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

CATAWBA COUNTY, NORTH CAROLINA | July 1, 2012 to July 1, 2022

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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 2010-11), Catawba County has reduced its annual per capita rate to 0.93 tons per capita, a reduction of approximately 38%. As a comparison, the statewide per capita disposal rate was 0.99 for FY 2010-11. This reduced rate exceeds the County's goal of 22% reduction set in the 2009 report for FY 2013-14. 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 potentially feasible for Catawba County; however, the County is concerned about a negative impact that a recovering economy will have on future waste reduction efforts. It is apparent that the struggling economy has resulted in a significant decrease in the per capita disposal rate across the State of North Carolina. The County will be pursuing aggressive goals of furthering the reduction to 39% below the baseline by FY 2016-17 and 40% below the baseline by FY 2021-22. This corresponds to per capita disposal rates of 0.92 and 0.91 tons by June 30, 2017 and 2022, 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, electronics, and other special wastes. The required tonnage 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 2016-17 and FY 2021-22, resulting in the "no action" disposal tonnages of 245,445 and 253,952 tons respectively. Subtracting tonnages calculated based on proposed per capita rates for the same population projections from the baseline tonnage, Catawba County must divert a total of 95,903 tons by FY 2016-17 and 100,908 tons by FY 2021-22, based on the baseline per capita disposal rate. 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 disposal rates remain unchanged from the most current (FY 2010-11) rate of 0.93 to the planning years FY 2016-17 and FY 2021-22, the County would dispose of 151,168 and 156,407 tons in those years. This translates to diverting an additional 1,626 tons by June 30, 2017, and 3,363 tons by June 30, 2022 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, the plan will 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.

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, Long View, 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. The most current expansion of the Blackburn MSW Landfill (Unit 3, Phase 1) was constructed in 2008-09 and was permitted for operation in May 2009. This will provide the community a disposal area for the next seven (7) years, out of the approximate seventy-five (75) 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 reduction methods adopted to date is the recycling program. The community has the option of contracting with the franchise hauler or dropping off recyclable materials at one of the five (5) convenience centers, which are strategically located throughout the County.

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 these objectives, the County has 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 2011	2011 Percent of Population
Brookford	434	430	383	0.24%
Catawba	698	721	604	0.39%
Claremont	1,060	1,079	1,352	0.86%
Conover	6,667	7,603	8,110	5.17%
Hickory	37,145	40,112	40,010	25.48%
Long View	4,013	4,817	4,871	3.10%
Maiden	3,177	3,264	3,325	2.12%
Newton	12,659	12,988	12,995	8.28%
Catawba County-unincorporated areas	75,832	78,402	85,384	54.36%
Total	141,685	149,416	157,034	100%

Source: Responses from questionnaires from municipalities & Census data

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 received at the landfill and categorizes into sectors. The sectors are: residential, commercial, industrial, and construction/ demolition. Residential/ municipal waste refers to waste generated by households (individual and multi-family 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 2010-11

TYPE OF WASTE	TONS	% OF WASTE STREAM
Residential / Municipal	52,595	35.9%
Commercial	49,774	34.0%
Industrial	20,780	14.2%
Construction and Demolition	23,203	15.9%
Total	146,352	100.0%

Source: County records

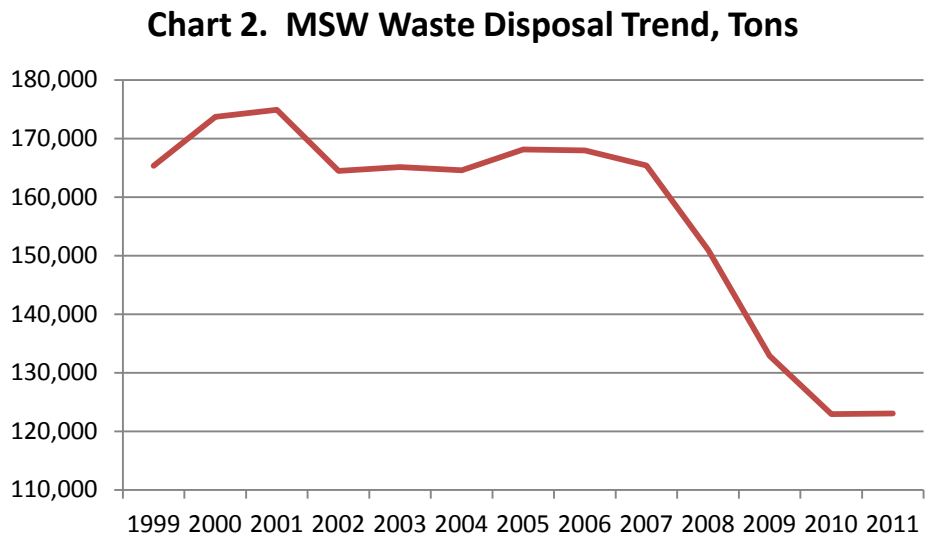
Chart 1. Waste Sectors by Percentage, FY 2010-11

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 & commercial sectors and overall economic conditions experienced from 2008 to 2011. In the 2009 Solid Waste Management Update, the Industrial/ Commercial sectors accounted for 62.3% of the waste disposed. As shown above the same sectors, although shown split apart above, have reduced to a combined 48.2% of the waste disposed. As a result, the residential/ municipal sector percentage has risen from 29.8% to 35.9%. The Construction/ Demolition waste percentage also decreased from 20.4% to 15.9%. 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 of 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 the Blackburn facility.

Municipal Solid Waste (MSW) Stream

The MSW waste stream was relatively stable from the mid 90s to 2006-07, but has experienced a substantial decline since that time, beginning in 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 an 8.9% decrease in the waste disposal tonnage from the previous year. The MSW waste is predominately dependent on the population and growth patterns. The FY 2007-08 decrease was due to a significantly slowing economy beginning late 2007/early 2008. The waste tonnages have continued to decrease since 2007-08. The following chart indicates the amount of waste disposed in the Blackburn MSW landfill since 1998. In FY 2010-11, 123,149 tons of municipal solid waste (MSW) was disposed of in the Blackburn MSW Landfill. This was a 0.1% increase in the waste disposal tonnage from the previous year. The waste disposal volume at the Blackburn MSW Landfill has decreased at an average annual rate of 7.4% since FY 2006-07.



At this time, the County has not conducted 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 most recently prepared 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 in Catawba County. Catawba County does not track food waste independently. The tonnage of yard waste is included in the wood waste tonnage.

Table 3. Estimate of MSW Waste Composition for FY 2010-11

MATERIAL	STATE ESTIMATE (%)	ESTIMATED 2010-11 WASTE DISPOSED (Tons)
Paper	27.0	33,250
Cardboard	16.4	20,196
Plastics	10.0	12,314
Yard Waste	0.5	616
Food Waste	20.0	24,630
Glass	7.4	9,113
Textiles	4.0	4,926
White Goods & Metals	3.0	3,695
Aluminum & steel cans	2.0	2,463
Wood Waste	9.5	11,699
Special Waste	0.2	247
Total	**100%**	**123,149**

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, cardboard, cable, plastics, food containers, and food waste. Some of these materials currently being disposed of are potentially recyclable or reusable. Waste tonnages from FY 2010-11 for the industrial and commercial waste generators totaled 70,554 tons (commercial – 49,774 tons and industrial – 20,780 tons). Table 4 provides a tabulation of the top ten commercial and industrial waste generators within Catawba County, as reported during FY 2010-11.

