) incorporated municipalities. The majority of Catawba County's residents live in unincorporated areas (see Table 1). Catawba County is continuing to transform to a more urban county through industrial and commercial growth within the municipalities and annexation by the municipalities. The population data for Catawba County and its eight (8) incorporated municipalities is shown in Table 1.

Table 1. Population Trends

Municipalities & County	Population 2000	Population 2005	Population 2008	2008 Percent of Population
Brookford	434	430	434	0.28%
Catawba	698	721	741	0.48%
Claremont	1,060	1,079	1,096	0.71%
Conover	6,667	7,603	7,722	4.98%
Hickory	37,145	40,112	40,985	26.45%
Long View	4,013	4,817	4,838	3.12%
Maiden	3,177	3,264	3,279	2.12%
Newton	12,659	12,988	13,550	8.74%
Catawba County-unincorporated areas	75,836	78,402	82,327	53.12%
Total	141,689	149,416	154,972	100%

Source: Responses from questionnaires from municipalities

Waste Stream Evaluation

For the purposes of this Solid Waste Management Plan, the waste stream will be broken into various sectors or classifications. Catawba County tracks all of the waste coming to the landfill and categorizes into the following sectors. The sectors are: residential, commercial, industrial, and construction/ demolition. Residential/ municipal waste refers to waste generated by households (individual and multifamily dwellings). Commercial waste is that waste generated by commercial businesses and institutions. Examples include restaurants, retail shops, schools, and members of the service industry. Industrial waste is that portion of the waste stream generated by manufacturing establishments. Construction and Demolition (C&D) waste is that waste generally associated with construction and/or renovation type projects.

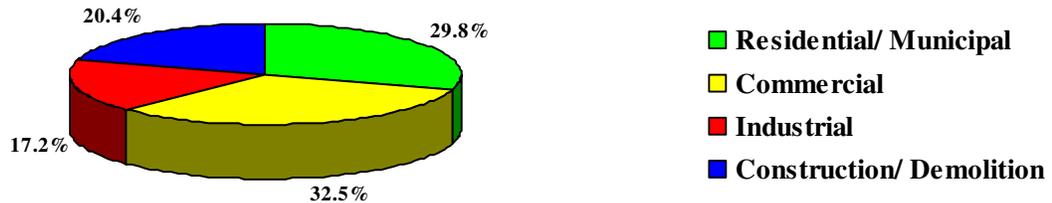
Table 2 provides a tabulation of the various waste stream sectors and the calculated percentage of each sector compared to the overall waste stream disposed of in the landfill. The tonnages are based on the data provided by Catawba County's scale records.

Table 2. Estimated Waste Disposed by Sector, FY 2007-08

TYPE OF WASTE	TONS	% OF WASTE STREAM
Residential / Municipal	56,630.34	29.8%
Commercial	61,703.10	32.5%
Industrial	32,673.76	17.2%
Construction and Demolition	38,745.04	20.4%
Total	189,752.24	100.0%

Source: County records

Chart 1. Waste Sectors by Percentage, FY 2007-08



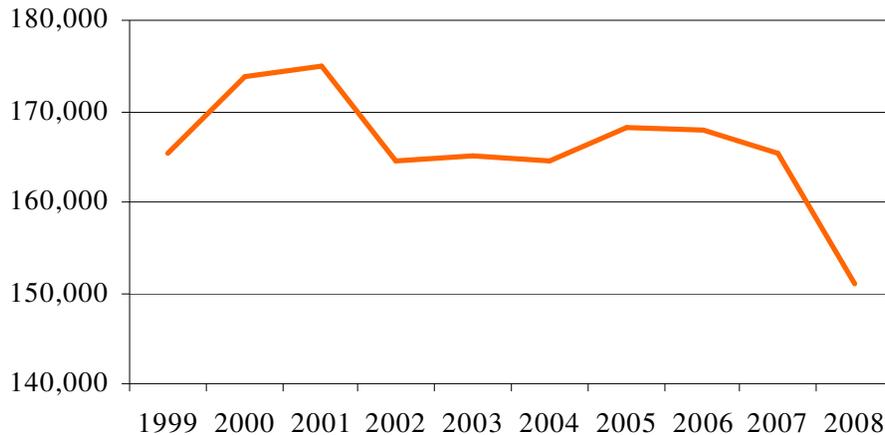
The updated waste breakdown figures presented in Table 2 and Chart 1 reflect the changes that Catawba County is experiencing with a decline in the industrial sector and overall economic conditions experienced in 2007 and 2008. In the 2006 Solid Waste Management Update, the Industrial/ Commercial sectors accounted for 58.9% of the waste disposed. As shown above the same sectors, although shown split apart above, have reduced to a combined 49.7% of the waste disposed. As a result, the residential/ municipal sector percentage has risen from 25.9% to 29.8%. The Construction/ Demolition waste percentage has also increased from 15.2% to 20.4%. These changes in percentage will impact the overall effectiveness of the recycling program.

As broken down above, all residential/ municipal, commercial, and industrial waste is disposed on into the Blackburn MSW Landfill and is categorized as Municipal Solid Waste. The construction/ Demolition waste is disposed of into the C/D Landfill at Blackburn facility.

Municipal Solid Waste (MSW) Stream

The MSW waste stream has been relatively stable over past 11 years until a substantial drop off in the FY 2007-08. In FY 2007-08, 151,007 tons of municipal solid waste (MSW) was disposed of in the Blackburn MSW Landfill. This was equal to 8.7% decrease in the waste disposal. The MSW waste is predominately dependent on the population and growth patterns. The FY 2007-08 drop off was most likely due to slowing economy beginning late 2007/ early 2008. The following Chart 2 indicates the amount of waste disposed into the MSW landfill since 1998.

Chart 2. MSW Waste Disposal Trend, Tons



At this time, the County does not have a study of its own MSW waste stream composition. Therefore, for the purpose of this Plan, the percentages utilized in Table 3 are taken from the Quick Stream Analysis as provided by NC DPPEA. The State's analysis indicates the most prevalent materials in the residential waste stream are paper, plastics, and organics.

Tonnages indicated in Table 3 are the estimated tonnage of each material based on the Quick Waste Stream Analysis percentages applied to the actual tonnage of waste generated. Catawba County does not tract food waste independently. The tonnage of yard waste is included in the wood waste tonnage.

Table 3. Estimate of MSW Waste Composition for FY 2007-08

MATERIAL	STATE ESTIMATE (%)	ESTIMATED 2007-08 WASTE DISPOSED (Tons)
Paper	27.0	48,379.56
Cardboard	16.4	29,386.10
Plastics	10.0	17,918.36
Yard Waste	0.5	895.92
Food Waste	20.0	35,836.71
Glass	7.4	13,259.58
Textiles	4.0	7,167.34
White Goods & Metals	3.0	5,375.51
Aluminum & steel cans	2.0	3,583.67
Wood Waste	9.5	17,022.44
Special Waste	0.2	358.37
Total	100%	179,183.56

Source: NC Solid Waste Management Annual Reports and NC DPPEA. Total tonnage of MSW disposed, yard waste, and MSW recyclables materials

The estimated waste composition data can be used to identify materials which could be targeted for recycling to reduce the overall waste disposal.

An examination of the major types of commercial and industrial firms that dispose of waste in the area helps to estimate the composition of non-residential waste. Table 4 lists major businesses and institutions with corresponding waste tonnage estimates and the primary type of waste materials disposed of. A review of the non-residential waste generators indicates that the most common non-residential materials disposed of are wood waste, plastics, cardboard, cable, and miscellaneous refuse from break rooms. Some of these materials currently being disposed of are potentially recyclable or reusable. Waste tonnages from FY 2007-08 for the industrial and commercial waste generators totaled 94,377 tons (commercial – 61,703.1 tons and industrial – 32,673.8 tons). Table 4 provides a tabulation of the top ten commercial and industrial waste generators within Catawba County as reported during FY 2007-08.

Table 4. Top Ten Commercial and Industrial Waste Generators, FY 2007-08

GENERATOR 2007-08	TONS 07-08	MAJOR MATERIALS
CommScope	1,797	Cable, paper, wood, plastic, cardboard, pallets, break room waste (paper, cups, bottles, etc.)
Shurtape Technology	1,790	Plastic, paper
Corning Cable	1,117	Cable, wood, cardboard drums, pallets
Century Furniture	1,059	Packing material, pallets, particle board, wood, sawdust, paper, break room waste (paper, cups, bottles, etc.)
Mom & Pops	871	Plastic, pallets, cardboard, frozen foods, break room waste (paper, cups, bottles, etc.)
McCreary Modern	839	Peg board, cloth, cardboard, pallets, wood, metal, ply wood, break room waste (paper, cups, bottles, etc.)
Pet Dairy	851	Ice cream, cartons, pallets, plastic, paper
Catawba Valley Medical Center (Hospital)	677	Gowns, scrubs, paper, plastic, cardboard, break room waste (paper, cups, bottles, etc.)
Boyles Furniture	649	Cloth, pallets, wood, paper, plastic, break room waste (paper, cups, bottles, etc.)
Frye Regional Hospital	642	Gowns, scrubs, paper, plastic, cardboard, break room waste (paper, cups, bottles, etc.)
TOTAL	10,292	

Source: information provided by the County, the municipalities and GDS

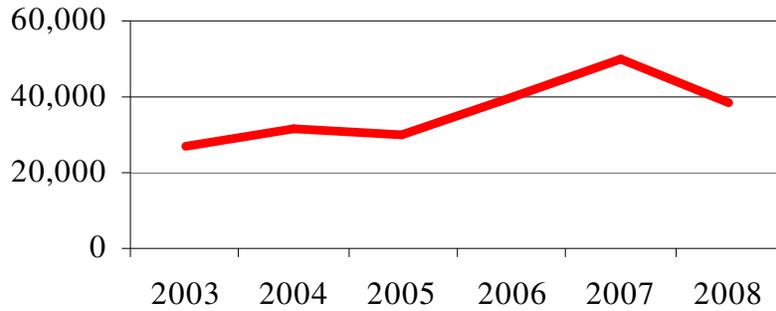
The top ten generators produced approximately 10.9% of the total industrial and commercial waste stream during FY 2007-08. By comparison, the top ten commercial/ industrial waste generators in 2006 accounted for 18.46%. The reduction in the tons of waste generated by some of the top ten commercial and industrial waste generators, as compared to the tons of waste reported in the 2006 update of the Ten Year Solid Waste Management Plan may be attributable in part to the overall downturn in the economy. Some businesses have closed certain manufacturing plants and/or reduced working hours at others. Some businesses have actually closed and are no longer a contributor. Through Catawba County's Commercial Recycling and Waste Reduction Partnership Program, several companies have found alternate uses for their waste products and are therefore no longer disposing of the waste in the County's landfill facilities.

Construction/ Demolition (C/D) Waste Stream

In FY 2007-08, 38,745 tons of C/D waste was disposed of at the Blackburn C/D Landfill. The C/D waste stream in Catawba County is very dynamic. From 2003 to 2007, the C/D waste stream rose approximately 82%. In 2007-08, the C/D waste stream dropped off approximately 22%. This drop was likely due to the sagging construction market which began in early 2008.

This amount of C/D waste disposal is usually associated with a specific demolition project in the County. In 2006 and 2007, the County demolished several schools, which made the C/D waste disposal rate spike. Chart 3 shows the C/D waste trend from 2003 until 2008.

Chart 3. C/D Waste Disposal Trend, Tons



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Section 2 – Current Operations

Waste Collection

All municipalities provide solid waste management services to their residents by in-house staff or by contracting with a private solid waste management company. Republic Services of North Carolina, LLC (d/b/a GDS) has the franchise for waste collection services within the County and presently collects residential waste in Claremont, Long View, Maiden and the unincorporated areas of the County. Brookford, Catawba, Conover, Hickory, and Newton provide residential waste collection services within their respective municipalities.

Non-residential waste collection services are available to all municipalities in Catawba County through GDS. However, Brookford, Catawba, Hickory, and Newton provide non-residential waste collection services for many businesses located within their municipality. Some businesses located in the City of Newton contracts directly with GDS for their commercial or industrial waste collection.

GDS contracts with Catawba, Claremont, Hickory, Long View, and Maiden for the collection of recyclables. Brookford, Conover and Newton collect recyclables within their municipalities. Catawba, Claremont, Conover, Hickory, Long View, Maiden, and Newton collect their own yard waste. In addition to yard waste, Catawba also collects its own white goods. The City of Hickory also operates a recycling program that collects cardboard, glass from restaurants, office paper from businesses, white goods, yard waste, and recyclables from multi-family complexes.

Construction & demolition waste collection services are available to all of the municipalities in Catawba County through GDS. However, the City of Newton will provide construction & demolition waste collection services within its municipality when requested by waste generators. Contractors working within other municipalities are responsible for the disposal of the construction and demolition waste they generate. The contractor must either haul the construction and demolition waste to the landfill or contract directly with GDS for collection and disposal service.

Catawba County operates five (5) staffed recycling and residential waste collection centers in unincorporated areas of the County, (see Appendix C for map). Catawba contacts the operation of the centers with GDS. Each provide for disposal of household waste and the collection of recyclable material.

A summary of the waste collection activities by municipality is below:

Brookford

- Provides residential and commercial pick up of waste

Catawba

- Collects residential waste and a few small commercial customers
- Brush and leaf pick up for residents

Claremont

- Contracts all waste collection with private hauler

Conover

- Residential curbside pick up once per week

City of Hickory

- Provides residential waste collection within their City limits on a daily basis Monday through Friday. Collected waste is transported to the City Of Hickory Transfer Station. Waste is then transported to the Blackburn Landfill for disposal.
- Collects residential yard waste and transports to either the Blackburn Landfill or the City's yard waste site on Cloninger Mill Road for further processing.
- The City also operates a fee based enterprise fund for collection of bulk dumpsters from local businesses and institutions. Through the enterprise fund, the City also operates a C/D waste collection service for local contractors and homeowners.

Long View

- Residential pick-up contracted through GDS

Maiden

- Residential pick-up contracted through GDS

Newton

- Provides residential and commercial pick up of waste and construction/demolition waste
- Collects yard waste for residential customers

Table 5 below is a list of what collections are provided by the different municipalities and unincorporated, and if it is contracted or not.

Table 5. Municipalities That Provided Collection of Solid Waste FY 2007-08

NAME	PROVIDES COLLECTION	CONTRACTS COLLECTION
Brookford	Yes	No
Catawba	Yes	No
Claremont	No	Yes
Conover	Yes	No
Hickory	Yes	No
Long View	No	Yes
Maiden	No	Yes
Newton	Yes	No
Catawba County-unincorporated areas	No	No

Source: Catawba County

Table 6 provides a further breakdown of Table 13 and identifies final disposal location.