Table 4. Top Ten Commercial and Industrial Waste Generators, FY 2010-11

GENERATOR 2010-11	TONS 10-11	MAJOR MATERIALS
Shurtape Technologies	2,419	Tape, non-recyclable cardboard, paper, cardboard reels, plastic
Corning Cable	1,539	Wire, wood reels, cable, cardboard drums
Mom & Pops	1,122	Food packaging, frozen foods, plastic wrap, non-recyclable cardboard, break room waste (paper, cups, food wrappers, containers, food waste, etc.)
Ethan Allen	768	Wood, metal furniture parts, foam rubber, cloth, cardboard cones, break room waste (paper, cups, food wrappers, containers, food waste, etc.)
Draka	739	Wood reels, cable, break room waste (paper, cups, food wrappers, containers, food waste, etc.)
Comm Scope	697	Non-recyclable cardboard, plastic barrels, wood, paper, plastic bands, wire, cable, break room waste (paper, cups, food wrappers, containers, food waste, etc.)
McCreary Modern	616	Pegboard, plywood, plastic, break room waste (paper, cups, food wrappers, containers, food waste, etc.)
Frye Regional Hospital	593	Plastic bags, gowns, scrubs, paper, cafeteria waste (paper, cups, food wrappers, containers, food waste, etc.),
Hickory Springs	587	Foam rubber, springs, wire, webbing, fiber, break room waste (paper, cups, food wrappers and containers, food waste, etc.)
Catawba Valley Medical Ctr.	586	Paper, plastic, Styrofoam, glass, scrubs, gowns, cafeteria waste (paper, cups, food wrappers, containers, food waste, etc.),
TOTAL	9,666	

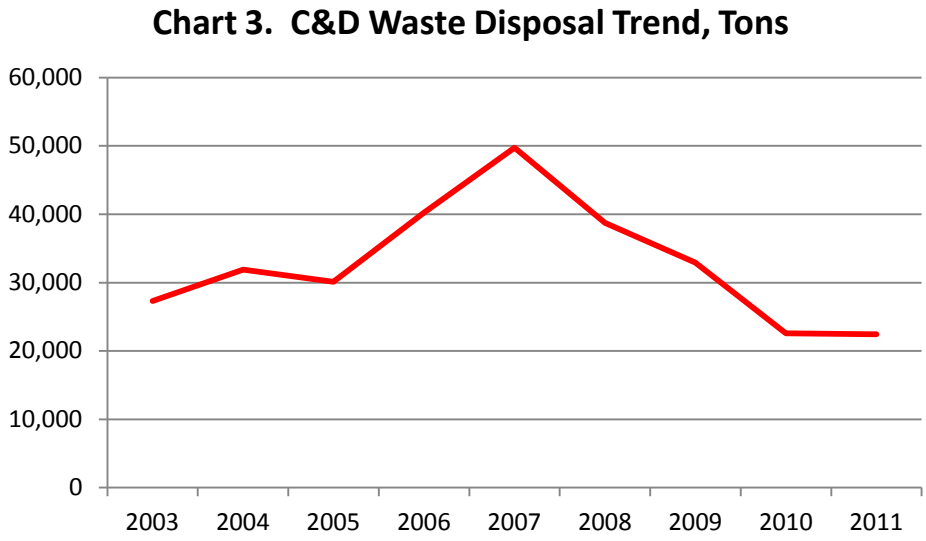
Source: information provided by Catawba County

The top ten generators produced approximately 13.7% of the total industrial and commercial waste stream during FY 2010-11. By comparison, the top ten commercial/ industrial waste generators in 2009 accounted for 10.9%. 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 2009 update of the Ten Year Solid Waste Management Plan, is definitely attributable in part to the overall downturn in the economy over the past several years. Some businesses have closed manufacturing plants and/or reduced working hours at others. Some businesses have actually closed and no longer dispose of any waste. 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 2010-11, 23,203 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 decreased approximately 22%. Once again, this reduction was realized concurrent with a depressed construction market resulting from economic turmoil beginning in FY 2007-08. 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 2011. In FY 2010-11, 23,203 tons of C/D waste was disposed of in the Blackburn C/D Landfill. This was a 1% increase in the waste disposal tonnage from the previous year. The waste disposal tonnage at the Blackburn C/D Landfill has decreased at an average annual rate of 16.7% since FY 2006-07.



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 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 Republic Services. However, Brookford, Hickory, and Newton provide non-residential waste collection services for many businesses located within their municipality. Some businesses located in the City of Newton contract directly with Republic Services for their commercial or industrial waste collection.

Republic Services contracts with Catawba, Claremont, Hickory, Long View, and Maiden for the collection of recyclables. A private individual collects recyclables within the Town of Brookford at no cost to the Town. Conover and Newton collect recyclables within their municipalities. Claremont, Conover, Hickory, Long View, Maiden, and Newton collect their own yard waste. The City of Hickory also operates a recycling program that collects mixed paper, office paper, plastics, aluminum, newspaper, cardboard, glass from restaurants, motor oil, antifreeze, and recyclables from multi-family complexes. The City of Hickory also offers dumpster rentals to large corrugated cardboard generators. The City of Hickory supports approximately 600 businesses in their recycling efforts.

Construction & demolition waste collection services are available to all of the municipalities in Catawba County through Republic Services. The City of Claremont provides residential collection of construction & demolition debris. 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 Republic Services for collection and disposal service.

Catawba County operates five (5) staffed recycling and residential waste collection centers (convenience centers) in unincorporated areas of the County, (see Appendix C for map). Catawba County contracts the operation of the convenience centers with Republic Services. Each center provides for disposal of household waste and the collection of recyclable material.

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

Brookford:

- Provides residential and commercial collection of waste

Catawba:

- Collects residential waste

Claremont:

- Contracts all residential MSW collection with private hauler
- Collects residential construction & demolition waste
- Operates yard waste collection route

Conover:

- Residential curbside waste and recyclables collection, once per week
- Operates yard waste collection route

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 waste collection contracted through Republic Services
- Operate bulky waste (junk) route by request
- Operates yard and bulky waste collection route

Maiden:

- Residential waste and recyclables collection contracted through Republic Services
- Operates yard waste collection route

Newton:

- Provides residential and commercial pick up of municipal solid waste and construction/demolition waste
- Operates yard waste collection route

Table 5 below indicates which municipalities self perform solid waste collection and which municipalities contract solid waste collection with Republic Services. Catawba County does not self-perform any waste collection, but does provide access to curbside waste collection to all citizens located within the unincorporated areas, via their Franchise Agreement with Republic Services.

Table 5. Municipalities That Provided Collection of Solid Waste FY 2010-11

NAME	PROVIDES COLLECTION	CONTRACTS COLLECTION
Brookford	Yes	No
Catawba	Yes	No
Claremont	No	Yes
Conover	Yes	No
Hickory	Yes	No
Long View	Yes	Yes
Maiden	No	Yes
Newton	Yes	No

Source: Catawba County

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

Table 6. Waste Hauling Information, FY 2010-11

HAULERS	RESID. WASTE	NON-RESID WASTE	C&D WASTE	TONS HAULED	DISPOSAL DESTINATION
Republic Services (primarily from unincorporated areas)	Yes	Yes	Yes	84,551	Blackburn Landfill
Brookford	Yes	No	No	188	Blackburn Landfill
Catawba	Yes	No	No	275	Blackburn Landfill
Claremont	No	No	Yes	23.2	Blackburn Landfill
Conover	Yes	No	No	2,847	Blackburn Landfill
Hickory	Yes	Yes	Yes	24,649	Blackburn Landfill
Long View	Yes	No	No	208	Blackburn Landfill
Maiden	Yes	No	No	126.4	Blackburn Landfill
Newton	Yes	Yes	Yes	5,956	Blackburn Landfill

Source: Catawba County & municipalities

Waste Disposal

All waste generated in Catawba County is disposed of at the Blackburn Landfill Facility, located off of Rocky Ford Road. The facility is owned and operated by Catawba County and includes 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 for approximately seven (7) years. Catawba County has site study approval on more than 230 acres of additional waste area. This additional waste area translates to approximately 75 years of waste capacity.

Catawba County also operates a construction/ demolition waste landfill at the Blackburn Landfill Facility. Currently, Catawba County has 23.3 acres of permitted waste area with an additional 5-acre area substantially prepared for a planned expansion and permit to operate. The existing footprint will provide approximately seven (7) years of capacity.

Waste Disposal Tax

North Carolina passed legislation in 2007 and modifications to legislation in 2008 requiring a $2.00 per ton tax be placed on all municipal solid waste and construction/demolition waste being disposed in the State or transferred for disposal out of the 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. The net revenue from the tax proceeds is distributed by the State of North Carolina for solid waste projects associated with cleanup and recycling, with a portion distributed to NC municipalities on a per-capita basis.

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 State supported programs to improve and expand its solid waste management and recycling programs and will encourage and support 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 a self-supporting program with a tipping fee that has remained stable at $30 per ton since 1995. Financial analyses indicated that in order for the enterprise fund to remain solvent a $1.00 per ton increase in the tipping fee would be required. This increase, along with the States mandated $2.00 per ton disposal tax, justified the $3.00 per ton increased tipping fee.

Recycling

Catawba County and the municipalities operate a very aggressive recycling program. In FY 2010-11, a total of 68,404.97 tons was recycled. A breakdown of the recycled material is shown in Table 7. In addition, Catawba County diverted 35,385 tons of woods chips from Catawba County's EcoComplex for a total of 103,789 tons of diverted material.

Table 7. Recycling in Tons, FY 2010-11

Material	Catawba County	Brookford	Catawba	Claremont	Conover	Hickory	Long View	Maiden	Newton	Total
Metal Cans	361.36		2.14	4.64	39.64	5.40	8.24	10.24	31.83	463.49
Office Paper	858.62					104.12				962.74
Textile	339.9									339.9
Glass	867.36		5.84	14.51	90.74	570.2	52.24	22.30	88.27	1,711.46
Mixed Paper	1,674.55			31.31		149.1	96.84			1,951.8
Mixed Plastic	1,165.5		5.52	11.28	57.38	222.1	30.96	0.85	74.54	1,568.13
Corrugated Cardboard	8,218.1				26.21	828.73			37.19	9,110.23
Newspaper and Mags.	935.28		9.05		203.28	761.5		49.46	186.55	2,145.12
White goods/metals	136.09				1.50	161.12				298.71
Pallets	10,516.16									10,516.16
Electronics	44.85			2.06	5.0					51.91
Household Haz	48.03									48.03
Tires	3,486.21				8.30		2.0		1.22	3,497.73
Wood	27,300									27,300
Yard waste	6,825.17				1.58					6,826.75
Asphalt & Masonry	1,612.29									1,612.29
Other	0.52									0.52
Totals	64,389.99	0.00	22.55	63.8	433.63	2,802.27	188.28	82.85	419.6	68,404.97

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

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

Catawba County

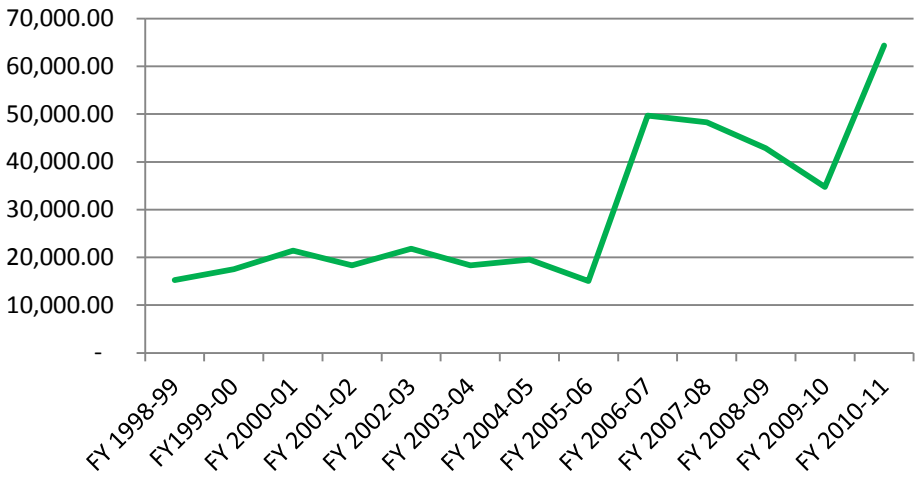
- Recycled approximately 64,390 tons of material in FY 2010-11. Highest per capita recycling rate for the State of North Carolina in FY 2010-11.
- Collects recycled material at five (5) convenience centers in unincorporated Catawba County.
- Employs dedicated Waste Reduction Coordinator to oversee County program.
- Conducts bi-annual Residential Household hazardous Waste and Electronics Collection Events each year.
- Established a recycle incentive program for 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 22 businesses signed up as partners.
- Worked with two industries at the EcoComplex to establish a re-use/ diversion of 35,385 tons of wood by-products.
- Worked with Catawba County School System to develop "Queen of Green" play.
- County Awards associated with Recycling and Recovery:
    - Excellence in Planning & Financial Management, SWANA – Blackburn Resource Recovery Facility
    - NC Litter Prevention Award, NCDOT/Office of Governor/NCKAB/NCBA
    - Excellence in Local Government, Alliance for Innovation; Thomas Muehlenbeck Award – Catawba County Regional EcoComplex & Resource Recovery Facility
    - NACO 2008 Achievement Award - Catawba County Regional EcoComplex & Resource Recovery Facility
    - NC Local Government Award, Carolina Recycling Association – Catawba County Waste Reduction & Recycling Program
    - Catawba County Buy Recycled Departmental Achievement Award
    - Engineering Excellence Award, American Council of Engineering Companies – Catawba County Biodiesel Research Facility

Catawba County has been aggressively pursuing new markets and educating the public about ways to recycle. As a result, the County has realized a dramatic increase in their 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 Pallet One and G&G Lumber.

Source: Catawba County

- *Catawba County's EcoComplex*

Chart 4. Catawba County Recycling Trend, Tons



Catawba County's EcoComplex is a Renewable Energy Industrial Park combining energy, production, businesses and waste management systems. The complex will ultimately include the landfill, methane electrical generating plant, wood gasification energy facility, biodiesel production & research facility, crop processing facility, sludge management facility, a dimensional lumber facility, wood pallet facility, brick and pottery facility, greenhouse facility, and turf research farm. The fundamental goal of the EcoComplex is to promote and utilize the municipal solid waste and construction/ demolition waste landfills as resource recovery facilities by converting the waste streams into commodities and creating green energy through a virtually closed system. Several of the EcoComplex components have already been established, including the landfill, a pallet manufacturer, a dimensional lumber company, Biodiesel Production & Research Facility, and Crop Processing Facility. One of the initial benefits was the diversion of 35,385 tons of wood by-products. The County is presently in the development stages of the research facility, the bio-solids facility, and the bio-energy facility. The Biodiesel Research and White Goods Freon Recovery Facility will involve research of all aspects of biologically derived energy recovery and utilization of biodiesel, hydrogen, nitrogen, carbon dioxide, and ethanol for environmental, agricultural, Freon recovery, and energy use. All white goods containing Freon will be received at the facility, the Freon removed, and then transported to the bulk white goods/ metal recycling facility.

A summary of the municipalities recycling programs is listed below:

Brookford

- Does not collect recycling, but recycling collected by private individual
- Purchases recycled products when practical & cost-effective

Catawba

- Contracts with Republic Services to collect recyclable material
- Collected 22.55 tons in FY 2010-11

Claremont

- Contracts with Republic Services to collect recyclable material
- Collects yard waste within their municipality
- Collected 63.8 tons in FY 2010-11

Conover

- Provides weekly curbside residential collection
- Provides one 18-gallon recycle bin to each household at no charge
- Provides education through community workshops, national Public Works Day, and handouts.
- Collects yard waste within their municipality
- Collected 433.63 tons in FY 2010-11

Hickory

- Contracts with Republic Services to collect residential recyclable material
- Provides two pubic drop-off centers
- Provide collection at approximately 24 multi family recycling centers
- Provides collection to businesses, restaurants, schools, and other institutions
- Provides recycling services to approximately 600 businesses and institutions
- Collects yard waste within their municipality; 6,500 tons in FY 2010-11
- Collected 2,802.27 tons in FY 2010-11

Long View

- Provides curbside residential collection though contract with Republic Services
- Collects yard waste within their municipality
- Collected 798.48 tons in FY 2010-11

Maiden

- Provides curbside residential collection though contract with Republic Services

- Collects yard waste within their municipality; 610.2 tons in FY 2010-11
- Collected 82.85 tons in FY 2010-11

Newton

- Provides curbside residential and small business collection
- Collects yard waste within their municipality; 1,940 tons in FY 2010-11
- Collected 419.6 tons in FY 2010-11

Financial Assessment

The Solid Waste costs 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 2010-11. Costs are given for collection, disposal, and waste reduction for each municipality and the County, when provided by the municipality.

Catawba County

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

The total budget for the county-operated solid waste program during FY 2010-11 was $5,383,457.90. Catawba County has a total of 157,034 citizens from approximately 59,251 households. However, the collection and waste reduction components of the County solid waste programs primarily serve the unincorporated areas of the County, which have a population of 85,384 and approximately 33,484 households. The annual cost of County collection was $332,507.24. This includes the collection centers and collection from government-operated facilities such as schools, Government Center, and the Courthouse. Disposal costs in the same year were $4,935,456.52. Waste reduction program costs, including recycling, reuse, mulching, household hazardous waste events, etc. total $115,494.14. Methane recovery costs are included with disposal costs. Administration expenses have been prorated in the aforementioned costs. Catawba County managed 146,352 tons of waste for collection and disposal and 64,390 tons of recyclable material, yard waste, and land clearing debris in FY 2010-11. The total waste managed was 210,742 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 2010-11

	COLLECTION*	DISPOSAL**	WASTE REDUCTION***	TOTAL
PROGRAM COST	$332,507.24	$4,935,456.52	$115,494.14	$5,383,457.90
COST PER TON	$2.27	$33.72	$1.79	$25.54
COST PER HOUSEHOLD	$9.93	$83.30	$3.45	$90.85

Source: Republic Services, 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 costs. 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 provides residential solid waste collection for approximately 383 citizens. Recycling is performed by a private individual at no cost to the Town. The Town collected a total of 188.05 tons of residential waste for a combined total cost of collection and disposal of $21,100 for FY 2010-11.