Table 6. Waste Hauling Information, FY 2007-08

HAULERS	RESID. WASTE	NON-RESID WASTE	C&D WASTE	TONS HAULED	DISPOSAL DESTINATION
GDS (primarily from unincorporated areas)	Yes	Yes	Yes	----	Catawba Co. Landfill
Brookford	Yes	No	No	220	Catawba Co. Landfill
Catawba	Yes	No	No	287	Catawba Co. Landfill
Claremont	No	No	Yes	143	Landfill/ on-site
Long View	Yes	Yes	Yes	178	Catawba Co. Landfill
Hickory	Yes	Yes	Yes	27,337	Catawba Co. Landfill
Newton	Yes	Yes	Yes	6,850	Catawba Co. Landfill
Conover	Yes	No	No	2,944	Catawba Co. Landfill
Maiden	Yes	No	Yes	Unknown	Catawba Co. Landfill

Source: Catawba County

Waste Disposal

All waste generated in Catawba County is disposed of at the Blackburn Landfill on Rocky Ford Road. The facility is owned and operated by Catawba County and has both a lined Subtitle D MSW Landfill and a Construction/ Demolition Waste Landfill. Currently, the Blackburn MSW Landfill consists of approximately 75 acres of lined waste area. The County received a permit to operate a new phase (Unit 3 Phase 1) of the landfill in May 2009. The new phase in conjunction with the Unit 2 waste area will provide the county waste disposal of approximately 9 years. Catawba County has site study approval on more than 230 acres of additional waste area. This additional waste area translates to more than 75 years of waste capacity.

Catawba County also operates a construction/ demolition waste landfill the Blackburn Landfill Facility. Currently, Catawba County has 23.3 acres permitted waste area with an additional 5 acre area ready for a permit to operate. The existing footprint will provide an approximately 8 years of capacity.

Waste Disposal Tax

North Carolina passed legislation in 2007 and modifications to it in 2008 requiring a \$2.00 per ton tax be placed on all municipal solid waste and construction/demolition wastes being disposed in the State or transferred for disposal out of state. This new program became effective July 1, 2008.

The owner/operator of the disposal or affected transfer facility is responsible for collecting and remitting the tax to the NC Department of Revenue who retains their cost of collection and, until payment is complete, costs associated with reimbursement settlements to affected private solid waste management companies. The net revenue from the tax proceeds is distributed quarterly as follows:

- 50% to the Inactive Hazardous Sites Cleanup Fund for assessment and remediation of pre-1983 landfills.
- 12.5% to the Solid Waste Management Trust Fund. (Funds are reallocated in part back to local governments in the form of grants for recycling through the NC Division of Pollution Prevention & Environmental Assistance (NC DPPEA).
- 37.5% to cities and counties on a per capita basis with 18.75% to cities and 18.75% to counties. Distributions to counties are based on the county's unincorporated population. (Only cities and counties that provide or contract for solid waste management programs or services are eligible for the distributions.) ***Funds received must be used for solid waste management related cost including recycling.***

For Fiscal Year 08-09 NC DPPEA projects that counties will receive \$.36 per capita and municipalities will receive \$.29 per capita. For Fiscal Year 09-10 the projections are \$.94 per capita for counties and \$.78 per capita for municipalities. The Division strongly urges local governments to budget conservatively for this disposal tax revenue.

While Catawba County did not support the passage of the legislation implementing the \$2.00 per ton disposal tax, the County will pursue opportunities made possible by receipt of this revenue and increased recycling grant availability through NC DPPEA to improve and expand its

solid waste management and recycling programs and to encourage all municipalities within Catawba County to do the same.

More information on this disposal tax program can be found at the NC Department of Revenue's website at www.dornc.com. A link can also be accessed to reports giving the actual distribution figures for specific jurisdictions. Click on Reports & Statistics to access this information.

As a result, effective July 1, 2008, the tipping fee at the Blackburn MSW Landfill was increased to \$33 per ton. The Solid Waste Department is self-supporting program with a tipping fee that has remained stable at \$30 per ton since 1995. Financial analysis indicated that in order for the enterprise fund to remain solvent a \$1 per ton increase in the tipping fee would be required. This increase with the States mandated \$2 per disposal tax justified the increased tipping fee.

Recycling

Catawba County and the municipalities operate a very aggressive recycling program. In FY 2007-08, a total of 32,014.87 tons was recycled. A breakdown of the recycled material is shown in Table 7. In addition, Catawba County diverted 29,789 of sawdust and 125,000 tons of woods chips from Catawba County's EcoComplex for a total of 186,803.87 tons of diverted material.

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Table 7. Recycling in Tons, FY 2007-08

Material	Catawba County	Brookford	Catawba	Claremont	Conover	Hickory	Long View	Maiden	Newton	Total
Metal Cans	303.62		1.65	3.46	16.13	86.43	9.41	8.14	25.45	454.29
Office Paper	1,071.76					68.58			19.71	1,160.05
Textile	1,017.87									1,017.87
Glass	683.81		6.12	14.12	84.72	510.06	28.32	14.64	63.5	1,405.29
Mixed Paper	559.22				6.93	162.16				728.31
Mixed Plastic	634.57		3.99	8.5	46.06	168.32	20.92	16.42	51.52	950.30
Corrugated Cardboard	9,570.75				8.05	884.81			85.34	10,548.95
Newspaper and Mags.	1,442.47		14.57	40.62	188.84	1066.92	83.93	67.68	233.33	3,138.36
White goods	414.11					78				492.11
Pallets	2,236.93									2,236.93
Electronics	25.04									25.04
Household Haz	56.37									56.37
Tires	3,298.00									3,298.00
Wood	5,943.00									5,943.00
Asphalt & Masonry	560.00									560.00
Totals	27,817.52	0.00	26.33	66.70	350.73	3,025.28	142.58	106.88	478.85	32,014.87

Source: Questioners, Catawba County report from GDS, and Municipal Annual Solid Waste Management reports
 * County recycling includes convenience centers, curbside pickup and other sources.

A detail summary of each entity recycling program is as follows:

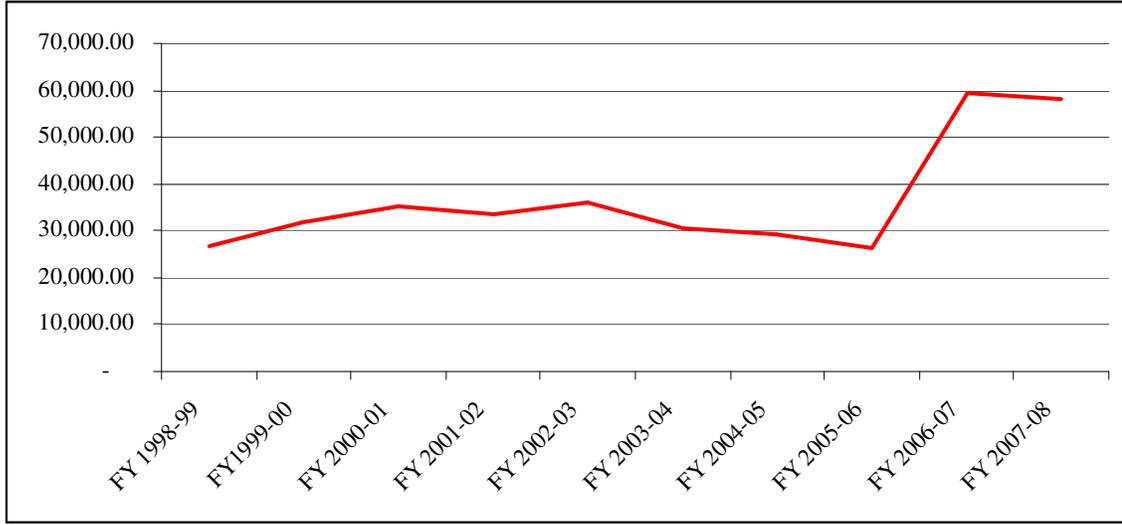
Catawba County

- Recycled approximately 27,817.52 tons of material in FY 2007-08.
- Collects recycled material at five (5) convenience centers in unincorporated Catawba County
- Employs dedicated Waste Reduction Coordinator to oversee County program
- Conducts bi-annual Residential Household hazardous Waste and Electronics Collection Event each year

- Established a recycle incentive program for businesses and municipalities including a diversion credit for each ton of recycled materials applied against their solid waste disposal bills.
- Established the Commercial Recycling and Waste Reduction Partnership Program to encourage workplace waste reduction, reuse, recycle, and purchasing recycled products. There are currently 10 businesses signed up as partners.
- Worked with two industries at the EcoComplex to establish a re-use/ diversion of 154,789 tons of wood by-products.
- Worked with Catawba County School System to develop “Queen of Green” play.
- Recycling Program Awards
 - Governor’s Take Pride in America Recycling Award
 - Solid Waste Association of North America (SWANA) Excellence Award for the Catawba County Recycling Program
 - NC Outstanding County Recycling Program
 - NC Department of Agriculture for Environmental Stewardship efforts in Pesticide Container Recycling
 - Catawba Valley Award for Environmental Excellence for Catawba County Recycling Program
 - Award for the play “Trash”
 - Catawba County Buy Recycled Departmental Achievement Award for purchasing \$75,423 environmentally friendly or recycled products in fiscal year 07/08.

Catawba County has been aggressively pursuing new markets and educating the public about ways to recycle. As a result, the County has seen a dramatic increase in there amount of recycled material. Chart 4 shows the recycling trend since FY 1998-99. FY 2006-07 and FY 2007-08 reflect a new initiative to divert wood waste from the Pallet One and G&G Lumber.

Chart 4. Catawba County Recycling Trend, Tons



Source: Catawba County

Catawba County's EcoComplex

Catawba County's Eco Complex is a Renewable Energy Industrial Park combining energy, production, businesses and waste management system. The complex will ultimately include a landfill, electrical generating plant, bio-energy plant, sludge management facility, a lumber, wood pallet, brick, and pottery manufacturing facilities, 100 acre greenhouse, and University Research Facility. The fundamental goal of the EcoComplex is promote and utilize the municipal solid waste and construction/ demolition waste landfills as resource recovery facilities as resource recovery facilities by converting the waste streams into commodities and creating green energy through a virtually closed system. Several of the complex components have already been established, including the landfill, a pallet manufacturer, and a lumber company. One of the initial benefits was the diversion of 154,789 tons of wood by-products. The County is presently in the development stages of the Research Facility, the bio-solids facility, and the co-generation facility.

Brookford

- Actively promotes Catawba County's recycling effort through citizen education
- Does not collect recycling

Catawba

- Contracts with GDS to collect recyclable material
- Collected 26.33 tons in FY 2007-08

Claremont

- Contracts with GDS to collect recyclable material
- Collected 66.70 tons in FY 2007-08

Conover

- Provides curbside residential collection
- Provide one 18-gallon recycle bin to each household at no charge
- Collected 350.73 tons in FY 2007-08

Hickory

- Contracts with GDS to collect residential recyclable material pick-up
- Provides two public drop-off centers
- Provide collection at approximately 24 multi family recycling centers
- Provides collection to businesses, restaurants, schools, and other institutions
- Collected 3,025.28 tons in FY 2007-08

Long View

- Provides curbside residential collection through contract with GDS
- Collected 142.58 tons in FY 2007-08

Maiden

- Provides curbside residential collection through contract with GDS
- Collected 106.88 tons in FY 2007-08

Newton

- Provides curbside residential and small business collection
- Collected 478.85 tons in FY 2007-08

Financial Assessment

The Solid Waste cost for each municipality and Catawba County have been summarized below. The costs are based on the last fiscal year completed prior to preparation of the Three-Year-Update, which is FY 2007-08. Costs are given for collection, disposal, and waste reduction for each municipality and the County.

Catawba County

Catawba County operates a solid waste disposal program and contracts their collection programs with GDS. The solid waste cost shown below are Catawba County programs separated from municipal programs.

The total budget for the county-operated solid waste program during FY 2007-08 was \$7,748,917.78. Catawba County has 154,972 citizens from approximately 70,952 households.

The annual cost of county collection was \$336,331.46. This includes the collection centers and collection from government-operated facilities such as schools, town hall, and the courthouse. Disposal costs in the same year were \$7,268,664.55. Waste reduction program costs, including recycling, reuse, mulching, household hazardous waste events, etc. total \$143,921.77. Methane recovery costs are included with disposal costs. Administration expenses have been prorated in the aforementioned costs. Catawba County managed 189,752 tons of waste for collection and disposal and 18,016.52 tons of recyclable material, yard waste, and land clearing debris in FY 2007-08. The County also recovered 6,221.96 tons through mulching and composting. The total waste managed was 213,989.24 tons. A summary of the county-operated solid waste program costs is shown in Table 8.

Table 8. County-operated Solid Waste Program Costs, FY 2004-2005

	COLLECTION*	DISPOSAL**	WASTE REDUCTION***	TOTAL
PROGRAM COST	\$336,331.46	\$7,268,664.55	\$143,921.77	\$7,748,917.78
COST PER TON	\$1.77	\$38.30	\$5.94	\$36.21
COST PER HOUSEHOLD	\$4.74	\$102.44	\$2.02	\$109.21

Source: GDS, Catawba County Solid Waste Department and Finance Department Records

** Disposal includes methane recovery costs.

*** Waste reduction includes all reduction, reuse, recycling, mulching, composting, household hazardous waste and other programs.

County Assessment:

According to the analysis, the cost of waste disposal is significantly higher than reducing waste on a per ton basis. It can be assumed that as participation in the waste reduction program increases, the cost per ton to reduce will decrease further, which will decrease the overall solid waste management cost. The County intends for the revenue produced by the Power Generating Facility to reduce the overall cost for solid waste management.

Brookford Description:

The Town of Brookford is no longer required to report to the Solid Waste Section due to its small population. The Town is considered to be represented by the City of Hickory for the purpose of solid waste reporting.

Catawba Description:

The Town contracts with GDS to collect and Town employees collect residential and non-residential waste on a weekly basis. The Town of Catawba does not collect Construction & Demolition waste. The Town of Catawba has 741 citizens from approximately _____ households that disposed of 287.71 tons of waste and produced 26.33 tons of recyclable material in FY 2007-2008. The total waste managed was 314.04 tons. The summary of solid waste costs for that fiscal year is shown below in Table 8A.

Table 8A. Town of Catawba Solid Waste Program Costs, FY 2007-08

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST				
COST PER TON				
COST PER HOUSEHOLD				

Source: The Town of Catawba Solid Waste Management Annual Report

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.

Claremont Description:

Claremont contracts with GDS for collection of residential and non-residential solid waste and recyclables. The City of Claremont does collect construction & demolition waste. Claremont has 1,096 citizens from approximately 842 households that disposed of 665.12 tons of waste and produced 133 tons of recyclable material in FY 2007-2008. The total waste managed was 790.12 tons. The summary of solid waste costs for that year is shown below in Table 8B.

Table 8B. Claremont Solid Waste Program Costs, FY 2007-2008

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	\$32,710.46	\$11,574.37	\$15,161.30	\$59,446.13
COST PER TON	\$49.17	\$17.40	\$113.99	\$75.23
COST PER HOUSEHOLD	\$38.85	\$13.74	\$18.00	\$70.62

Source: Claremont Solid Waste Management Annual Report

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.

Conover Description:

The City of Conover provides weekly collection of residential solid waste and recyclables. The City does not collect non-residential or construction & demolition waste. Conover has 7,722 citizens from approximately 3,175 households that disposed of 2,944 tons of waste and produced 350.73 tons of recyclable material in FY 2007-2008. The City also recovered 2,227 tons through mulching and composting. The total waste managed was 5,521.73 tons. The summary of solid waste costs for that year is shown below in Table 8C.

Table 8C. Conover Solid Waste Program Costs, FY 2007-08

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	\$308,503	\$87,000	\$343,118	\$736,621
COST PER TON	\$104.79	\$11.27	\$62.14	\$133.40
COST PER HOUSEHOLD	\$97.16	\$27.40	\$108.07	\$232.00

Source: Conover Solid Waste Management Annual Report

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.