Catawba Description:

The Town contracts with Republic Services to collect recycling 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 604 citizens from approximately 280 households that disposed of 275 tons of waste and produced 22.55 tons of recyclable material in FY 2010-11. The total waste managed was 297.55 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 2010-11

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	$73,333	**	$10,250	$83,583
COST PER TON	$266.67	**	$454.55	$281.81
COST PER HOUSEHOLD	$261.90	**	$36.61	$298.51

Source: Town questionnaire
*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.
** Disposal cost included with collection

Claremont Description:

Claremont contracts with Republic Services for collection of residential and non-residential solid waste and recyclables. The City of Claremont does collect construction & demolition waste. Claremont has 1,352 citizens from approximately 531 households that

disposed of 699.2 tons of waste and produced 63.8 tons of recyclable material in FY 2010-11. The total waste managed was 763 tons. The summary of solid waste costs for that year is shown below in Table 8B.

Table 8B. Claremont Solid Waste Program Costs, FY 2010-11

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	**	**	**	$87,000
COST PER TON	**	**	**	$114.02
COST PER HOUSEHOLD	**	**	**	$163.84

Source: Town questionnaire

*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.
** Only total program costs provided by municipality via questionnaire.

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 8,110 citizens from approximately 3,180 households that disposed of 2,847 tons of waste and produced 433.63 tons of recyclable material in FY 2010-11. The total waste managed was 3,280.63 tons. The summary of solid waste costs for that year is shown below in Table 8C.

Table 8C. Conover Solid Waste Program Costs, FY 2010-11

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	$469,182	$122,500	$112,439	$704,121
COST PER TON	$143.02	$43.03	$259.30	$214.63
COST PER HOUSEHOLD	$147.54	$38.52	$35.36	$221.42

Source: Town questionnaire

*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 Republic Services. Hickory has 40,010 citizens from approximately 16,466 households that disposed of 24,649 tons of waste and produced 2,802.27 tons of recyclable material in FY 2010-11. The City also recovered 6,500 tons through mulching and composting. The total waste managed was 33,951 tons. The summary of solid waste costs for that year is shown below in Table 8D.

Table 8D. Hickory Solid Waste Program Costs, FY 2010-11

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	**	**	**	$3,700,000
COST PER TON	**	**	**	$108.98
COST PER HOUSEHOLD	**	**	**	$224.71

Source: Town questionnaire
*Waste reduction includes all reduction, reuse and recycling, mulching, composting, and other programs.
** Only total program costs provided by municipality via questionnaire.

Long View Description:

Long View contracts with Republic Services 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 4,871 citizens from approximately 1,911 households that disposed of 2,669 tons of waste and produced 188.28 tons of recyclable material in FY 2010-11. The Town also recovered 610.2 tons of yard waste. The total waste managed was 3,467.48 tons. The Town of Long View did not provide any solid waste program cost information.

Maiden Description:

Maiden contracts with Republic Services 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 3,325 citizens from approximately 1,304 households that disposed of 593.97 tons of waste and produced 82.85 tons of recyclable material in FY 2010-11. The Town also recovered 340 tons of yard waste. The total waste managed was 1,016.82 tons. The total annual cost for brush and bulky waste collected by the Town is $80,000. The total cost of contracting with Republic Services for solid waste and recycling collection is $240,000. The Town's total annual solid waste budget is $320,000.

Newton Description:

The City of Newton collects solid waste and recyclables for residential and non-residential locations within their municipality. Larger businesses have the option of contracting with Republic Services to collect their non-residential waste. Newton also collects a portion of the construction & demolition waste in the City. Newton has 12,995 citizens from approximately 5,440 households that disposed of 7,007.36 tons of waste and produced 419.6 tons of recyclable material in FY 2010-11. The City also recovered 1,940 tons of material through mulching and composting. The total waste managed was 9,366.96 tons. The summary of solid waste costs for that year is shown below in Table 8G.

Table 8E. Newton Solid Waste Program Costs, FY 2010-11

	COLLECTION	DISPOSAL	WASTE REDUCTION*	TOTAL
PROGRAM COST	$539,341.24	$191,342.83	$132,175.69	$862,859.76
COST PER TON	$76.97	$27.31	$56.02	$92.12
COST PER HOUSEHOLD	$99.14	$35.17	$24.30	$158.61

Source: Town questionnaire
*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 through a "Pay as You Throw" program. Table 9 shows a summary of the solid waste program costs by entity.

Table 9. Summary of Solid Waste Program Cost, FY 2010-11

	Collection	Disposal	Waste Reduction	Total
Catawba County	$332,507.24	$4,935,456.52	$115,494.14	$5,383,457.90
Catawba	$73,333	Inc. in collect.	$10,250	$83,583
Claremont	Not Provided	Not Provided	Not Provided	$87,000
Conover	$469,182	$122,500	$112,439	$704,121
Hickory	Not Provided	Not Provided	Not Provided	$3,700,000
Long View	Not Provided	Not Provided	Not Provided	Not Provided
Maiden	Not Provided	Not Provided	Not Provided	$320,000
Newton	$539,341.24	$191,342.83	$132,175.69	$862,859.76

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 declined. 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 declined approximately 22%. The C/D waste stream has continued to decline since that time with drops of 15% (FY2008-09), 31% (FY 2009-10), and 0.6% (FY 2010-11). In the 2009 Solid Waste Management Plan update, Catawba County and the municipalities set goals of 22% waste reduction by FY 2013-14 and a 25% waste reduction by FY 2018-19. This was equivalent to 1.18 and 1.13 tons per capita disposal rates, respectively.

Eighteen 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 2010-11), Catawba County has reduced its annual per capita rate to 0.93 tons, a reduction of approximately 38%. As a comparison, the statewide per capita disposal rate was 0.99 for FY 2010-11. The 0.93 rate exceeds the County's goal of 22% reduction set in the previous report for FY 2013-14. This accomplishment is a tribute to the hard work and dedication of all solid waste personnel of the County and its municipalities. In addition, the significant diversions of the EcoComplex partners has contributed greatly to exceeding the goals.

The Department of Utilities and Engineering and the Catawba County Landfill staff believe Catawba County and the eight (8) municipalities 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 2010-11.

The County is of the opinion that the recommended 40% waste reduction goal recommended by the North Carolina Department of Environment and Natural Recourses, Division of Solid Waste Management may actually be attainable for Catawba County during this planning period. However, the County is concerned that significant growth in the economy may actually have negative affects on their waste reduction efforts. 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. The County Department of Utilities and Engineering wants to set realistic and attainable waste reduction goals for the planning period.

Following a review of the past waste stream trends and population growth patterns, the County has chosen a waste reduction goal of 39% by FY 2016-17 and 40% and FY 2021-22 as compared to the FY 1989-90 baseline year. This is equivalent to reducing the per capita waste disposal rates to 0.92 and 0.91 tons by June 30, 2017 and 2022, respectively. This will be challenging during periods of significant economic growth, but the County does not want to lose any momentum gained in the past eighteen years of working toward the waste reduction goals

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 245,445 tons in FY 2016-17 and 253,952 tons in FY 2021-22. 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 2016-17 and FY 2021-22, 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
FY 2010-11	157,034	146,352	0.93
	PROJECTED POPULATION	PROJECTED WASTE DISPOSAL	PER CAPITA DISPOSAL RATE
FY 2016-17	162,546	245,445	1.51
FY 2021-22	168,180	253,952	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 of 39% per capita waste reduction in FY 2016-17, and 40% in FY 2021-22 as compared to the FY 1989-90 baseline year per capita disposal rate. Catawba County must reduce its per capita disposal rate to 0.92 in FY 2016-17, and 0.91 in FY 2021-22 respectively, to meet these goals. Using the target per capita rates, the target annual tonnage remaining for disposal by Catawba County would be 149,542 tons in FY 2016-17, and 153,044 tons in FY 2021-22. In other words, a total of 95,903 tons diverted in FY 2016-17, and 100,908 tons diverted by 2021-22 in order to meet the waste goals. These figures have been summarized in Table 11 below.

Table 11. Targeted Waste Reduction, FY 2016-17, and 2021-22

CALCULATIONS	FY 2016-17	FY 2021-22
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)	0.92	0.91
3. Population Projections (County figure from Office of State Budget & Management)	162,546	168,180
4. Projected tonnage for disposal at the baseline disposal rate (multiplied line 1 by line 3)	245,445	253,952
5. Targeted annual tonnage for disposal At targeted per capita disposal rate (multiplied line 2 by line 3)	149,542	153,044
6. Targeted annual tonnage to reduce for FY's (subtracted line 5 from line 4)	95,903	100,908

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 2010-11) rate of 0.93 per capita disposal to the planning years FY 2016-17 and FY 2021-22, the County would dispose of 151,168 and 156,407 tons in those years. This translates to diverting an additional 1,626 tons by June 30, 2017, and 3,363 tons by June 30, 2022 beyond what is currenty being diverted.

Section 4 - Meeting the Waste Reduction Goals

This plan is designed to reduce Catawba County's per capita disposal rate to 0.92 by FY 2016-17, and 0.91 by FY 2021-22. This equates to diverting an additional 1,626 tons of waste by FY 2016-17 and an additional 3,363 tons by FY 2021-22. This would result in a total diversion of 95,903 tons by FY 2016-17 and 100,908 tons by 2021-22, as compared to the original baseline year of 1989. Table 12 summarizes the annual tonnages of waste targeted for reduction and disposal in FY 2016-17 and 2021-22 at the projected per capita disposal rates. As a comparison, in FY 2010-11, approximately 31% of the waste generated in Catawba County is recycled.

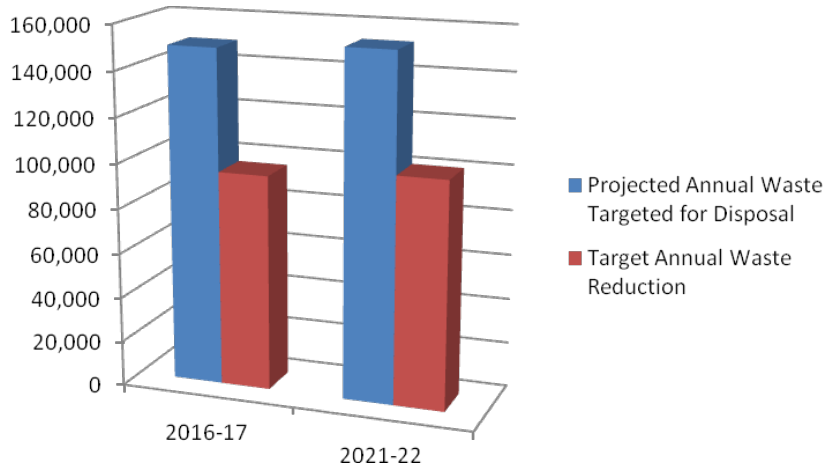
Table 12: Projected Annual Waste Targeted for Disposal and Targeted Annual Waste Reduction

	2016-17	2021-22
Projected Annual Waste Targeted for Disposal	149,542	153,044
Targeted Annual Waste Reduction	95,903	100,908

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 a total of 95,903 tons by FY 2016-17 and 100,908 tons by FY 2021-22, as compared to the baseline year per capita disposal rate. 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, 2016-2017, and 2021-2022

WASTE TYPE	% of Waste Stream	EST. TONS FY 2016-17	EST. TONS FY 2021-22
Residential/Municipal	35.9%	34,429	36,226
Commercial/Industrial	48.2%	46,225	48,638
Construction & Demolition	15.9%	15,249	16,044
Goal	100%	95,903	100,908

Source: Staff Calculations

Residential/ Municipal Waste

This plan proposes the total diversion of 34,429 tons in FY 2016-17, and 36,226 tons in FY 2021-22 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.

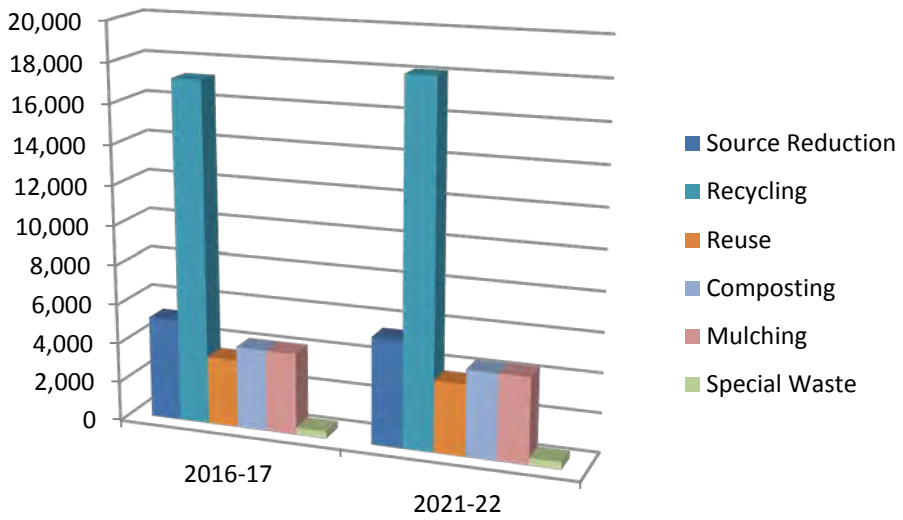
Table 14 Targeted Residential/ Municipal Waste Reductions, 2013-14, and 2018-19

Reduction Method	Targeted Materials	FY 2016-17 Tons	FY 2021-22 Tons
Source Reduction	Paper, Plastic, Styrofoam	5,164	5,434
Recycling	Cardboard, paper, plastics, glass, metals	17,214	18,113
Reuse	Clothing, furniture, appliances, households	3,443	3,623
Composting	Yard waste, organics	4,132	4,347
Mulching	Brush and other woody materials	4,132	4,347
Special Waste	Household hazardous waste/electronics	344	362
Totals		34,429	36,226

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 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 46,225 tons in FY 2016-17, and 48,638 tons in 2021-22, as listed in Table 15.

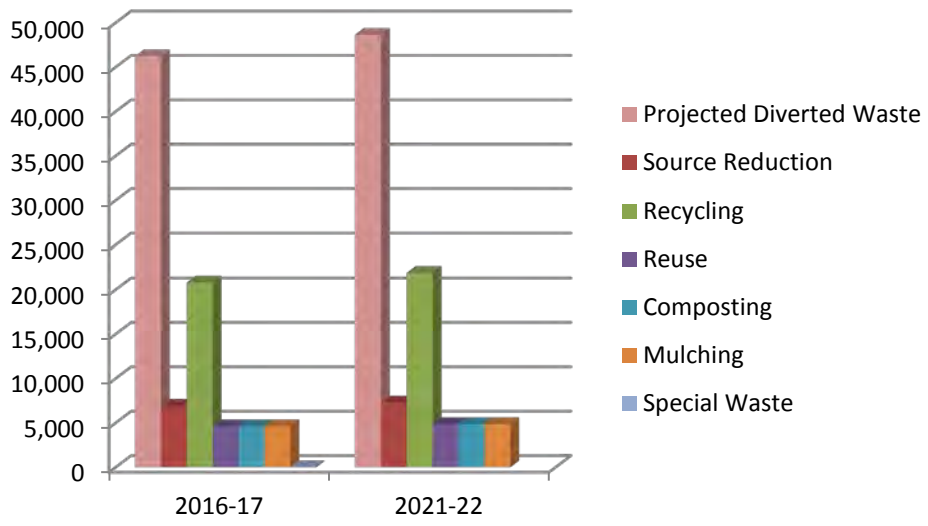
Table 15: Targeted Commercial/Industrial Waste Reduction, FYs 2016-17, and 2021-22

Reduction Method	Targeted Materials	FY 2016-17	FY 2021-22
Source Reduction	Pallets, foam padding, Styrofoam, furniture wood	6,935	7,296
Recycling	Plastics, paper, metal	20,802	21,886
Reuse	Wood reels, wood	4,622	4,864
Composting	Food products, animal waste	4,622	4,864
Mulching	Wood products	4,622	4,864
Special Waste	Cable, cloth, wire	4,622	4,864
Totals		46,225	48,638

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 15,249 tons in FY 2016-17, and 16,044 tons in FY 2021-22. The proposed reduction methods and targeted wastes tonnages are shown in Table 16.

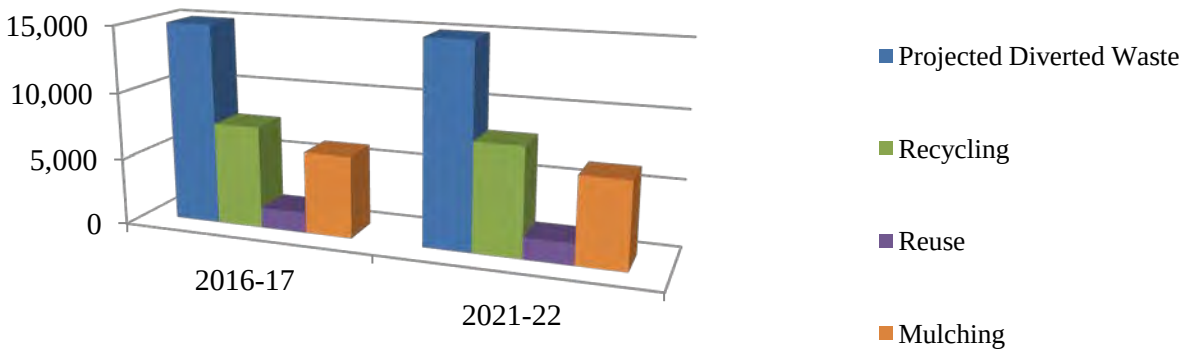
Table 16: Targeted C&D Waste Reduction, FYs 2016-17, and 2021-22

Reduction Method	Targeted Materials	FY 2016-17	FY 2021-22
Mulching	Wood products	6,099	6,418
Recycling	Asphalt, brick, block, concrete, shingles	7,625	8,022
Reuse	Concrete, block	1,525	1,604
Totals		15,249	16,044

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 2016-17, and 2021-22.