Hickory Description:

The City of Hickory provides collection of residential and a portion of the non-residential solid waste within their municipality. Curbside collection of recyclables within the City of Hickory is contracted through GDS. Hickory has 40,985 citizens from approximately

_____ households that disposed of 27,337 tons of waste and produced 3,025.28 tons of recyclable material in FY 2007-2008. The City also recovered 3,439 tons through mulching and composting. The total waste managed was 33,801 tons. The summary of solid waste costs for that year is shown below in Table 8D.

Table 8D. Hickory Solid Waste Program Costs, FY 2007-08

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST				
COST PER TON				
COST PER HOUSEHOLD				

Source: Hickory Solid Waste Management Annual Report

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.

Long View Description:

Long View contracts with GDS for collection of residential solid waste and recyclables. Town employees collect larger items such as white goods, c/d waste, and furniture. Long View has 4,838 citizens from approximately _____ households that disposed of 2,760.83 tons of waste and produced 142.58 tons of recyclable material in FY 2007-08. The Town also recovered 436.8 tons of yard waste. The total waste managed was 3,340.21 tons. The summary of solid waste costs for that year is shown below in Table 8E.

Table 8E. Long View Solid Waste Program Costs, FY 2007-08

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	--	\$172,000.00	\$37,944.00	\$209,944.00
COST PER TON	--	\$85.62	\$225.86	\$96.44
COST PER HOUSEHOLD	--	\$89.58	\$19.76	\$109.35

Source: Long View Solid Waste Management Annual Report

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.

Maiden Description:

Maiden contracts with GDS for the collection of its residential and non-residential solid waste and recyclables. Town employees collect construction & demolition waste and haul it to the Blackburn Landfill. Maiden has 3,279 citizens from approximately _____ households that disposed of _____ tons of waste and produced 106.88 tons of recyclable material in FY 2007-08. The total waste managed was _____ tons. The summary of solid waste costs for that year is shown below in Table 8F.

Table 8F. Maiden Solid Waste Program Costs, FY 2007-08

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST				
COST PER TON				
COST PER HOUSEHOLD				

Source: Maiden Solid Waste Management Annual Report

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs

Newton Description:

The City of Newton collects solid waste and recyclables for residential and non-residential locations within the municipality. Larger businesses have the option of contracting GDS to collect their non-residential waste. Newton also collects a portion of the construction & demolition waste in the City. Newton has 13,550 citizens from approximately _____ households that disposed of 6,850.16 tons of waste and produced 564.26 tons of recyclable material in FY 2007-2008. The City also recovered 478.85 tons of material through mulching and composting. The summary of solid waste costs for that year is shown below in Table 8G.

Table 8G. Newton Solid Waste Program Costs, FY 2007-08

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST				
COST PER TON				
COST PER HOUSEHOLD				

Source: Newton Solid Waste Management Annual Report

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs

Each county entity funds their solid waste program in a different way. Residents in unincorporated Catawba County pay for solid waste services provided by GDS through their property tax. Table 9 shows a summary of the financing methods utilized in County.

Table 9. Solid Waste Financing Methods Used By the Planning Area, FY 2007-08

	Total SWM Budget	Tip Fee	Property Taxes-General Fund	Household Charge	Volume or Weight-Based fees	Sale of Recyclables	Grant	Tire & White-Goods Tax	Other
Catawba County	\$7,748,917.78								
Catawba		--						--	--
Claremont	\$59,446.13	--	100%	--	--	--	--	--	--
Conover			100%						
Hickory									
Long View									
Maiden									
Newton									

Source: Finance Department records plus County and Municipal Solid Waste Management Annual Reports

Note: Municipalities are not currently required to report what percentage each funding method contributes to their total solid waste management budgets. An "X" in a cell denotes that the funding method is employed by its respective municipality.

Section 3 – Local Waste Reduction Goals

The original Solid Waste Management Plan prepared in 1997 established a local goal of 20% waste reduction to be reached by June 30, 2001 and a further goal of 30% to be reached by June 30, 2010. These waste reduction goals were less than the recommended goals of the North Carolina Department of Environment and Natural Resources, Division of Solid Waste Management. The recommended goal was 40% waste reduction by June 30, 2006. Catawba County did not feel that 40% waste reduction was achievable for this time period since the County waste stream was approximately 66.5% industrial and commercial waste at the time. The County felt their limited control over the industrial and commercial waste produced in the County would reduce their ability to achieve a 40% waste reduction. In addition, Catawba County had aggressively pursued recycling since 1989, and the waste reduction experienced between 1989 and 2006 was much more modest than the recommended 40%. Catawba County's MSW waste stream remained virtually unchanged between calendar year 1996 and 2007. In late 2007 and early 2008, the County's MSW waste dramatically dropped off. The distinct difference between the waste streams from 1996 to 2008 was a significant volatility in construction & demolition waste. From 2003 to 2007, the C/D waste stream rose approximately 82%. In 2007-08, the C/D waste stream dropped off approximately 22%. In the 2006 Solid Waste Management Plan update, Catawba County and the municipalities set goals of 15% waste reduction by FY 2007-08 and a 16% waste reduction by FY 2015-16. This was equivalent to 1.28 and 1.27 tons, respectively.

Twelve years have passed since the Ten-year Solid Waste Management Plan was first developed. From the County's baseline year (FY 1989-90) disposal rate of 1.51 tons per capita to the most recently recorded year (FY 2007-08), Catawba County has reduced its annual per capita rate to 1.22 tons per capita, a reduction of approximately 19.2%. As a comparison, the statewide per capita disposal rate was 1.24 for FY 2007-08. This rate met the County's goal of 15% reduction set in the previous report for FY 2007-08. This accomplishment is a tribute to the hard work and dedication of all Solid Waste personnel of the County and its municipalities.

The Department of Utilities and Engineering and the Catawba County Landfill staff believe Catawba County and the eight (8) municipalities, and the landfill staff have been aggressive in promoting waste reduction and their efforts have resulted in the reduction of waste. However, the County feels that they still have limited control of the industrial and commercial waste stream, which continues to make up approximately 49.7% of the County's waste stream for FY 2007-08.

The County is of the opinion the recommended 40% waste reduction goal recommended by the North Carolina Department of Environment and Natural Resources, Division of Solid Waste Management remains unattainable for Catawba County during this planning period. Catawba County will continue to aggressively pursue waste reduction through such means as recycling, reuse, waste diversion, mulching, composting, and pursuing technological advances in the solid waste industry. However, the County Department of Utilities and Engineering does not want to set unrealistic waste reduction goals for the planning period. The selected waste reduction goals should be both realistic and attainable.

Following a review of the past waste stream trends and population growth patterns, the County has chosen a waste reduction goal of 22% by FY 2013-14 and 25% by FY 2018-19 as

compared to the FY 1989-90 baseline year. This is equivalent to reducing the per capita waste disposal rates to 1.18 and 1.13 tons per person per year by June 30, 2014 and 2019, respectively.

The baseline year per capita disposal rate of 1.51 (FY 1989-1990) and the population estimates for the ten-year planning period have been used to estimate waste disposal tonnage that would be realized by the County if waste reduction practices had not been implemented during the prior planning periods. If the baseline year per capita disposal rate was realized over the ten-year planning period, Catawba County would dispose of 253,037 tons in FY 2013-14 and 268,895 tons in FY 2018-19. These estimated tonnages will also be used to calculate the tonnage of waste that must be reduced for the waste stream to meet reduction goals for FY 2013-14 and FY 2018-19, as compared to the baseline year (1989-90). These figures have been summarized in Table 10 below.

Table 10. Waste and Population Projections

YEAR	POPULATION	WASTE DISPOSAL (Tons)	PER CAPITA DISPOSAL RATE
Baseline Year 1989-90	118,412	179,351	1.51
FY 1998-99	132,100	193,723	1.47
FY 2001-02	142,500	191,359	1.34
FY 2004-05	149,416	198,434	1.33
FY 2007-08	154,972	189,752	1.22
	PROJECTED POPULATION	PROJECTED WASTE DISPOSAL	PER CAPITA DISPOSAL RATE
FY 2013-14	167,574	253,037	1.51
FY 2018-19	178,076	268,895	1.51

Source: Population figures from 2008 Provisional County Population Estimates Report; Office of State Budget Management.

The County is optimistic through its efforts to aggressively pursue new recycling and reuse markets for the industrial, commercial, and construction and demolition waste in conjunction with promoting residential recycling through education, they can realistically meet the local goal 22% of per capita waste reduction in FY 2013-14, and 25% in FY 2018-19 as compared to the FY 1989-90 baseline year per capita disposal rate. Catawba County must reduce its per capita disposal rate to 1.18 in FY 2013-14, and 1.13 in FY 2018-19 respectively, to meet these goals. Using the target per capita rates, the target annual tonnage remaining for disposal by Catawba County would be 197,737 tons in FY 2013-14, and 201,226 tons in FY 2018-19. In other words, 55,299 tons in FY 2013-14, and 67,669 tons diverted by 2018-19 in order to meet the waste goals. These figures have been summarized in Table 11 below.

Table 11. Targeted Waste Reduction , FY 2013-14, and 2018-19

CALCULATIONS	FY 2013-14	FY 2018-19
1. Baseline year (FY 1989-90) per capita disposal rate (County figure provided by Solid Waste Section)	1.51	1.51
2. Targeted per capita disposal rate (Subtract the percent Goal from 1.0, then multiply result by line 1)	1.18	1.13
3. Population Projections (County figure from NC Municipal Population booklet)	167,574	178,076
4. Projected tonnage for disposal at the baseline disposal rate (multiplied line 1 by line 3)	253,037	268,895
5. Targeted annual tonnage for disposal At targeted per capita disposal rate (multiplied line 2 by line 3)	197,737	201,226
6. Targeted annual tonnage to reduce for FY's (subtracted line 5 from line 4)	55,299	67,669

Source: Staff Calculations

These proposed diversion tonnages do not account for the progress made by the County in the years between the baseline and the present.

Considering the possibility that the per capita rates remain unchanged from the most current (FY 2007-08) rate of 1.22 per capita disposal to the planning years FY 2013-14 and FY 2018-19, the County would dispose of 204,440 and 217,252 tons in those years. This translates to diverting an additional 6,703 tons by June 30, 2014, and 16,027 tons by June 30, 2019 beyond what is currently being diverted.

Section 4 - Meeting the Waste Reduction Goals

This plan is designed to reduce Catawba County's waste by 40,221 tons by FY 2010-11, 46,582 tons by FY 2013-14, and 61,404 tons by 2018-19. Table 12 summarizes the annual tonnages of waste targeted for reduction and disposal in FY 2009-10, 2013-14 and 2018-19 at the projected per capita disposal rates. As a comparison, in FY 2007-08, approximately 10.8% of the waste generated in Catawba County is recycled.

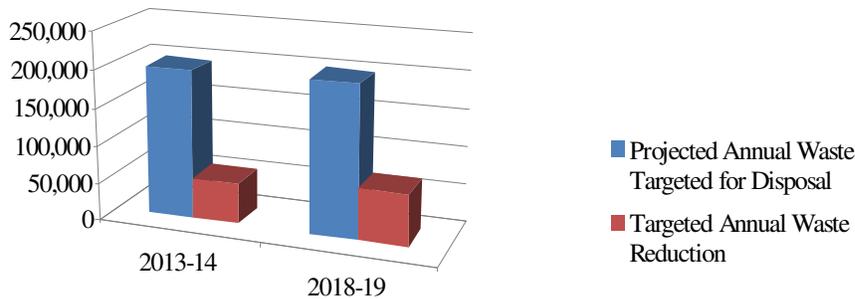
Table 12: Projected Annual Waste Targeted for Disposal and Targeted Annual Waste Reduction

	2013-14	2018-19
Projected Annual Waste Targeted for Disposal	197,737	201,226
Targeted Annual Waste Reduction	55,299	67,669

Source: Staff Calculations

Chart 5 provides a graphical depiction of the data summarized in Table 7: Targeted Annual Waste Reduction and Projected Annual Waste Targeted for Disposal.

Chart 5: Projected Total Waste Disposal and Targeted Waste Reduction



Source: Staff Calculations

As noted above, this Plan is designed to reduce Catawba County's waste stream by, 55,299 tons by FY 2013-14 and 67,669 tons by FY 2018-19. To accomplish this, Catawba County will target the types of waste generated by assigning the same waste stream percentages calculated in Table 2. Since the industrial and commercial waste stream is similar in nature, they will be combined for waste reduction purposes. This information is summarized in Table 13. How these wastes will be targeted is addressed below.

Table 13: Approximate Waste Reduction by Sector, 2013-2014, and 2018-2019

WASTE TYPE	% of Waste Stream	EST. TONS FY 2013-14	EST. TONS FY 2018-19
Residential/Municipal	29.8%	16,535	20,233
Commercial/Industrial	49.7%	27,484	33,631
Construction & Demolition	20.4%	11,281	13,804
Goal	100%	55,299	67,669

Source: Staff Calculations

Residential/ Municipal Waste

This plan proposes the diversion of 16,535 tons in FY 2013-14, and 20,233 tons in FY 2018-19 from the residential waste stream. Table 14 summarizes the residential waste reduction methods to be utilized to meet the local established goals. Specific activities planned are described in Part V of this Plan.

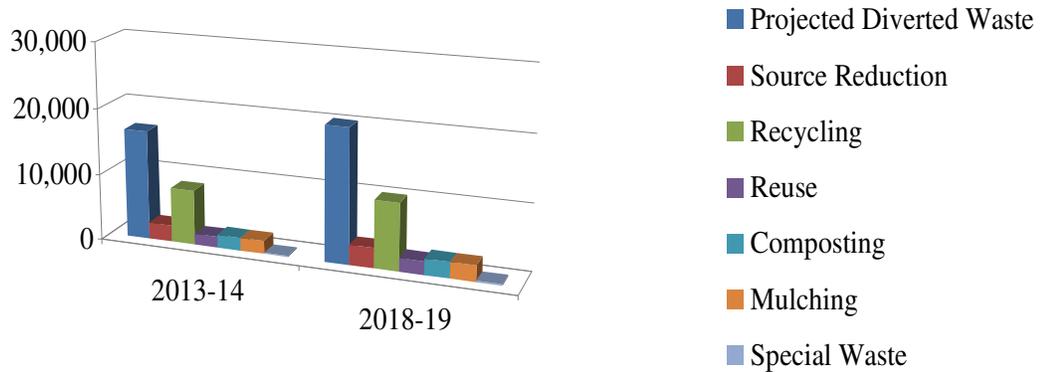
Table 14 Targeted Residential/ Municipal Waste Reductions, 2013-14, and 2018-19

Reduction Method	Targeted Materials	FY 2013-14 Tons	FY 2018-19 Tons
Source Reduction	Paper, Plastic, Styrofoam	2,480	3,035
Recycling	Cardboard, paper, plastics, glass, metals	8,267	10,116
Reuse	Clothing, furniture, appliances, households	1,653	2,023
Composting	Yard waste, organics	1,984	2,428
Mulching	Brush and other woody materials	1,984	2,428
Special Waste	Household hazardous waste	165	202
Totals		16,535	20,233

Source: Staff Calculations

Chart 6: Projected Residential/ Municipal Waste Diversion and Targeted Residential Waste Reduction Methods, provides a graphical representation of the various reduction methods shown in the Table 14.