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 64.1% 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 detrimental 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 39% per capita waste reduction by the end of FY 2016-17, and a 40% per capita waste reduction rate by the end of FY 2021-22.

Section 5 - 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 18, 2012 at 7:00 p.m. in the 1924 Courthouse in Newton. The 2012 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 2012 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 F.

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.

Section 6 - 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 buying safer alternatives, buy only what you need, and use up those items you purchase)
- Food scraps/ organics (Back yard composting)
- Packing media (Buy products with less packaging, “flexible packaging”)
- Styrofoam (Use natural/ recyclable packaging material)
- Disposable Dishware/Flatware (Do not use)

Hickory and Maiden operate local backyard composting programs.

Catawba County currently has a 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 5,164 tons by FY2016-17 and 5,434 tons by FY 2021-22.

The County will continue to schedule one-day collection events in the spring and fall each year. 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 collection events 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; Catawba utilizes website, council meetings, and facebook; Hickory also places handouts in local convenience centers and businesses. The County will work to have all of the municipalities advertise the event for future collection events. Brochures will continue to be distributed throughout libraries, schools, and convenience centers. Private contract haulers will continue to package and transport the waste for disposal.

The County continues to strongly support their existing educational program 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 Blackburn MSW Landfill & EcoComplex Facility in hopes that experiencing a working landfill will highlight the reality that waste not diverted, reused or recycled ends up buried in the landfill. The EcoComplex of course will highlight real and tangible diversion, reuse, and recycling that is occurring in their community.

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 identify potential recyclables existing within their waste stream and assists with connecting them to recycling companies and markets. A certificate or decal 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 6,935 tons by FY2016-17 and 7,296 tons by FY 2021-22. 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. In FY 2010-11, 15,876 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 Republic Services. 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 - Saturday - 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 enclosed compactors and/or open top containers. A variety of recyclable materials are also accepted. Republic Services transfers all municipal solid waste collected at these sites to the Blackburn MSW Landfill. The recyclables collected at these sites are managed by Republic Services.

Residential:

Current Program: Unincorporated Catawba County, Claremont, Long View, and Maiden, through an agreement with Republic Services, is provided weekly residential waste collection. 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 Republic Services.

Commercial and Industrial:

Current Program: Large commercial establishments contract waste pick-up with Republic Services. Most businesses and portions of private residential communities use this service also. A few smaller businesses may utilize the municipal service if their volume is relatively insignificant. Brookford, Hickory and Newton provide commercial and industrial waste collection service.

Intended Actions: The County currently has no intended actions for modifying commercial and industrial collection, and intend for businesses to 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 31% 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 (Republic Services). The County also provides recycling opportunities via the five (5) convenience centers, which is equipped 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, all plastic bottles, and mixed paper. Cell phones and ink cartridges are also collected at these sites. Used oil and oil filters are collected at Blackburn, Cooksville, Newton and Oxford sites. Used antifreeze is collected at the Blackburn and Newton sites. Appliances and used cooking oil are collected at the Blackburn site. Pesticide containers from area farmers are

collected at Blackburn, Newton and Oxford sites. Convenience center staff educates and assists citizens with proper sorting. Educational information on recycling and contact information is also made available at the convenience centers.

Republic Services 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.

The total tonnages of materials recycled by Catawba County, including all private contracts with Republic Services, and the recyclables collected by the municipalities is shown in Table 7.

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

Table 17. Comparison between Estimated Tons Disposed and Tons Recycled, FY 2010-11

Materials	Est. Total Generated	Tons Recycled*	Est. Total Disposed	Percent Recycled	Available Processors or Markets
Paper	33,250	5,060	28,190	15.2%	Republic Services
Cardboard	20,196	9,110	11,086	45.1%	Republic Services
Plastics	12,314	1,568	10,746	12.7%	Republic Services
Glass	9,113	1,712	7,401	18.8%	Republic Services
Metals	6,158	762	5,396	12.4%	State Line
Organics	36,945	**17,343	19,602	46.9%	Digestion Facility
Textiles	4,926	340	4,586	6.9%	Specialty Recycler
Special Waste	247	93	154	37.7%	HHW contractors
Total	123,149	35,988	87,161	29.2%	

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.
** Does not include tonnage diverted from EcoComplex partners

Table 17 shows that approximately 29% of the readily recycled materials were diverted from the disposed waste stream in FY 2010-11. 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 Republic Services. However other markets may be available for specific materials, which are not currently collected by Republic Services.

Materials collected curbside by Republic Services include newspaper with inserts, catalogs, and phone books; aluminum cans; steel cans; clear, brown, and green glass; and plastic 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 are provided access to curbside recycling through Republic Services. These residents can also utilize the recycling bins at the convenience centers.

It is unclear the specific volume of recycling that 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 un-marketed 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 educational materials.

Table 18. Potential Recycling Markets for Currently Un-marketed 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 17,214 tons in FY 2016-17, and 18,113 tons in FY 2021-22. Table 19 lists the projected tons that will be targeted by type of material.

Table 19. Estimated Recycling Projections FY 2016-17 and FY 2021-22

MATERIAL	2016-17 TONS	2021-22 TONS
Glass	1,171	1,232
Plastic	620	652
Aluminum cans	430	453
Steel cans		
White goods	568	598
Newspaper and Magazines	3,615	3,804
Mixed Paper	1,033	1,087
Corrugated cardboard	8,951	9,419
Various wood	826	869
Total	17,214	18,113

Source: Staff projections

It is assumed that residents who currently use the solid waste and recycling collection centers (Convenience Centers) will continue to recycle. Solid Waste staff has been monitoring recycling habits and have realized 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 properly separate materials.

Non-residential recycling is targeted to reduce future waste by 20,802 tons in FY 2016-17, and 21,886 in FY 2021-22. 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 disposal of these materials, which are traditionally disposed of in the landfill. 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 should 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 7,625 tons in FY 2016-17, and 8,022 tons in FY 2021-22. 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 reduced in size into usable products 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. The County is planning to construct a new tire and shingle recycling area at the Blackburn Landfill in 2012.

Reuse:

Current Program: Non-profit programs such as Good Will, Salvation Army, Habitat for Humanity, Family Guidance Center, Resource Warehouse Gallery 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.

Intended Actions: Residential/ municipal waste reuse is targeted to reduce disposal by 3,443 tons in FY 2016-17, and 3,623 tons in FY 2021-22. Current programs will be continued.

Non-residential reuse is targeted to reduce waste by 4,622 tons in FY 2016-17, and 4,864 tons in FY 2021-22. 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 yard waste composting facility at the Blackburn Landfill. Hickory operates a yard waste composting facility at city property located on Cloninger Mill Road.

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

Intended Actions: Residential/ municipal composting is targeted to reduce waste up to 8,754 tons in FY 2016-17, and 9,211 tons in FY 2021-22.

To encourage residential backyard composting, worm bins and composting demonstrations have become an integral part of the County's education program. The demonstrations have been set up at Cooperative Extension Building, 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, received from various 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 properly 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 4,132 tons in FY 2016-17, and 4,347 tons in FY 2021-22, respectively.

Non-residential mulching will be targeted to reduce 4,622 tons in FY 2016,-17, and 4,864 tons in FY 2021-22. Construction and Demolition mulching will be used to reduce waste by 6,099 tons in FY 2016-17, and 6,418 tons in FY 2021-22. 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, wood gasification and University Research Facilities included as part of the current Master Plan of the Blackburn MSW Landfill, in lieu of incineration.

F. Incineration without Energy Recovery

Current Program: Incineration without energy recovery is not part of the County's current program. The County considers it an inappropriate waste management option.