Chart 6: Projected Residential/ Municipal Waste Diversion and Targeted Residential Waste Reduction Methods



Source: Staff Calculations

Commercial/Industrial Waste

The goal for reducing commercial/industrial waste is approximately 27,484 tons in FY 2013-14, and 33,631 tons in 2018-19, As listed in Table 15.

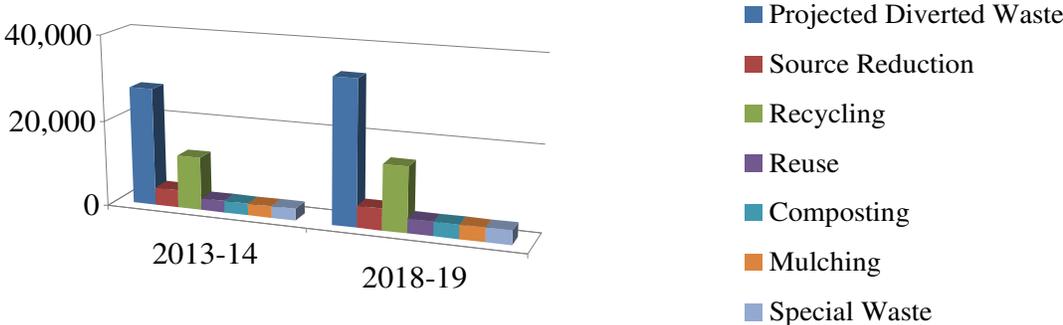
Table 15: Targeted Commercial/Industrial Waste Reduction, FYs 2013-14, and 2018-19

Reduction Method	Targeted Materials	FY 2013-14	FY 2018-19
Source Reduction	Pallets, foam padding, Styrofoam, furniture, wood	4,123	5,045
Recycling	Plastics, paper, metal	12,368	15,134
Reuse	Wood reels, wood	2,748	3,363
Composting	Food products, animal waste	2,748	3,363
Mulching	Wood products	2,748	3,363
Special Waste	Cable, cloth, wire	2,748	3,363
Totals		27,484	33,631

Source: Staff Calculations

Chart 7: Projected Commercial/Industrial Waste Diversion and Targeted Reduction Methods, provides a graphical representation of the various reduction methods shown in the aforementioned Table 15.

Chart 7: Projected Commercial/Industrial Waste Diversion and Targeted Waste Reduction Methods



Source: Staff Calculations

Construction and Demolition Waste

It is anticipated that construction and demolition waste can be reduced by 11,281 tons in FY 2013-14, and 13,804 tons in FY 2017-18. The proposed reduction methods and targeted wastes tonnages are shown in Table 16.

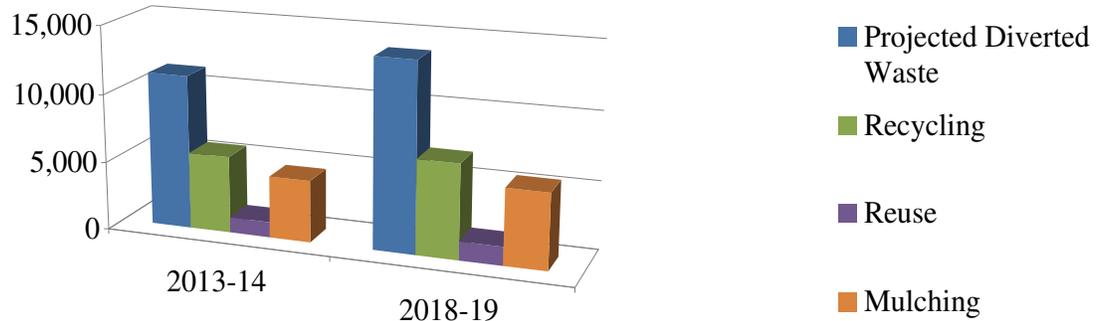
Table 16: Targeted C&D Waste Reduction, FYs 2013-14, and 2018-19

Reduction Method	Targeted Materials	FY 2013-14	FY 2018-19
Mulching	Wood products	4,512	5,522
Recycling	Asphalt, brick, block, concrete, shingles	5,641	6,902
Reuse	Concrete, block	1,128	1,380
Totals		11,281	13,804

Source: Staff Calculations

Chart 8: Projected C&D Waste Diversion and Targeted C&D Waste Reduction Methods, provides a graphical representation of the various reduction methods shown in Table 16: Targeted C&D Waste Reduction, FYs 2013-14, and 2018-19.

Chart 8: Projected C&D Waste Diversion and Targeted C&D Waste Reduction Methods



The largest obstacle to waste reduction continues to be the County’s lack of direct control over the non-residential waste stream. Since the non-residential waste stream (commercial, industrial, construction and demolition, etc.) continues to account for almost 70.1% of the waste stream, it is more difficult for the County to find methods for reducing waste. The County has been proactive in establishing a waste disposal fee structure that financially benefits landfill users who source separate their waste. It is not practical for the staff to sort waste that is delivered to the landfill, because it is too labor intensive. Therefore, co-mingled loads of waste that are delivered to the landfill are disposed in the landfill and are not recycled or mulched. The County has experimented with significant rate increases for co-mingled waste, but these rate increases must be carefully balanced to avoid losing commercial and industrial waste producers. Loss of existing customers could have a large impact on the long-term economic stability of the solid waste program.

The County intends to aggressively pursue new recycling and reuse markets for the industrial, commercial, and construction & demolition waste products produced by the planning area, as well as continue to promote residential recycling through education. By adhering to these objectives, the County is of the opinion it can realistically meet the local goal of an 22% per capita waste reduction e by the end of FY 2013-14, and a 25% per capita waste reduction rate by the end of FY 2018-19.

Section 4- Public Participation

A cooperation of representatives from Catawba County and eight municipalities (see Appendix A) along with McGill Associates, P.A. developed and wrote the plan.

A Catawba County Board of Commissioners meeting is scheduled for June 15, 2009 at 7:00 p.m. in the 1924 Courthouse in Newton. The 2009 Three-Year Update to the Solid Waste Management Plan will be discussed at this meeting. Copies of the Plan will be distributed to the County Commissioners approximately ten (10) days prior to the meeting to allow the Commissioners adequate time to review the 2009 Three-Year Update Draft. This meeting serves as the required public meeting to provide citizens of Catawba County an opportunity to comment and/or provide input to the plan. Drafts of the Plan were placed in the Catawba County Utilities and Engineering Department and the Catawba County Library. The meeting and hearings were announced in the Hickory Daily Record and the Observer News Enterprise. The plan will be reviewed based on public comment. The plan will be submitted to the elected boards of each participating local government for approval (see appendix B). A copy of the public meeting advertisement is attached as Appendix G.

The public will be invited to read the final version of the plan that will be placed in the Catawba County Utilities and Engineering Department and the Catawba County Library.

DRAFT

Section 5 - Solid Waste Management Methods

Each solid waste management method as required by North Carolina G.S. 130 A-309.09A (b) is described below. Each section includes an assessment of the current program and a summary of the intended actions.

A. Source Reduction

Efforts for source reduction are primarily focused on public education and outreach. County employees are trained to present educational programs to schools, and civic groups. They coordinate efforts with other waste related educational programs performed throughout the county. Presentations include information on reducing packaging, purchasing less hazardous alternatives, and backyard composting.

Residential/ Municipal:

Current Program: The following are some of the items that are a focus of source reduction in the residential waste stream through educational outreach followed by the educational message in Parentheses:

- Household batteries (buy rechargeable batteries)
- Household hazardous waste (Promotion of buy safer alternatives, buy only what you need, and use up those items you purchase)
- Food scraps/ Compostables (Back yard composting)
- Packing media (Buy products with less packaging, “flexible packaging”)
- Styrofoam (Use natural/ recyclable packaging material)
- Disposable Dishware/Flatware (Do not use)

The County constructed the Catawba County Educational Center in a modular building formerly located behind the Catawba County Agricultural Recourses Center. It was moved from the Catawba County Agricultural Recourses Center to a location across the road from the Blackburn Landfill Facility, where it is easier and safer to access. It originally opened in December 1997, and is used to educate citizens throughout the County-particularly school students-about household hazardous waste and recycling.

A Junk mail reduction program has been in place for eighteen years through the Cooperative Extension Service. The program allows county residents to obtain a junk mail reduction kit. The kit contains postcards addressed to the major firms that sell names and addresses to advertising firms. The cards enable residents to request removal of their names form the mailing list supplied to advertisers.(see APPENDIX D.)

Conover, Hickory and Maiden operate local backyard composting programs.

Catawba County currently has source reduction program that encourages county departments to use fewer disposable items and purchase products with longer life. The program also encourages all county offices to use electronic memos in lieu of paper memos, as well as

require all government documents that contain multiple pages to be printed and copied double-sided.

Intended Actions: The residential/ municipal source reduction program has been targeted to reduce future waste by 2,480 tons by FY2013-14 and 3,035 tons by FY 2018-19.

The County will continue to implement the junk mail reduction program for County departments will continue to be implemented and improved where opportunity exists.

The County will continue to schedule biannual one-day HHW collection events in May and November. The events will continue to be advertised by newspaper, radio, television, utility bills, brochures, and on the County's Internet home page. Announcements for the HHW collection event have been distributed by all eight municipalities located in the County. Brookford, Catawba, Conover, Long View and Maiden send residents a newsletter; Claremont and Hickory include notices with their water bills; Hickory also places handouts in local convenience centers and businesses. The County will work to have all of the municipalities advertise the event with their utility bills for future collection events. Brochures will continue to be distributed throughout libraries, schools, and convenience centers. Private contract haulers Ecoflow, Inc. and Envirocycle, Inc. will continue to package and transport the waste for disposal.

The County intends to continue using the Waste Educational Center facility to educate citizens throughout the County about HHW and recycling, and will also continue to arrange for civic groups and schools to schedule field trips to both the Education Center and landfill property, in hopes that seeing a working landfill will make the point that waste not diverted, reused or recycled ends up buried in the landfill.

Commercial & Industrial:

Current Program: The Catawba County Commercial Recycling and Waste Reduction Partnership Program offers a partnership certification program to businesses within Catawba County. This program is designed to provide members of the Commercial sector with information regarding the benefits that a Recycling and Waste Reduction Program can provide to their business and the community. During the program the County works with the entity to determine recyclables and assists with matching up to recycling companies and markets. A certificate is provided to the business showing their participation in the program. A flyer describing the program is included in Appendix D.

Intended Actions: The Commercial/ Industrial sector has been targeted to reduce future disposed waste by 4,123 tons by FY2013-14 and 5,645 tons by FY 2018-19. The County programs addressed above will continue to be provided.

Yard Waste:

Current Program: Several resources have been directed toward source reduction. The county has a source reduction program which is intended to reduce solid waste by backyard composting and grasscycling. The Catawba County Solid Waste Department has made a formal policy encouraging specific source reduction efforts by county government offices. In FY 2007-08, 9,807 tons of yard waste was diverted from the waste stream.

Intended Actions: County to continue to build this current program with a goal of 100 % waste reduction of Yard Waste to the overall waste stream.

B. Collection of Solid Waste

Catawba County collects waste and recyclables at the Blackburn MSW Landfill and five Convenience Centers. Currently, operation of convenience centers is performed by GDS. An attendant is located at each center during all operating hours. The current hours of operation are as follows:

Blackburn Landfill	Monday- Saturday - 8:00 a.m. until 6:00 p.m.
Cooksville	Friday and Saturday - 8:00 a.m. until 6:00 p.m.
Bethany Church Road	Tuesday - Sunday - 10:00 a.m. until 6:00 p.m.
Oxford	Wednesday – Sunday - 10:00 a.m. until 6:00 p.m.
Sherrills Ford	Wednesday – Sunday - 10:00 a.m. until 6:00 p.m.

Residential solid waste is accepted at each center in an enclosed compactor and open top containers. A variety of recyclable materials are also accepted. GDS transfers all municipal solid waste collected at these sites to the Blackburn MSW Landfill. The recyclables collected at these sites are managed by GDS, Inc.

Residential:

Current Program: Unincorporated Catawba County, Claremont, Long View, and Maiden through an agreement collects residential waste weekly. Brookford, Catawba, Conover, Hickory and Newton collect residential waste with their own crews. All residential waste in Catawba County has a final destination to the Blackburn MSW Landfill facility.

Intended Actions: The County will continue to use collection centers to collect residential waste from rural areas of the county. The county will continue to offer curbside collection services to all areas of the County through a franchised agreement with GDS.

Commercial and Industrial:

Current Program: Large commercial establishments contract waste pick-up with GDS. Most business and portions of private residential communities use this service also. A few smaller businesses may use the municipal service if their volume is low enough. Brookford and Newton provide commercial and industrial waste collection service.

Intended Actions: The County has no intended actions for commercial and industrial collection as businesses establish these contracts privately.

C. Recycling and Reuse

Recycling:

Current Program: Catawba County has been working since 1989 to maintain a stable recycling program. Currently, the County is recycling approximately 10% of the total waste stream. Catawba County's recycling program has been very aggressive, offering curbside collection of recyclables to all county citizens through a private collection firm (GDS). The county also has five (5) collection centers with a variety of collection containers, including roll-offs and converted dumpsters. Collected items include: newspaper; cardboard; steel cans; aluminum cans; clear, brown, green glass, plastic milk and soda bottles, and mixed paper. Used oil also collected at these sites. Used antifreeze is collected at the Blackburn and Newton sites. Collection center staff teaches residents proper sorting and material listing, phone numbers, and other information are available at each site.

GDS collects recyclables curbside for Catawba, Claremont, Hickory, Long View, Maiden, and Unincorporated areas of the County. Conover and Newton collect recyclables generated from their municipalities. Hickory also collects recyclable materials.

The total amount of materials recycled by Catawba County, including all private contracts with GDS plus the municipalities of Conover, Newton, and Hickory is shown in Table 7.

Comparing the recycling tonnages listed in Table 7 with the estimated waste tonnages and estimated composition from Table 3, shows that there is potential to increase the amount of each material recycled. This comparison is shown on Table 17.

Table 17. Comparison Between Estimated Tons Disposed and Tons Recycled, FY 2007-08

Materials	Est. Total Generated	Tons Recycled*	Est. Total Disposed	Percent Recycled	Available Processors or Markets
Paper	48,380	4,864	43,516	10%	Garbage Disposal Service
Cardboard	29,390	10,533	18,857	36%	Garbage Disposal Service
Plastics	17,918	951	16,967	5%	Garbage Disposal Service
Glass	13,259	1,380	11,879	10%	Garbage Disposal Service
Metals	5,376	946	4,430	18%	Tri-State Metal
Total	114,323	18,674	95,649	16%	

Source: tons disposed taken from Table 3, tons recycled derived from County and Municipal Annual Solid Waste Management reports and from figures reported on "Update Questionnaire" from municipalities.

* Recycling data includes commingled and non-residential recyclables.

Table 17 shows that approximately 16% of the readily recycled materials were diverted from the disposed waste stream in FY 2007-08. There is significant material remaining in the

waste stream that can be recycled. According to these figures, the quantity targeted to recycle in Table 14 can be met.

Catawba County markets most of its recyclables through GDS. However other markets may be available for specific materials not collected by GDS as listed seen in Table 17.

Materials collected curbside by GDS include newspaper, catalogs, and phone books; aluminum cans; steel cans; clear, brown, and green glass; and plastic milk and soda bottles.

Participation in residential recycling could be increased. Maximizing recovery of recyclables will entail increasing participation and possibly increasing the types of materials accepted. Residents of unincorporated areas do have curbside recycling through GDS. These residents can also use the recycling bins at the collection centers.

It is unclear how much recycling industries, businesses and institutions are performing, but it is clear that there is a large amount of recyclables in the waste stream. It may be possible to find other markets or outlets for some of the currently unmarketed waste. Potential new recycling markets are listed by material in Table 18.

Several County schools also participate in a cash rewards program for recycling ink-jet printer cartridges and specially marked food packaging that is found on several varieties of canned goods and cereal boxes. In both programs, the cartridges and product labels are exchanged for cash rewards from participating manufacturers, which is used to purchase education materials.

Table 18. Potential Recycling Markets for Currently Unmarketed Materials

MATERIAL	AVAILABLE PROCESSORS/MARKETS
Shingles	Asphalt production
Brick, block	Grading Contractors
Paint	Consumer product

Source: Catawba County

Intended Actions: The residential/ municipal recycling programs are targeted to reduce waste by 8,267 tons in FY 2013-14, and 10,116 tons in FY 2018-19. Table 19 lists the projected tons that will be targeted by type of material.

Table 19. Estimated Recycling Projections FY 2013-14 and FY 2018-19

MATERIAL	2013-14 TONS	2018-19 TONS
Glass	562	688
Plastic	298	364
Aluminum cans	206	253
Steel cans		
White goods	273	334
Newspaper and Magazines	1,736	2,124
Mixed Paper	495	607
Corrugated cardboard	4,299	5,260
Various wood	397	486
Total	8,267	10,116

Source: Staff projections

It is assumed that residents who currently use the solid waste and recycling collection centers will continue to recycle. Solid Waste staff has been monitoring recycling habits and have seen a steady increase in the number of people who recycle. Approximately 80% of the residents currently using the collection centers participate in recycling. Solid waste staff continually educates residents on how to separate materials.

Non-residential recycling is targeted to reduce future waste by 12,368 in FY 2012-13, and 15,134 in FY 2017-18. Research into potential new recycling markets may prove to be key to reducing non-residential waste. Markets for shingles, brick, and block have the potential to reduce consistently disposed wastes. Members of the solid waste management staff will continue to visit commercial and industrial establishments to promote recycling and waste reduction.

Catawba County will continue recycling at the local colleges. The County is working with staff and students to maintain a recycling program at the colleges. The continuation and expansion of the K-12 school recycling program will also increase the amount of waste recycled.

In an effort to reduce the amount of non-residential cardboard disposed, the County reduced the amount of cardboard that can be disposed of in each load of solid waste from 15% to 10% in 1997. Trucks containing more than 10% cardboard are charged a higher rate of \$90.00 per ton. This rate also applies to loads containing more than 20% metal springs, 50% foam rubber, over four(4) feet of wire or cable, or other bulky items that will not compact.

Recycling construction and demolition waste is expected to reduce future waste by 5,641 tons in FY 2013-14, and 6,902 tons in FY 2018-19. The County has modified tipping fees for certain materials such as untreated wood and pallets, in order to provide an incentive to the waste generator to source separate those materials. Additionally, the County has restrictions on the amount of wood that a load of waste can contain.

Construction and demolition concrete and asphalt are ground into usable products that are marketed and used on the landfill access roads for maintenance, in lieu of purchasing aggregate

materials from the quarry. Tipping fees are set to enhance separated material for ease in handling.

Reuse:

Current Program: Non-profit programs such as Good Will, Salvation Army and area churches collect and distribute most of the usable items in the County. Play-it Again Sports buys and sells used sporting equipment.

Alternative types of reuse programs need to be developed and promoted to reach people who do not use the thrift store or social, service type programs. More convenient methods may increase participation. Particular materials, such as appliances, can be targeted. Exchange of non-residential reusable items needs to be addressed.

Intended Actions: Residential/ municipal waste reuse is targeted to reduce disposal by 1,653 tons in FY 2013-14, and 2,023 tons in FY 2018-19. Current programs will be continued. In addition, the County would like to eventually incorporate an exchange/ swap shop has not been added to event to date.

Non-residential reuse is targeted to reduce waste by 2,748 tons in FY 2013-14, and 3,363 tons in FY 2018-19. The Catawba County construction and demolition landfill will continue to reuse brick, demolition road asphalt, broken concrete, and concrete block in erosion control applications in lieu of purchasing rip-rap from the quarry.

D. Composting and Mulching

Composting:

Current Program: Composting is currently performed at County schools and the community college. The County, the local municipalities and the Cooperative Extension Services have encouraged residential composting, but the program could be expanded.

Catawba County operates a composting facility at the Blackburn Landfill. Hickory operates a yard waste composting facility at city property on Cloninger Mill Road.

Catawba, Claremont, Conover, Hickory, Maiden, and Newton operate local government composting facilities. In addition, Conover, Hickory, and Maiden have residential backyard composting programs.

Intended Actions: Residential/ municipal composting is targeted to reduce waste up to 1,984 tons in FY 2013-14, and 2,428 tons in FY 2018-19.

To encourage residential backyard composting, worm bins and composting demonstrations have been established at the Catawba County Waste Education Center. The demonstrations have been set up, along with diagrams and literature that explain how individuals can set up their own worm bin and/or composting bins at home or at work.

Mulching:

Current Program: Yard waste is accepted at the county construction and demolition landfill and then ground and sold as mulch. Grass and leaves are composted and sold. Grinding occurs approximately three days per week. The resulting mulch was sold to residents.

Clean, untreated wood from construction & demolition waste pallets from industries are also ground by the county. As an incentive to contractors, loads of untreated wood waste is accepted at the C&D landfill at little cost if it is separated from the rest of the C&D waste.

Intended Actions: Residential yard waste will continue to be accepted at the Blackburn Landfill Facility. Residential mulching is targeted to divert 1,984 tons in FY 2013-14, and 2,428 tons in FY 2018-19, respectively.

Non-residential mulching will be targeted to reduce 2,748 tons in FY 2013,-14, and 3,363 tons in FY 2018-19. Construction and Demolition mulching will be used to reduce waste by 4,512 tons in FY 2013-14, and 5,522 tons in FY 2018-19. The County yard-waste grinding program will continue.

E. Incineration with Energy Recovery

Current Program: Incineration with energy recovery is not part of the County's current program. The County considers it an inappropriate waste management option due to the local waste flow, public opinion, and capital/ operating cost. The County formerly considered participating in a regional waste-to-energy facility hosted elsewhere, but decided against it due to high transfer cost.

Intended Actions: With the research done with considering participating in a waste-to-energy facility elsewhere. The County is actively pursuing a plan for its own Eco-complex with a Co-Generation, Bio-Solids, Bio-Energy and University Research Facilities in the current master plan of Blackburn MSW Landfill, in lieu of incineration.

F. Incineration without Energy Recovery

Current Program: Incineration with energy recovery is not part of the County's current program. The County considers it an inappropriate waste management option due to the local waste flow, public opinion, and capital/ operating cost. The County formerly considered participating in a regional waste-to-energy facility hosted elsewhere, but decided against it due to high transfer cost.

Intended Actions: With the research done with considering participating in a waste-to-energy facility elsewhere. The County is actively pursuing a plan for its own Eco-complex with a Co-Generation, Bio-Solids, Bio-Energy and University Research Facilities in the current master plan of Blackburn MSW Landfill, in lieu of incineration.

G. Transfer of Solid Waste outside Geographic Area

Current Program: Other than recyclables, or special waste, (i.e. tires, hazardous waste, etc.) all solid waste generated in Catawba County is disposed of within the County.

Intended Actions: Catawba County will continue to dispose of all the solid waste generated within County.

H. Disposal of Solid Waste

Current Program: Catawba County has owned and operated the Blackburn landfill facility from its opening in 1980. Since that time it has seen a number of expansions to the waste capacity of the Subtitled D landfill. Starting with Unit 2 Phase 1 in 1997, followed with Unit 2, Phases 2, Stage 1 and 2 in 2003, then with the latest update Unit 3, Phase 1 beginning to receive waste in May 2009. The next expansion of the Blackburn MSW Landfill is planned for 2015, and will be designated Unit 3, Phase 2.

Unit 3, Phase 2 is proposed to be constructed as a side-slope fill against Units 2 and 3. Therefore, the Unit 3, Phase 2 expansion will increase the horizontal footprint of the MSW waste area and allow the landfill personnel proper access for final filling of Unit 2 waste area. The Blackburn landfill will continue to be expanded to the east with the construction of subsequent phase 3 and eventually Unit 4 and 5. Unit 3 is proposed to cover 97.2 acres and Unit 4 is proposed to cover a footprint of approximately 155.6 acres. Units 3 and 4 will combine to provide Catawba County approximately 75 years of landfill capacity, based on information provided via the "Expansion Properties Site Study report, Blackburn MSW Landfill" that was prepared by McGill Associates, P.A. and submitted to the NCDENR, Division of Waste Management on May 4, 2006.

Construction and demolition waste continues to be disposed in the county construction and demolition landfill. The old C&D landfill located on the north side of Rocky Ford Road at the Blackburn landfill stopped receiving waste in 2002. A new C&D cell has been constructed at the Blackburn Landfill Facility on the south side of Rocky Ford Road and the west of the MSW landfill. This allowed for both MSW landfill and the C&D landfill to serve from the same entrance, although two (2) scale houses remain to be utilized. This allowed the landfill staff to have even more control over the incoming waste. Phase 2 is currently accepting waste and expected to provide an estimated airspace of 8 additional years.

Land clearing and inert debris (LCID) continues to be disposed in the county C&D landfill. The locations of the County-owned landfills are shown on the map in Appendix C.

According to North Carolina General Statute 153A-136c, prior to undertaking an expansion of an existing landfill (Blackburn), the County's Board of Commissioners must first consider alternative sites, socioeconomic and demographic data and hold a public hearing. In order to address the issue of alternative landfill sites, the County hired the engineering firm Camp Dresser & McKee (CDM) on August 9, 2005 to evaluate the Blackburn Landfill and three (3) alternate locations as potential MSW landfill sites. Several criteria were adopted by the County and utilized by CDM to select the alternate sites. Three sites were chosen and evaluated based on the established criteria. The findings of the CDM evaluation were presented at the

February 6, 2006 public hearing and conclude that the proposed Blackburn Expansion Site is the preferred site for the County to proceed with the permitting process.

Intended Actions: Catawba County plans to continue handling the disposal and transfer aspects of the solid waste program in the current manner.

I. Natural Disaster

In the event that citizens of Catawba County become victims of a natural disaster and unusually large amount of solid waste could be generated. Catawba County has a franchise agreement with GDS that includes a provision for the collection of waste generated by such an event. The agreement has been in effect since July 1, 2004 and will expire on July 1, 2014, at which time the County will consider renewing it.

All of the waste collected during a natural disaster would be disposed of at the Blackburn Landfill facility. Co-mingled inert debris would be separated and stockpiled at the grinding operation, which is located north of the new C&D landfill cell. However, if very large quantities of waste were encountered, the County-owned property located across the road from the MSW landfill would be utilized over a period of several weeks or months. Only the waste normally accepted at the Blackburn Landfill Facility as described in the approved operations plans (residential and non-residential waste, construction and demolition waste, land clearing and inert debris) will be accepted.

The Town of Catawba is currently soliciting proposals to provide disaster debris removal.

J. Education

Community Education:

Current Program: Several educational pamphlets describing the locations of collection centers, recyclable materials accepted, and how to prepare materials for recycling (e.g. wash and remove lids) have been produced and distributed by Catawba County. Examples of these pamphlets are shown in Appendix D. Educational presentations are given to civic groups throughout the county by members of the solid waste management staff, and the recycling program is promoted at the community fairs. Maiden, Claremont, Conover, Hickory, and Newton conducted solid waste educational activities within their respective municipalities. Hickory sends recycling information in the residents monthly water bill.

Catawba County provide twelve (12) landfill tours to the general public, students and teachers, scout groups and the Project Learning Tree Workshop on the importance landfill operation and the need for recycling. Thirty (30) presentations were given to various public groups, including Environmental Awareness Field Days, School Career Days, Science Center Day Camps, county employee orientations, and departmental staff meetings. The County become a member of Keep America Beautiful and formed a local chapter of “Keep Catawba Beautiful.”

Newton works with Middle School and high School students on recycling programs at the schools as well as at home. In 2008, a City staff member mentored a high school senior help to educate almost 200 Hispanic homes on the importance of recycling.

Citizens can call the County Utilities & Engineering Department at (828) 465-8261 to obtain or provide information on solid waste issues.

Brookford and Long View provides recycling information to their residents through their quarterly newsletter.

Intended Actions: The Catawba County waste Reduction Coordinator and the Cooperative Extension Service will continue to conduct waste reduction training program for interested community members, schools and civic groups.

The Cooperative Extension Service plans to use radio stations to explain waste reduction, water conservation, and household hazardous waste.

Another program to be included in educational curriculum is the State's "RE3" campaign (Reduce, Reuse, Recycle), information for which can be found online at <http://www.re3.org>.

Also, additional educational programs will be developed for the presentation to schools and civic groups. Topics that will be discussed include quality separation of recyclables, true cost of solid waste management, and cost advantages of source reduction.

School Education:

Current Program: The Cooperative Extension Service conducts a periodic mailing to the county elementary schools with information on educational materials that are available.

Catawba County hired a Waste Reduction Coordinator/Educator in August 1997. This individual is responsible for developing new educational materials for Catawba County citizens, particularly school age children. This individual also actively encourages civic groups and schools to become more involved in community cleanup programs such as the state "Adopt-A-Highway" program and the "Liter Sweep Weeks" program and participation in Earth day contest and events designed to bring about awareness of the impact of litter and recycling. In addition to working with the community school systems, this individual also provides public education display booths at community festivals and events providing educational material to the general public.

A pilot project to recycle white paper began in 1997. Based on the success of the program, white paper recycling is now performed at all the county schools. Elementary schools are given copies of the video, The Rotten Truth, as well as other videos to use in the education of students. Catawba County and Hickory sponsored an environmental structured play named "The Queen of Green" which was presented to 4th graders.

Intended Actions: A member of the solid waste management staff will assist teachers in obtaining educational materials from the NC Division of Environmental Assistance and Pollution Prevention and the NC Office of Environmental Education. In addition, teachers will be given information about the annual environmental educators' conference sponsored by the NC Office of Environmental Education.

A member of the solid waste management staff will develop a training session for teachers from each school who wish to become "lead teachers" in developing a school recycling program.

The Cooperative Extension Service will encourage more teachers to use the solid waste educational materials that are available through that organization.

K. Special Waste Management

Neither the County nor the municipalities provide for hauling of hazardous materials. Private companies in the County perform contracted services for medical waste, hazardous waste and household hazardous waste collected. The management of special waste is expected to reduce residential waste by 2,913 tons in FY 2013-14, and 3,565 tons in FY 2018-19.

Intended Actions: The County and Hickory will continue to collect special waste such as HHW, electronics, oil, batteries tires, white goods, ect. at the landfill and/or transfer stations on designated days. The County does not plan to add other items for collection within the planning period.