Intended Actions: None

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 Catawba 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 the County has undertaken 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, Phase 2, Stage 1 and 2 in 2003, then with the latest update Unit 3, Phase 1 which began receiving waste in May 2009. The next expansion of the Blackburn MSW Landfill is planned for 2019, 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 the Unit 2 waste area. The Blackburn landfill will continue to be expanded to the east with the construction of subsequent phase 3 and eventually Units 4 and 5. Unit 3 is proposed to have a total footprint of 97.2 acres and Unit 4 is proposed to have a footprint of approximately 155.6 acres. Units 3, 4, and 5 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 was constructed at the Blackburn Landfill Facility on the south side of Rocky Ford Road and west of the MSW landfill. This allowed for both the MSW landfill and the C&D landfill to be served 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. Unit 3, 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, an unusually large amount of solid waste could be generated. Catawba County has a franchise agreement with Republic Services 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 renewal.

Initially all waste generated as a result of 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 Newton Landfill has been designated as a Temporary Disaster Debris Staging Site (TDDSS), Permit No. DS18-002, for vegetative debris resulting from a natural disaster. The Newton Landfill site could be used as a backup site to the Blackburn Landfill site or it may be used due to its proximity to the impacted area. The Newton

Landfill TDDSS would require activation through the NCDENR prior to being used for the temporary staging/storage/removal or processing of vegetative waste.

The City of Conover is in the process of developing a new Natural Disaster Plan.

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 provided 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 to residents via monthly "Snippets" in their water bill. Hickory also has a Recycling Advisory Board that meets monthly and promotes education within the City, including sponsoring Earth Day event.

Catawba County has provided forty-seven (47) EcoComplex landfill tours to the general public, students and teachers, scout groups, local businesses and potential EcoComplex partners on the importance of landfill operations and the need for recycling. Sixty-five (65) presentations were given to various public groups, including Environmental Awareness Field Days, School Career Days, Earth Day events, and America Recycles Day radio and television segments. Total number of people reached through all educational efforts during 2010-2011 was 14,066. The County became 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 establishing and improving recycling programs at the schools and their homes.

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

Brookford, Long View, and Maiden provide 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 programs for interested community members, schools and civic groups.

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

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

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

School Education:

Current Program: The Catawba County Waste Reduction Educator and Keep Catawba Beautiful periodically provides the school system 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 "Litter Sweep Weeks" program and participation in Earth day contests and events designed to increase 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. Catawba County sponsors an environmentally structured play named “The Queen of Green” which is presented to all 3rd and 4th graders.

Intended Actions: A member of the solid waste management staff will assist teachers in obtaining educational materials from the County offices, Keep Catawba County Beautiful, and NC Division of Environmental Assistance and Outreach.

A member of the solid waste management staff will encourage 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.

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 344 tons in FY 2016-17, and 362 tons in FY 2021-22.

Intended Actions: The County and City of Hickory will continue to collect special waste such as HHW, electronics, oil, batteries, tires, white goods, etc. at the landfill and/or transfer stations on designated days. The County does plan to add asphalt shingle recycling 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. New River Tire 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. New River Tire indicates that a very small amount of tires collected are separated for sale as used tires or for recapping. According to the tire recycling industry, 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 2,284 tons in 2004-05, 3,298 tons in FY 2007-08, and 3,497.73 tons in 2010-11.

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 approximately 100 tons of white goods are ready for removal, State Line Scrap Metal is called to transport and recycle white goods. Republic Services and various municipalities provide collection services for discarded appliances, which are brought to the Blackburn Landfill Facility. The various metals and White Goods that the County recycled and municipalities received was an estimated 298.71 tons in FY 2010-11. This is an approximate 28% decrease in various metals and white goods received in FY 2007-08. The most logical explanation for this change was the drastic decrease in the County's economy and the significant increase that private recycling companies are paying for scrap metal.

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 7,165 lbs. (3.59 tons) of mixed batteries were collected in fiscal year 2010-11.

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 Service 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 replace their own batteries and change their own motor 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 observed the yield of HHW more than triple over the time period of 2000-2011. The County has plans to continue supporting biannual HHW collection events; one in the spring and the other in the fall. The latest recorded event took place in the fall of 2011 and resulted in the collection of 46.25 tons. A Private contractor packaged and transported the waste collected at this event. Maiden also collects paint from residential customers four days per week. Claremont holds quarterly HHW collection events for residents.

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

Chart 9. Annual HHW & Electronics Collection, Tons

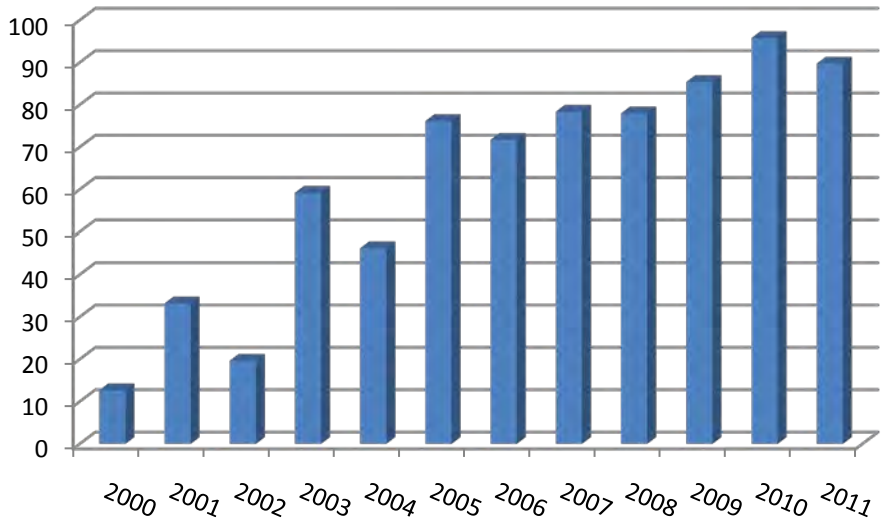
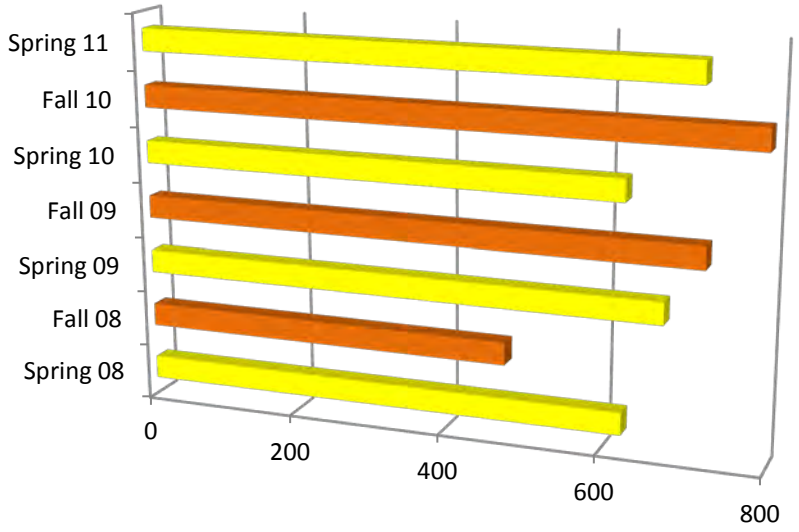


Chart 10. HHW & Electronics Collection Events Vehicle Participation



Source: Catawba County Staff

In an 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 a free newsletter addressing household hazardous products and other waste management issues.

Intended Actions: The County intends to continue sponsoring the biannual HHW collection events. The events will be advertised by local radio, television, newspaper, libraries, municipal facilities, websites, newsletters and utility bill inserts.

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 were accepted and buried at the Blackburn Landfill until July 1, 2009. The County implemented a new Management Plan for Abandoned Manufactured Homes in July 2010.

Intended Actions: To continue to implement and follow defined procedures on the handling and recycling of abandoned manufactured homes as outlined in the Catawba County Management Plan for Abandoned Manufactured Homes. A copy of the plan is included in Appendix G.

Electronics:

Current Program: Catawba County collects electronics two times per year at the bi-annual HHW collection events. During the time period between the HHW/electronics collection events, the Solid Waste Management Team requests that residents hold these items until the dates of the next scheduled event. Maiden collects electronics four days per week. Newton and Conover hold a monthly electronics collection event on the second Saturday of each month.

Intended Actions: Effective July 1, 2011, Catawba County implemented a permanent recycling program for all electronic wastes in accordance with the Electronics Recycling Plan. A copy of the Plan is included in Appendix H.

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 indentified 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 a 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 wastes 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 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. In 2006 Catawba County became an affiliate of Keep America Beautiful and is now known as Keep Catawba County Beautiful.

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, etc. 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 Community Service Work Program 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. A copy of the policy is attached as Appendix I.

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 of the total dollar value of paper products

purchased. They must report annually to Division of Environmental Assistance and Outreach. 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 20.