Tires:

Current Program: Tires are collected free of charge at the Blackburn Landfill if adequate proof of payment of tire disposal tax is provided. The U.S. Tire Recycling removes the tires to be recycled. The County Solid Waste Director has met with tire retailers to explain the tire program.

Money from the statewide tax pays for approximately 70% of the tire recycling program. U.S. Tire Recycling indicates that a very small amount of tires collected are separated for sale as used tires or for recapping. According to the County, 100% are ground up with 30% used as septic tank drain fill, 20% converted to tire-derived fuel, 18% sold to recycling facilities and 32% landfilled.

Catawba County collected and recycled approximately 2,543 tons of tires in 2001-02, approximately 2,284 tons in 2004-05, and 3,298 in FY 2007-08.

Intended Actions: The County is exploring other environmentally friendly and economical options to recycle tires. The County will continue to monitor new technology for tire recycling.

White Goods:

Current Program: White goods are also stored at the Blackburn Landfill Facility. When 100 tons of white goods are ready for removal, Tri-State Metal is called to transport and recycle white goods. GDS and various municipalities provide collection services for discarded appliances, which are brought to the Blackburn Landfill Facility. The various metals and White Goods the County recycled and municipalities approximately received was an estimated 512 tons in FY 2007-08. This is an approximate 50% decrease in various metals and white goods received in FY 2004-05. More than likely this change was brought on by the drastic decrease in the County's economy.

Intended Actions: White Goods collection and Recycling will remain the same.

Lead-acid Batteries:

Current Program: Lead-acid batteries are collected by the County at the biannual HHW collection events. In addition, the County also accepts alkaline, lithium and nickel cadmium batteries. Approximately 2941 lbs. (1.47 tons) of mixed batteries were turned in during Spring 2008 event.

Area automotive stores charge an extra fee of approximately ten (10) dollars when a new battery is sold, unless an old battery can be returned.

Intended Actions: The County intends to continue to collect lead-acid batteries at the biannual HHW collection event. The Catawba County Solid Waste Department will continue to work with the Cooperative Extension Service, NC Services Station Association, and Catawba County Auto Dealers Association on the distribution of educational pamphlets and improving the effectiveness of the HHW collection events. The pamphlets are intended to explain the correct disposal methods and penalties for illegal disposal to motorists and farmers who change their own batteries and used oil.

Household Hazardous Waste:

Current Program: Catawba County began an annual one-day household hazardous waste (HHW) collection event on May 6, 2000 and collected 13 tons of waste. The County has seen the yield of HHW double over the time of 2001-07. From that point, the County has plans to continue supporting biannual HHW collection events one in May and the other in November. The latest recorded event took place on May, 2008 and resulted in the collection of 39 tons. Private contractor Clean Harbors Synergy, packaged and transported the waste collected at this event.

The following charts depicts waste generated and vehicle participation at each event.

Chart 9. Household Hazardous and Electronics Collection Events, lbs

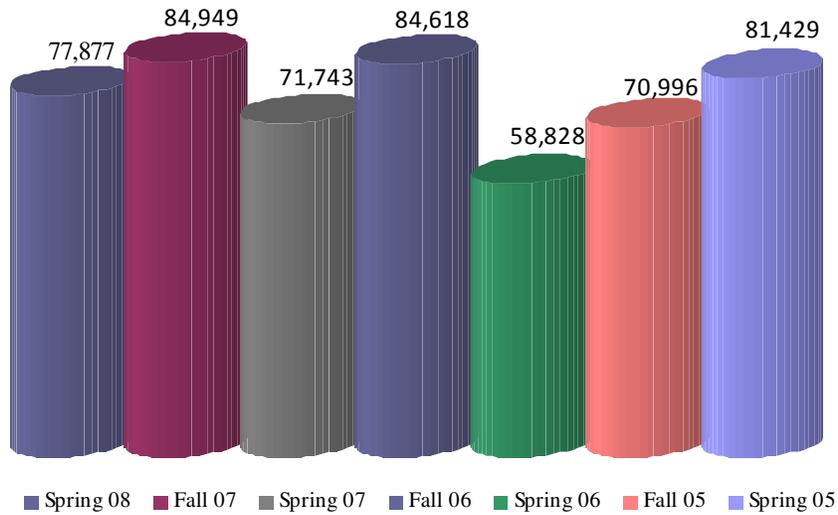
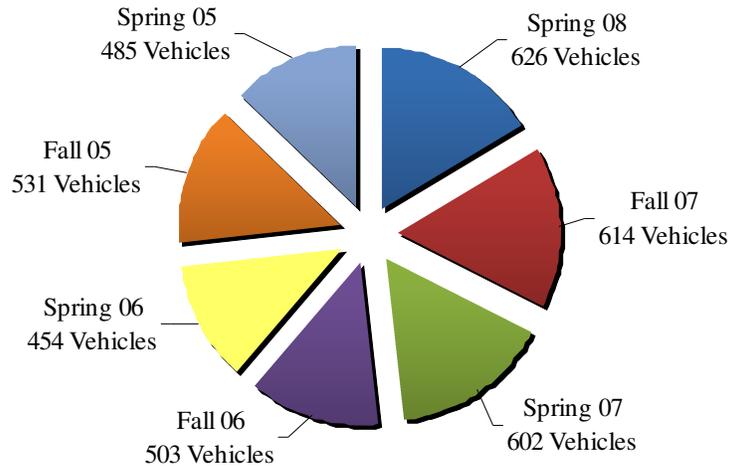


Chart 10. Household Hazardous and Electronics Collection Events Vehicle Participation



Source: Catawba County Staff

In attempt to improve awareness of future HHW collection events, participants of the 2003 and subsequent HHW collection events were asked to complete a brief survey that would help the County determine: (1) which advertising media was most effective in notifying participants of the event, (2) if participants had participated in the past or were new participants and (3) if their participation in the collection events has affected their use of HHW products in

their homes. This also gave participants an opportunity to sign up for free newsletter about household hazardous products and other waste management issues.

Intended Actions: The County intends to continue sponsoring the biannual household hazardous waste collection events. The events will be advertised by local radio, television, newspaper, and inserts with utility bills.

Animal Mortality:

Current Program: At this time the Catawba County landfill facility accepts deceased animals from residential homes and ashes of the remains from the Animal shelter.

Intended Actions: Animal Mortality collection will remain the same.

Abandoned Manufactured Homes Disposal:

Current Program: Manufactured homes are accepted and buried at this time till July 1, 2009. From that date on a new Catawba County Management Plan for Abandoned Manufactured home will take effect.

Intended Actions: To implement and follow updated procedures on the handing and recycling of Abandoned Mobile homes. Outlined in the Catawba County management Plan for Abandoned Manufactured Homes. The plan is included in Appendix H.

Electronics:

Current Program: Catawba County collects electronics two times a year at the bi-annual HHW collection events. During the time that collection of the electronics are not done, the Solid Waste Management Team request that residents hold until the dates of the events.

Intended Actions: Electronics collection and recycling will conducted in accordance with G.S. 130A-309.91.

L. Prevention of Illegal Disposal and Management of Litter

Illegal Disposal-Operated Sites:

Current Program: Catawba County hired a Solid Waste Code Enforcement Technician in November 2001 who works for the Utilities and Engineering Department, Solid Waste Division. This individual is responsible for enforcing the North Carolina and Catawba County codes and regulations throughout Catawba County. The Code Enforcement Technician responds to all notices and/or complaints of illegal disposal of municipal solid waste, construction and demolition waste, and land clearing and inert debris within the County. If sites are identified that pose an immediate health hazard, the Code Enforcement Technician will contact the North Carolina Division of Environment and natural resources, Division of Waste Management for guidance on how to proceed with cleanup of the illegal site. The Catawba County Sheriff's Department assists the Solid Waste Division in enforcement of regulations associated with illegal dumpsites and litter management. The County also has junk car ordinance that is enforced by the County Zoning Department.

Intended Actions: The County will continue with current structure. The County has purchased a water contamination model and uses it to show residents how groundwater wells can be contaminated if waste are disposed of improperly. This helps educate local citizens, particularly school students, on the potential impacts of improper disposal.

Litter Management and Promiscuous Dumping:

Current Program: Litter has been a problem in and along roadways near convenience centers and along other roadways across the County. The County currently contracts with the local Mental Health Department and the Community Service Work Program for cleanup of those roadways.

As a result of the County Board of Commissioners' concerns over the growing litter problem in Catawba County, a Litter Summit was held on October 8, 2003. As a result of the Litter Summit, the Board of Commissioners directed that the Catawba County Litter Task Force be created to address the problem. The current efforts towards affiliation with Keep America Beautiful are a direct result of the Litter Task Force and Keep Catawba County Beautiful affiliation is anticipated was completed in September 2006.

The County also sponsors and promotes "Litter Sweep Weeks" in the spring and fall each year (during the last two weeks of April and September). Citizens, schools, civic groups, scouts, ect. are provided orange bags for trash and blue bags for recyclables at various locations in the County. These groups collect litter from roadsides, parks, rivers, creeks, and any other areas in need of cleanup. Orange bags can be left at a predetermined location for pickup by the NCDOT [call (828)466-5519], or disposed at any county convenience center or the Blackburn Landfill free of charge. Volunteers are responsible for recycling of materials collected in blue bags. The DOT and prison labor also perform roadside cleanup of litter.

Intended Actions: The County feels that the State " Adopt-A-Highway" program is currently underutilized. Therefore, the County will continue to promote the program at local fairs, festivals, public schools, and churches.

Litter Sweep Weeks will continue to be publicized by the County. The County will continue using the State prison system for cleanup.

M. Purchase of Recycled Materials and Products

Current Program: A Recycled Product Purchasing Program has been in place for Catawba County Government offices since August 1994.

Procurement of products having recycled content is encouraged and the County has a policy that county offices write product specifications encouraging vendors to offer products with recycled content. The County has been consistent in recent years for specifying recycled content for the purchase of office supplies and janitorial products, but recycled content is rarely specified on other products.

The local colleges and the county schools are required by legislation and executive order to purchase recycled products equal to a percentage the total dollar value of paper products purchased. They must report annually to Division of pollution Prevention and Environmental

Assistance. These percentages increased from 45% in FY 1995-96 to 65% in FY 1997-98. Recycled content products are to be purchased whenever economically feasible and practicable.

Intended Actions: The County will continue to purchase recycled materials and products.

Summary of Intended Actions

The intended actions described on previous pages are listed chronologically in Table 19.

Table 19 Intended Actions Implementation Schedule

FISCAL YEAR	PROGRAM
2009-13	<ul style="list-style-type: none"> • Continue development of EcoComplex • Continue biannual household hazardous waste collection events • Continue/expand grasscycling and composting programs • Research new markets for recyclables and reusable products • Continue promotion of Biannual "Litter Sweep Weeks"
2014-16	<ul style="list-style-type: none"> • Continued development of EcoComplex • Continue biannual household hazardous waste collection events • Continue/expand grasscycling and composting programs • Research new markets for recyclables and reusable products • Continue promotion of Biannual "Litter Sweep Weeks" • Begin construction of Blackburn Unit 3, Phase 2 • 2014- Consider renewal of the County's franchise agreement with GDS
2016-19	<ul style="list-style-type: none"> • Continue biannual household hazardous waste collection events • Continue/expand grasscycling and composting programs • Research new markets for recyclables and reusable products • Continue promotion of Biannual "Litter Sweep Weeks" • Expected closure of Blackburn Unit 2.

Source: Staff estimates

The "Plan of Action" worksheets have been attached in Appendix E. These worksheets provide an assessment of the initial plan with current status and give new and/or revised actions to achieve goals set through FY 2018-19 for each of the elements.

Appendix A
Catawba County Solid Waste Advisory Committee

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Appendix B
Resolutions to Adopt Plan

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Appendix C

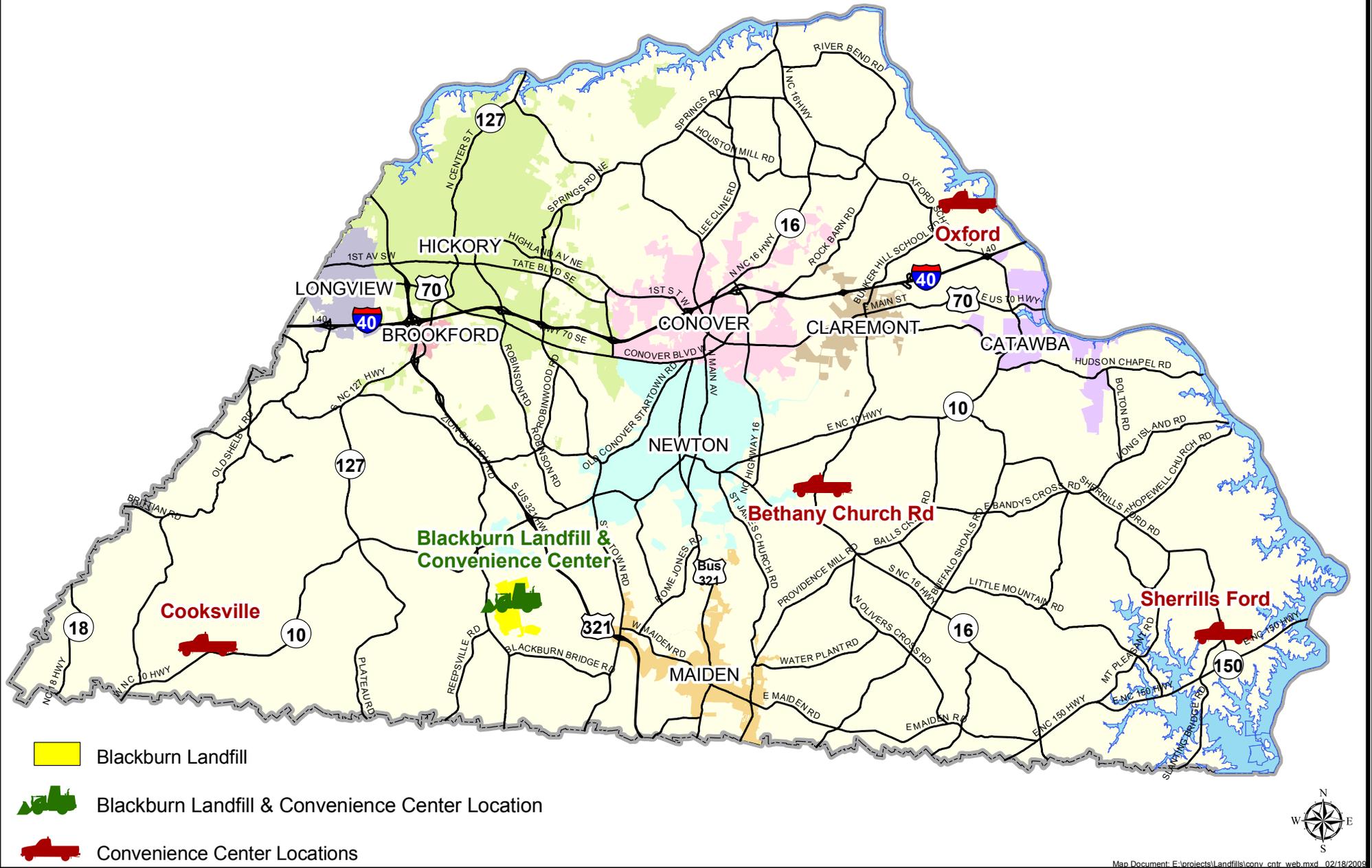
Map of Catawba County Planning Area

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CATAWBA COUNTY

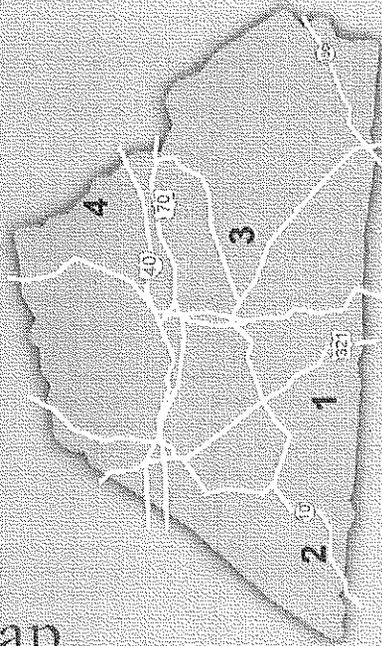
Convenience Center and Landfill Locations



Appendix D
Education Pamphlets

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Catawba county
map



Catawba County offers four (4) Convenience Centers located throughout the County for solid waste disposal and recycling opportunities. The centers are operated as part of the franchise agreement with Carbage Disposal Service.

- 1. Blackburn**-located on Pocky Ford Rd + (704) 462-2496
Open-Monday through Saturday + Hours-8:00 am-6:00 pm
Closed-Sunday
- 2. Cooksville**-located on Rhoney Farm Rd + (704) 462-1497
Open-Friday and Saturday + Hours-8:00 am-6:00 pm
Closed-Sunday through Thursday
- 3. Bethany Church Rd** + (828) 465-4635
Open-Tuesday through Sunday + Hours-10:00 am-6:00 pm
Closed-Monday
- 4. Oxford**-located on Lookout Dam Rd + (828) 241-3774
Open-Wednesday through Sunday + Hours-10:00 am-6:00 pm
Closed-Monday and Tuesday

Catawba County USE Dept.
PO Box 389
Newton, NC 28658

RECYCLE

Catawba
county programs



Reduce Reuse Recycle

what is recycling all about?

It is a way of diverting solid waste from our landfills to reuse some solid waste into new products. It can be a responsible, cost-effective way to help solve some disposal problems. Recycling helps preserve our natural resources, reduce pollution and save energy. Recycling just makes sense!

want curbside pickup?

For information on curbside recycling and garbage pickup, please call Garbage Disposal Service at 828-256-2158.

what about special items?

Real Christmas trees (no artificial) may be recycled at all four Convenience Centers after the Christmas holidays. Please call for dates and times.

what if I am unsure about whether something can be recycled?

Call the County's Waste Reduction Coordinator at 828-465-8217 or Garbage Disposal Service at 828-256-2158.

what about hazardous waste recycling/disposal?

Look for information in newspapers and on the County's web site about our free spring and fall household hazardous waste collections.

what about other materials?

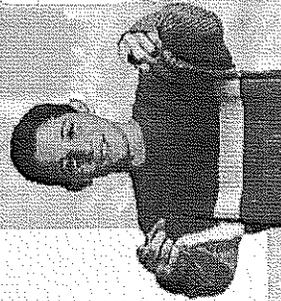
To learn more about Catawba County Solid Waste and Recycling and these programs:
 Appliance Recycling - Educational Tours - Mulch and Compost Sales - Tire Disposal
 Household Hazardous Waste and Electronics Collection - Waste Education Center
 Asphalt Recycling - Co-Generation Facility - Blackburn Landfill - Fee Schedules
 Wood and Yard Waste - Concrete, Brick & Block Recycling - How to stop junk mail
 And more, contact...

Mail: Amanda Kain
 Waste Reduction Coordinator
 PO Box 389
 Newton, NC 28658

Contact information:
 Phone: 828-465-8217
 amandak@catwbacountync.gov
 www.catwbacountync.gov

Mission Statement:

To provide residential solid waste collection and disposal services to County residents, provide and encourage the use of recycling services and disposal of household hazardous waste, and educate the public in waste reduction methods.



recycle how where leave out

newspapers with inserts	break down and flatten	all centers and curbside	boxes, bags, mail
corrugated cardboard	remove lids and rinse	all centers and curbside	pizza boxes, waxed cardboard
aluminum and steel cans	remove lids and rinse	all centers and curbside	pie plates, aluminum foil
plastic bottles #1, #2	remove lids and rinse	all centers and curbside	any other type of plastic
glass bottles & jars	brown, clear and green - remove lids and rinse	all centers and curbside	light bulbs, windows, ceramics, broken glass
mixed paper	break down and flatten	all centers	
junk mail, magazines, cereal boxes, phone books, office paper			
motor oil, filters and transmission fluid	limit 5 gallons	all centers	
pesticide containers	from area farmers	Blackburn, Bethany Church Rd, Oxford	
cell phones	leave battery intact	all centers & libraries	no accessories
ink/laser jet cartridges	put in plastic bag	all centers & libraries	
used antifreeze		Blackburn and Bethany Church Rd	
appliances	When closed, must fit into dumpster	Blackburn	
oil and latex paints		Blackburn	

want more recycling info?



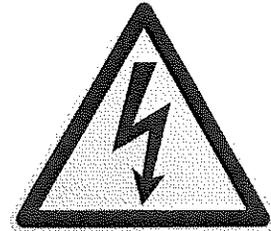
www.RE3.org

www.cleanup.org

www.recycleguys.org

Residential Household Hazardous Waste and Electronics One-Day Collection Event

**May 2nd, 2009
9am—3pm
Government Center
Newton, NC
Rain or Shine**



What types of household hazardous waste and electronics will be accepted at the event?

Household cleaners
Paint products
Automotive products
Pesticides
Fertilizers
Kerosene
Batteries
Pool chemicals
Metallic mercury

Computer monitors
Televisions
VCRs
Stereos
Cell phones
Pagers
Calculators
Fax machines
and much more...



**Questions...Contact us:
Amanda Kain, Waste Reduction Coordinator
Phone: 828-465-8217
E-mail: amandak@catawbacountync.gov**

Types of HHW accepted at certain Convenience Centers listed below.

Although this is a one day event, four of the County's Convenience Centers accept used motor oil and transmission fluid (5 gallon limit) at no charge throughout the year. Pesticide containers from area farmers are also accepted at no charge at the Bethany Church Rd, Oxford and Blackburn locations only. Antifreeze (5 gallon limit) is also accepted at the Bethany Church Rd and Blackburn locations only at no charge. Latex and oil-based paints are accepted at the Blackburn location only at no charge.

Convenience Center Locations:

Blackburn-located on Rocky Ford Rd
Open-Monday through Saturday
Hours-8:00 am-6:00 pm
Phone-704-462-2496
Closed-Sunday

Bethany Church Rd-
located on Bethany Church Rd
Open-Tuesday through Sunday
Hours-10:00 am-6:00 pm
Phone-828-465-4635
Closed-Monday

Cooksville-located on Rhoney Farm Rd
Open-Friday and Saturday
Hours-8:00 am-6:00 pm
Phone-704-462-1497
Closed-Sunday through Thursday

Oxford-located on Lookout Dam Rd
Open-Wednesday through Sunday
Hours-10:00 am-6:00 pm
Phone-828-241-3774
Closed-Monday and Tuesday

You can learn more about this event by contacting Amanda Kain, Catawba County Waste Reduction Coordinator at 828-465-8217, or the Utilities and Engineering Dept at 828-465-8261, or visit us on the web at www.catawbacountync.gov.

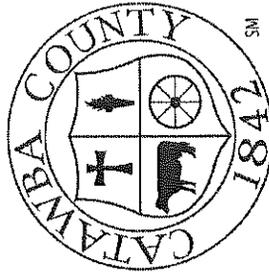
Co Sponsored by:



Printed on Recycled Paper.

Residential Household Hazardous Waste and Electronics Collection

**Saturday
May 2, 2009
(Rain or Shine)**



Location:
Catawba County
Government Center
Parking Lot
Time: 9:00 am-3:00 pm

Sponsored by:
Catawba County
Utilities and Engineering

Spring 2009 Household Hazardous Waste and Electronics Collection

Catawba County will be conducting a residential household hazardous waste and electronics collection event at the Catawba County Government Center on Saturday, May 2, 2009. The collection will begin at 9:00 am and end at 3:00 pm. There is no fee for this event.

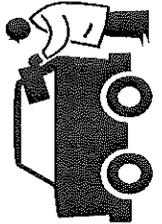
What is hazardous household waste?

Chances are, when you care for your home, car, yard, or garden, you use a variety of chemical products. Many of these products contain hazardous chemicals. Most household products are not harmful if used according to label directions. However, they can be harmful if you use them improperly, store them improperly, or dispose of unused portions improperly.

Why is proper disposal of hazardous household waste important?

These products can contaminate lakes, rivers, streams, and groundwater. 55% of all North Carolina residents and 97% of the State's rural residents rely on groundwater as a source of drinking water.

What can I expect on the day of the collection (May 2nd)? As you enter the Government Center parking lot you will be directed to the collection area. Event staff will ask you to complete a short survey regarding the collection event. The survey results help make subsequent events more successful. The hazardous waste contractor will ask you questions about the chemicals you bring to the event and remove them from your vehicle. *Please remain inside your car unless you have to unlock doors or trunks.* This will allow for quicker processing, and should shorten the length of waiting time.



What types of household hazardous waste and electronics will be accepted at the collection event?



- ✓ Household cleaners, such as drain openers, toilet bowl cleaners, oven cleaners, disinfectants, and pine cleaners.
- ✓ Paint products, such as solvents, thinners, shellacs, varnishes, wood preservatives, and sealers. **Latex and oil-based paint will be accepted, but these can also be disposed of year round at the Blackburn Convenience Center at no cost.**



- ✓ Automotive products including lead acid batteries, brake fluid, and auto starter fluid. **Used motor oil and transmission fluid will be accepted, but can be disposed of at four Convenience Centers year round at no cost (5 gallon limit).** Antifreeze will also be accepted, but can be disposed of at the Blackburn and Bethany Church Rd Convenience Centers year round at no cost (5 gallon limit).

- ✓ Pesticides and insecticides including poisons, aerosols, and weed killers.

- ✓ Miscellaneous materials such as acids, bases, kerosene, household batteries, photographic chemicals, pool chemicals, gas cylinders, and metallic mercury.

- ✓ Electronics—Computer monitors, televisions, VCR's, stereo's, cell phones, pagers, calculators, fax machines, etc.

Note: You are encouraged to remove all personal information from your electronic equipment. The County cannot guarantee the non-disclosure for any information left on electronic equipment.

What will NOT be accepted?

- ✗ Radioactive Wastes
- ✗ Biologically Active or Infectious Waste
- ✗ Unknown Cylinders
- ✗ Dioxin Related Waste
- ✗ Explosives
- ✗ Tires



Take Responsibility for Your Waste!

What should I do with my household hazardous waste after this event is over?

The best option is to *buy only as much as you need*, and simply use the product as it was intended. Bulk purchases may be cheaper per ounce, but then you are often stuck with extra material which must be disposed of. *Recycle* when you have the opportunity. Finally, *use safe alternatives* when you have the opportunity.

Look for the Fall 2009 Household Hazardous Waste and Electronics Collection at the LP Frans Stadium, Hickory

Appendix E
Planning Element Worksheets

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Appendix F
Solid Waste Disposal Fee Schedule

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**Solid Waste Management Disposal
Fee Schedule Effective March 2, 2009**

Sanitary Landfill

Hours of operations are 8:00 am to 4:00 pm, Monday – Friday,
8:00 am – 11:30 am, Saturday, Closed Sunday

Sanitary Landfill

Municipal Solid Waste \$31.00 per ton + \$2.00 per ton State Tax = \$33.00 per ton
..... \$16.00 minimum + \$2.00 per ton State Tax

Industrial Wood Waste

Furniture Wood, glued, stained, etc. \$31.00 per ton + \$2.00 per ton State Tax = \$33.00 per ton
Painted or treated..... \$31.00 per ton + \$2.00 per ton State Tax = \$33.00 per ton
Chipboard and/or pressboard \$31.00 per ton + \$2.00 per ton State Tax = \$33.00 per ton
Dead Animals \$31.00 per ton + \$2.00 per ton State Tax = \$33.00 per ton
..... \$16.00 minimum + \$2.00 per ton State Tax

Other Wood Waste

Saw Dust..... \$8.00 per ton + \$2.00 per ton State Tax = \$10.00 per ton
Chipped wood waste (no less than 2" and no more than 5" in diameter; must be pre-approved
as non-hazardous..... \$8.00 per ton + \$2.00 per ton State Tax = \$10.00 per ton
..... \$4.00 minimum + \$2.00 per ton State Tax

Any Waste Contaminated with more than

10% Cardboard(industrial entities only).....
..... \$90.00 per ton + \$2.00 per ton State Tax = \$92.00 per ton
20% Springs..... \$90.00 per ton + \$2.00 per ton State Tax = \$92.00 per ton
50% Foam Rubber..... \$90.00 per ton + \$2.00 per ton State Tax = \$92.00 per ton
Wire or cable over 4 ft. \$90.00 per ton + \$2.00 per ton State Tax = \$92.00 per ton
Bulky items not easily compacted \$90.00 per ton + \$2.00 per ton State Tax = \$92.00 per ton
..... \$45.00 minimum + \$2.00 per ton State Tax

Friable Asbestos*

*The State required friable asbestos to be covered with soil requiring extra landfill space;
therefore the fee will increase accordingly.
..... \$120.00 per ton + \$2.00 per ton State Tax = \$122.00 per ton
..... \$15.00 minimum + \$2.00 per ton State Tax

Non-Friable Asbestos

Asbestos containing transit siding, vinyl floor tiles, asphalt roofing shingles
..... \$19.50 per ton + \$2.00 per ton State Tax = \$21.50 per ton
..... \$10.00 minimum + \$2.00 per ton State Tax

Other Materials

Forklift Tires with metal rims embedded in rubber
..... \$50.00 per ton + \$2.00 per ton State Tax = \$52.00 per ton

Construction & Demolition Landfill and Grinding Area

Hours of operations are Standard Time 8:00 am to 4:00 pm,
Monday – Friday, 8:00 am to 11:30 am, Saturday (year round), Closed Sunday (year round);
Daylight Savings Time 7:00 am to 5:00 pm, Monday – Friday

Construction & Demolition Landfill

Demolition debris is defined as follows: Waste produced from the demolition of a structure (house, building, mobile home, etc.). This includes items that are inside the structure at time of demolition, except appliances and materials not accepted at the landfill for disposal.

Construction debris is defined as follows: Waste produced during the construction of a structure (house, building, deck, etc.).

Construction and Demolition Permit number and address of the site are required on transaction tickets when unloading such waste at the landfill.

Construction & Demolition Landfill

Lumber over 8 feet in length \$19.50 per ton + \$2.00 per ton State Tax = \$21.50 per ton
Painted, treated or creosote..... \$19.50 per ton + \$2.00 per ton State Tax = \$21.50 per ton
Chipboard and/or pressboard \$19.50 per ton + \$2.00 per ton State Tax = \$21.50 per ton
Brick/block/concrete with reinforcement material and/or contaminated with other
waste \$19.50 per ton + \$2.00 per ton State Tax = \$21.50 per ton
Drywall \$19.50 per ton + \$2.00 per ton State Tax = \$21.50 per ton
Roofing/Shingles \$19.50 per ton + \$2.00 per ton State Tax = \$21.50 per ton
..... \$10.00 minimum + \$2.00 per ton State Tax

Extra Service Provided

Labor to de-bag yard waste or to clean contaminated pallets..... \$17.00 per ton/\$8.00 minimum

Other Materials

Clean furniture wood waste for grinding (no glue, stain, etc)..... \$6.00 per ton/\$3.00 minimum
Mobile Homes (Arrangements must be made prior to acceptance
at landfill) \$0.27 square foot + \$2.00 per ton State Tax

Items Free of Charge

Lumber less than 8 feet in length No Charge
Clean/Uncontaminated Pallets..... No Charge
Asphalt No Charge
Brick/block/concrete without reinforcement material and separated from other waste.....
..... No Charge
Loose grass and leaves (de-bagged) No Charge

Note: Construction and Demolition and Grinding fees are the same for residential, commercial or industrial users.

Ground and/or Non-ground Brush, Limbs, and Trees

These items will be charged on a per load basis. The amount charged will depend on the type of vehicle and if the material is separated to be grindable or if it is mixed and non-grindable. Materials brought to the landfill in compactor vehicle will be charged by the ton.

Vehicle Type	Grindable Load	Non-grindable Load
Pick-up Truck	\$8.00 per load	\$10.00 per load
Pick-up with trailer (both loaded)	\$15.00 per load	\$20.00 per load
Single Axle	\$30.00 per load	\$80.00 per load
Tandem Axle	\$75.00 per load	\$150.00 per load
Tri-axle	\$87.00 per load	\$165.00 per load
Trailer dump up to 30'	\$130.00 per load	\$180.00 per load
Trailer dump 31' to 39'	\$143.00 per load	\$190.00 per load
Trailer dump over 39'	\$155.00 per load	\$210.00 per load
Compactor	\$20.00 per ton	\$24.00 per ton

Loads of grubbing, roots, stumps and loads contaminated with dirt, brush, limbs, trees, etc. will not be considered grindable and will be charged the non-grindable rate.

If a load of waste is unloaded at the grinders and it has other materials mixed in that makes the load non-grindable, a special handling fee will be charged for the load. This fee is for employee and equipment time to transport the material to the Landfill to be buried.

Mulch and Compost

Mulch	\$10.33 per yard with a 3 yard minimum purchase 3 yard bucket = \$31.00 or \$24.00 per ton
Compost	\$15.16 per yard with a 3 yard minimum purchase 3 yard bucket = \$45.50 or \$35.00 per ton

Customers may choose to pay per 3 yard bucket or have their vehicle weighed.

(No Mulch or Compost Sales on Wednesday)

Scrap Tires

Tires without proper documentation, Tires that have been buried, Tires stockpiled prior to January 1, 1994, and Out of State Tires.....\$80.00 per ton

Note: If the Sanitary Landfill is used when the Construction and Demolition Landfill is closed, users will be charged Sanitary Landfill fees.

Solidwaste Convenience Centers

Cooksville-located on Rhoney Farm Road

Open-Friday & Saturday
Closed-Sunday – Thursday
Hours-8:00 AM – 6:00 PM
Phone 704.462.1497

Blackburn-located on Rocky Ford Road

Open-Monday - Saturday
Closed-Sunday
Hours-8:00 AM – 6:00 PM
Phone 704.462.2496

Oxford-located on Lookout Dam Road

Open- Wednesday - Sunday
Closed-Monday & Tuesday
Hours-10:00 AM – 6:00 PM
Phone 828.241.3774

Bethany Church Road

Open-Tuesday - Sunday
Closed-Monday
Hours-10:00 AM – 6:00 PM
Phone 828.465.4635

Sherrills Ford Road

Open – Wednesday - Sunday
Hours – 10:00 AM – 6:00 PM
Phone 828.478.2248

Residential Waste Only

1 to 5 (32 gallon) bags.....	\$1.25 per bag
Small truckload (6 foot bed-waste in truck only)	\$12.00
Large truckload (8 foot bed-waste in truck only)	\$18.00
Trucks with sideboards or waste higher than 2 ft above bed	\$24.00
Trucks with camper tops.....	\$24.00
Trucks w/6 foot or less trailers (waste in truck and trailer)	\$36.00
Trucks w/more than 6 foot trailers (waste in truck and trailer).....	\$50.00

Recyclables

Recyclables only (properly cleaned and separated).....No Charge

- Recyclables must be reasonably compressed, cleaned, segregated and free of waste.
- After attendant checks the recyclables, citizens are required to sort and place in designated recycling containers.
- Recyclables must be on current list of accepted materials.
- Clear 32 gal. recycling bags may be purchased at cost from the Convenience Centers, the Blackburn Landfill office, or the Utilities and Engineering Department in the Government Center.

**For information on curbside pick up, please call Garbage Disposal Service at 828/256-2158.
For disposal information, please call the Blackburn Landfill at 704/462-1348.**

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Extra Service Provided

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Other Materials

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Brick/block/concrete without reinforcement material and separated from other waste.....
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Loose grass and leaves (de-bagged) No Charge

Note: Construction and Demolition and Grinding fees are the same for residential, commercial or industrial users.

Ground and/or Non-ground Brush, Limbs, and Trees

These items will be charged on a per load basis. The amount charged will depend on the type of vehicle and if the material is separated to be grindable or if it is mixed and non-grindable. Materials brought to the landfill in compactor vehicle will be charged by the ton.

Vehicle Type	Grindable Load	Non-grindable Load
Pick-up Truck	\$8.00 per load	\$10.00 per load
Pick-up with trailer (both loaded)	\$15.00 per load	\$20.00 per load
Single Axle	\$30.00 per load	\$80.00 per load
Tandem Axle	\$75.00 per load	\$150.00 per load
Tri-axle	\$87.00 per load	\$165.00 per load
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Trailer dump 31' to 39'	\$143.00 per load	\$190.00 per load
Trailer dump over 39'	\$155.00 per load	\$210.00 per load
Compactor	\$20.00 per ton	\$24.00 per ton

Loads of grubbing, roots, stumps and loads contaminated with dirt, brush, limbs, trees, etc. will not be considered grindable and will be charged the non-grindable rate.

If a load of waste is unloaded at the grinders and it has other materials mixed in that makes the load non-grindable, a special handling fee will be charged for the load. This fee is for employee and equipment time to transport the material to the Landfill to be buried.

Mulch and Compost

Mulch	\$10.33 per yard with a 3 yard minimum purchase 3 yard bucket = \$31.00 or \$24.00 per ton
Compost	\$15.16 per yard with a 3 yard minimum purchase 3 yard bucket = \$45.50 or \$35.00 per ton

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(No Mulch or Compost Sales on Wednesday)

Scrap Tires

Tires without proper documentation, Tires that have been buried, Tires stockpiled prior to January 1, 1994, and Out of State Tires.....\$80.00 per ton

Note: If the Sanitary Landfill is used when the Construction and Demolition Landfill is closed, users will be charged Sanitary Landfill fees.

Solidwaste Convenience Centers

Cooksville-located on Rhoney Farm Road

Open-Friday & Saturday
Closed-Sunday – Thursday
Hours-8:00 AM – 6:00 PM
Phone 704.462.1497

Blackburn-located on Rocky Ford Road

Open-Monday - Saturday
Closed-Sunday
Hours-8:00 AM – 6:00 PM
Phone 704.462.2496

Oxford-located on Lookout Dam Road

Open- Wednesday - Sunday
Closed-Monday & Tuesday
Hours-10:00 AM – 6:00 PM
Phone 828.241.3774

Bethany Church Road

Open-Tuesday - Sunday
Closed-Monday
Hours-10:00 AM – 6:00 PM
Phone 828.465.4635

Sherrills Ford Road

Open – Wednesday - Sunday
Hours – 10:00 AM – 6:00 PM
Phone 828.478.2248

Residential Waste Only

1 to 5 (32 gallon) bags.....	\$1.25 per bag
Small truckload (6 foot bed-waste in truck only)	\$12.00
Large truckload (8 foot bed-waste in truck only)	\$18.00
Trucks with sideboards or waste higher than 2 ft above bed	\$24.00
Trucks with camper tops.....	\$24.00
Trucks w/6 foot or less trailers (waste in truck and trailer)	\$36.00
Trucks w/more than 6 foot trailers (waste in truck and trailer).....	\$50.00

Recyclables

Recyclables only (properly cleaned and separated).....No Charge

- Recyclables must be reasonably compressed, cleaned, segregated and free of waste.
- After attendant checks the recyclables, citizens are required to sort and place in designated recycling containers.
- Recyclables must be on current list of accepted materials.
- Clear 32 gal. recycling bags may be purchased at cost from the Convenience Centers, the Blackburn Landfill office, or the Utilities and Engineering Department in the Government Center.

**For information on curbside pick up, please call Garbage Disposal Service at 828/256-2158.
For disposal information, please call the Blackburn Landfill at 704/462-1348.**

Appendix G
Public Meeting Advertisement

DRAFT

Appendix H
Management Plan for Abandoned Manufactured Homes

DRAFT

FIRST DRAFT dated 3-19-09

Catawba County

Management Plan for Abandoned Manufactured Homes

Planned implementation date: July 1, 2009

Plan's statutory basis: H1134 passed by the General Assembly in the short session/2008

Definition of Abandoned Manufactured Homes:

To qualify, manufactured homes must be: a) vacant or in need of extensive repair, and b) an unreasonable danger to public health, safety, welfare, or the environment.

Summary of Catawba County's goals/objectives in developing a plan to manage "abandoned manufactured homes" in the unincorporated areas of the County:

- To provide a reasonable and efficient method of management for these units which will encourage the abatement of what has been determined to be a nuisance and hazard to the public health, safety, welfare or the environment.
- To ensure that recycling of suitable materials from the units is accomplished and that proper management or disposal methods are followed for the non-recyclable materials including the potentially hazardous mercury containing thermostats.
- County desires to recoup some or all of the cost associated with this plan by participating in the reimbursement grant program from NC DENR effective July 1, 2009.

Outline of Catawba County's plan for management of "abandoned manufactured homes":

I. Identification:

Catawba County intends to identify the "abandoned manufactured homes" through the regular course of operation of their Code Enforcement Section. Primarily this will be handled on a complaint basis as a violation of the Catawba County Solid Waste Ordinance. Once a complaint is received or the unit is otherwise discovered, the process for determining that the unit is in fact "abandoned" under the definition herein given will begin. An "abandoned manufactured home" may also be identified through contact initiated by the homeowner or responsible party to the Code Enforcement Section with a request that the unit be identified as an abandoned manufactured home. Once such request is received the process of determination will follow as with units identified by complaint or routine discovery.

II. Determination:

As a matter of routine duties an employee or officer of the Catawba County Code Enforcement Section will conduct an investigation and/or on-site visit to view the unit and the property on which it is situated. If there is sufficient cause, the owner of the unit or responsible party will be determined as well as the owner of the land upon which the unit is located and both will be sent a written notice requiring abatement by the responsible party within 90 days. This notice will include notice of a hearing set by the "code enforcement officer" for discussion of the matter and response. The notices will be served on the person/s as provided by Rule 4(j) of the rules of Civil Procedure, G.S. 1A-1 and will incorporate guidance given in H1134 regarding the hearing date, location and content.

If, after notice and hearing, the officer determines that the unit is in fact “abandoned” based on initial findings and information and response provided by the owner or responsible parties, the officer will prepare a written statement of findings of fact in support of the determination and Catawba County will order the responsible party to dispose of the abandoned manufactured home within 90 days of the date of the notice. In the event of a dispute regarding the classification of a unit as “abandoned” the matter will be settled by the designated hearing officer, the Director of the Catawba County Utilities and Engineering Department.

Should the responsible party fail to comply with the order to abate the nuisance or dispose of the unit, Catawba County will move to the next steps of deconstruction and disposal.

III. Deconstruction, Recycling, Disposal and Management of Special Wastes

Catawba County will utilize both contracted on-site deconstruction and special management of the units brought to the Blackburn Landfill for disposal. An individual determination will be made by County personnel for each unit as to the feasibility of the unit being moved to the landfill for management versus the need for on-site deconstruction or a combination of both methods. Personnel making these determinations will be from the Code Enforcement Section and/or Solid Waste Departments. All factors will be considered in these decisions including safety issues which might arise with movement of units.

Checklist forms will be developed by Catawba County to aid in evaluating the individual units and determining the best method of management. Approved vendor criteria will be established for contractors wishing to engage in the business of moving mobile homes to the landfill under this plan and for on-site deconstruction services. Pre-approved vendors will be asked to bid on providing requested services for one or more abandoned manufactured homes as outlined in the informal bid request.

Clear written instruction will be provided to vendors for units being deconstructed on-site. For those units being transported to the landfill, a designated area will be used to store and process units. Special waste materials will be removed from the unit prior to the dismantling effort. These will include mercury switches from thermostats and any white goods present in the home including hot-water heaters. Other special waste such as paints will also be removed and separated from waste and traditional recyclable material such as metal siding. The vendor providing on-site deconstruction services will be required to provide records of the disposition of any materials removed, recycled and disposed from the unit. This will be critical for any materials not brought to the Blackburn Landfill for ultimate management.

Catawba County will store material removed from units as necessary and contract with an approved vendor for proper recycling and/or disposal of any potentially

hazardous material removed from units either at the landfill or from the on-site deconstruction efforts. White goods and other metals will be recycled through the programs already in place for these materials. Assistance will be provided under the current contract with the provider of these services as needed. In addition, landfill operations personnel will be utilized as required for deconstruction, recycling and disposal efforts on units brought to the landfill for disposal/management.

Materials classified as construction/demolition waste or municipal solid waste will be properly disposed under guidelines in place for this material and in compliance with current operating permits for the disposal facilities.

IV. Program Funding

Catawba County will submit a Reimbursement Grant Application to NC DENR as outlined in H1134 on forms developed by the Department or utilizing guidance provided. A detailed budget and proposed timeline for expenditures will be provided. It is understood that an agreement will then be reached with NC DENR which will designate a maximum amount of funding available to the County under that particular reimbursement grant. The County will submit reimbursement requests to NC DENR for funds expended under the program along with proper documentation of such. It is further understood that Catawba County, as a Tier 2 county, may request \$1,000 per unit and an additional amount equal to 50% of the actual direct cost of management over and above the \$1,000 per unit. Further details of cost and approved reimbursement limits will be covered in Reimbursement Grant Agreement itself.

Should Catawba County's cost to manage a unit or units exceed the available reimbursement from the NC DENR Reimbursement Grant the owner of the abandoned manufactured home or responsible party will be held liable for the difference. The county may initiate civil action for cost recovery and may impose a lien on any real property owned by the owner/responsible party.

V. Reporting

Catawba County will utilize proper accounting measures and document retention in order to comply with the following requirements:

“On or before August 1st of each year in which Catawba County has an active NC DENR Reimbursement Grant under the Abandoned Manufactured Home Program the County will submit a report to include the following”:

- 1) Number of units and tonnage of units managed under the program
- 2) Copies of receipts and disbursements from the County's abandoned manufactured home account during the previous fiscal year
- 3) Obligated and unobligated balances in the account at the end of the fiscal year
- 4) An assessment of the County's progress in managing abandoned manufactured homes