Table 20 Intended Actions Implementation Schedule

FISCAL YEAR	PROGRAM
2012-14	• Commission Crop Processing Facility • 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 • Promote electronics and paint recycling program • Continue promoting education programs, focusing on school-age children • Construct new tire and shingle recycling area • Promote recycling of abandoned manufactured homes • Provide single-stream recycling to citizens through negotiation of franchise agreement • Continue promotion of Biannual "Litter Sweep Weeks" • City of Conover: Transition to single stream recycling & add mixed paper • Continued purchase of recycled products when cost effective
2015-18	• Continued development of EcoComplex • Continue biannual household hazardous waste collection events • Continue/expand grasscycling and composting programs • Continue to promote electronics and paint recycling program • Continue promoting education programs, focusing on school-age children • Research new markets for recyclables and reusable products • Continue promotion of Biannual "Litter Sweep Weeks" • Promote recycling of abandoned manufactured homes • Begin development of Blackburn Unit 3, Phase 2 MSW Landfill
2019-22	• Continue biannual household hazardous waste collection events • Continue/expand grasscycling and composting programs • Continue to promote electronics and paint recycling program • Continue promoting education programs, focusing on school-age children • Research new markets for recyclables and reusable products • Continue promotion of Biannual "Litter Sweep Weeks" • Promote recycling of abandoned manufactured homes • Construction of Blackburn Unit 3, Phase 2 MSW Landfill • Expected closure of Blackburn Unit 2 MSW Landfill

Source: Staff estimates

Appendix A

Catawba County Solid Waste Planning Advisory Committee

Solid Waste Management Advisory Committee				
Organization	**Contact**	**Job Title**	**Phone Number**	**E-mail**
City of Hickory	Chuck Hansen	Public Services Director	828-323-7500	chansen@hickorync.gov
City of Hickory	Andrew Ballentine	Solid Waste Supervisor	828-323-7439	aballentine@hickorync.gov
City of Hickory	Ed Bowman	Supervisor	828-323-7500	ebowman@hickorync.gov
City of Newton	Wilce Martin	Public Works Director	828-695-4310	wmartin@newtonnc.gov
City of Newton	Andrew Roseblock	Sanitation/Recycling Supv.	828-695-4310	aroseblock@newtonnc.gov
Town of Long View	David Draughn	Public Works Director	828-322-3921	drdraughn@drdraughn.net
City of Conover	Jimmy Clark	Public Works Director	828-464-4808	jimmy.clark@conovernc.gov
City of Conover	Keith Lynch	Sanitation/Recycling Supv.	828-464-4808	keith.lynch@conovernc.gov
City of Conover	Jody Self	Sanitation/Recycling	828-464-4808	jody.self@conovernc.gov
Town of Maiden	Billy Price	Public Works Director	828-428-5006	bprice@maidennc.gov
Town of Maiden	Todd Herms	Town Manager	828-428-5002	therms@maidennc.gov
Town of Catawba	Cary Broadwell	Public Works Director	828-241-3343	cary.broadwell@townofcatawbanc.org
City of Claremont	Tom Winkler	Public Works Director	828-459-7009	tomwinkler@cityofclaremont.org
Catawba Co.	Barry Edwards	Director of Utilities	828-465-8261	barrye@catawbacountync.gov
Catawba Co.	Amanda Kain	Waste Reduction Coordinator	828-465-8217	amandak@catawbacountync.gov
Catawba Co.	Jack Chandler	Asst. Director of Utilities	828-465-8940	jackc@catawbacountync.gov
Catawba Co.	Rodney Hamby	Landfill Superintendant	704-462-1348	rhamby@catawbacountync.gov
Republic Services	Drew Isenhour	Area President	828-464-2414	isenhourd@repsrvnc.com
Republic Services	Bill Schrum	Municipal Marketing Manager	828-464-2414	schrumb@repsrvnc.com
Republic Services	Don Phelps	Division Manager	828-256-2158	phelpsd@repsrvnc.com
Republic Services	LaDonna Bolton	Facility Manager	828-327-3119	boltonl@repsrvnc.com

Appendix B

Resolutions to Adopt the Plan

RESOLUTION # 2012-05

APPROVING THE
CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, Better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources and control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, Catawba County was represented on the Catawba County Solid Waste Planning Advisory Committee and has been actively involved in the planning process.

NOW, THEREFORE, BE IT RESOLVED that the Catawba County Board of Commissioners hereby approves the Three-Year update to the Catawba County Ten Year Solid Waste Management Plan.

Adopted this the 18th day of June, 2012.

COUNTY OF CATAWBA
CHARTERED
SEAL
1842
Seal
NORTH CAROLINA

Katherine W. Barnes
Katherine W. Barnes, Chair
Catawba County Board of Commissioners

Attest:

Barbara R. Morris
Barbara Morris, Clerk

RESOLUTION # 452

APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, THE *(Town/City)* of Brookford was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the *(Town Board of Aldermen/City Council/Town Council)* of the *(Town/City)* of Brookford hereby approves the Three-Year update to the Catawba County Ten Year Solid Waste Management Plan.

Adopted this the 25 day of June, 2012.

Thomas Schrune

Thomas Schrune, Mayor
(Town/City) of Brookford

Attest:

Marshell J Eckel, *(Town/City)* Clerk
(Town/City) of Brookford

(seal)

RESOLUTION 2012-8

A RESOLUTION APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, the Town of Catawba was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process; and

NOW, THEREFORE, BE IT RESOLVED that the Town Council of Catawba of the Town of Catawba hereby approves the Three-Year Update to the Catawba County Ten Year Solid Waste Management Plan.

Adopted this the 2nd Day of July, 2012.

TOWN OF CATAWBA, NC INCORPORATED SEAL 1893

Vance L. Readling, Mayor

ATTEST:

Kathy Johnson, Town Clerk

CITY OF CLAREMONT
NORTH CAROLINA

RESOLUTION # 01-12

A RESOLUTION APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, The City of Claremont was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process; ;

NOW THEREFORE, BE IT RESOVLED, that the City Council of the City of Claremont hereby approves the Three-Year update to the Catawba County Ten Year Solid Waste Management Plan

Adopted this 2nd day of July 2012.

David B. Morrow, Mayor

ATTEST:

Doug Barrick
City Clerk

CITY OF CONOVER
RESOLUTION 18-12

APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 3-year update to the 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, THE City of Conover was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process.

NOW, THEREFORE, BE IT RESOLVED that the Conover City Council hereby approves the 3 year update to the Catawba County 10 year Comprehensive Solid Waste Management Plan.

Adopted this the 2nd day of July, 2012.

Mayor Lee E. Moritz, Jr.

City Clerk Cara C. (Chris) Reed

RESOLUTION # 12-17

APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, The City of Hickory was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Hickory hereby approves the Three-Year update to the Catawba County Ten Year Solid Waste Management Plan.

Adopted this the 17 day of July, 2012.

Rudy Wright
, Mayor
(~~Town~~/City) of Hickory

Attest:

Debbie D. Miller
Interim, *(~~Town~~/City)* Clerk
(~~Town~~/City) of Hickory

(seal)

RESOLUTION

APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, THE Town of Long View was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the Board of Aldermen of the Town of Long View hereby approves the Three-Year update to the Catawba County Ten Year Solid Waste Management Plan.

Adopted this the14th day of May, 2012.

Lee Little, Mayor
Town of Long View

Attest:

Stephanie C. Watson, Town Clerk
Town of Long View

(seal)

TOWN OF LONG VIEW N C
1907

RESOLUTION #5-2012

APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, The Town of Maiden was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Maiden hereby approves the Three-Year update to the Catawba County Ten Year Solid Waste Management Plan.

Adopted this the 7th day of May, 2012.

Robert L. Smyre, Mayor
Town of Maiden

Attest:

Wendy Vanover, Town Clerk
Town of Maiden

TOWN OF MAIDEN
SEAL
MAIDEN, NC

May 7, 2012 Agenda
Item #7-C

RESOLUTION 5-2012

APPROVING THE CATAWBA COUNTY SOLID WASTE MANAGEMENT PLAN 2012 UPDATE

WHEREAS, better planning for solid waste will protect public health and the environment, provide for an improved solid waste management system, better utilize our natural resources, control the cost of solid waste management; and

WHEREAS, NCGS 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year Comprehensive Solid Waste Management Plan; and

WHEREAS, THE City of Newton was represented on the Catawba County Planning Advisory Committee and has been actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Newton hereby approves the Three-Year update to the Catawba County Ten Year Solid Waste Management Plan.

Adopted this the 19th day of June, 2012.

Anne P. Stedman, Mayor

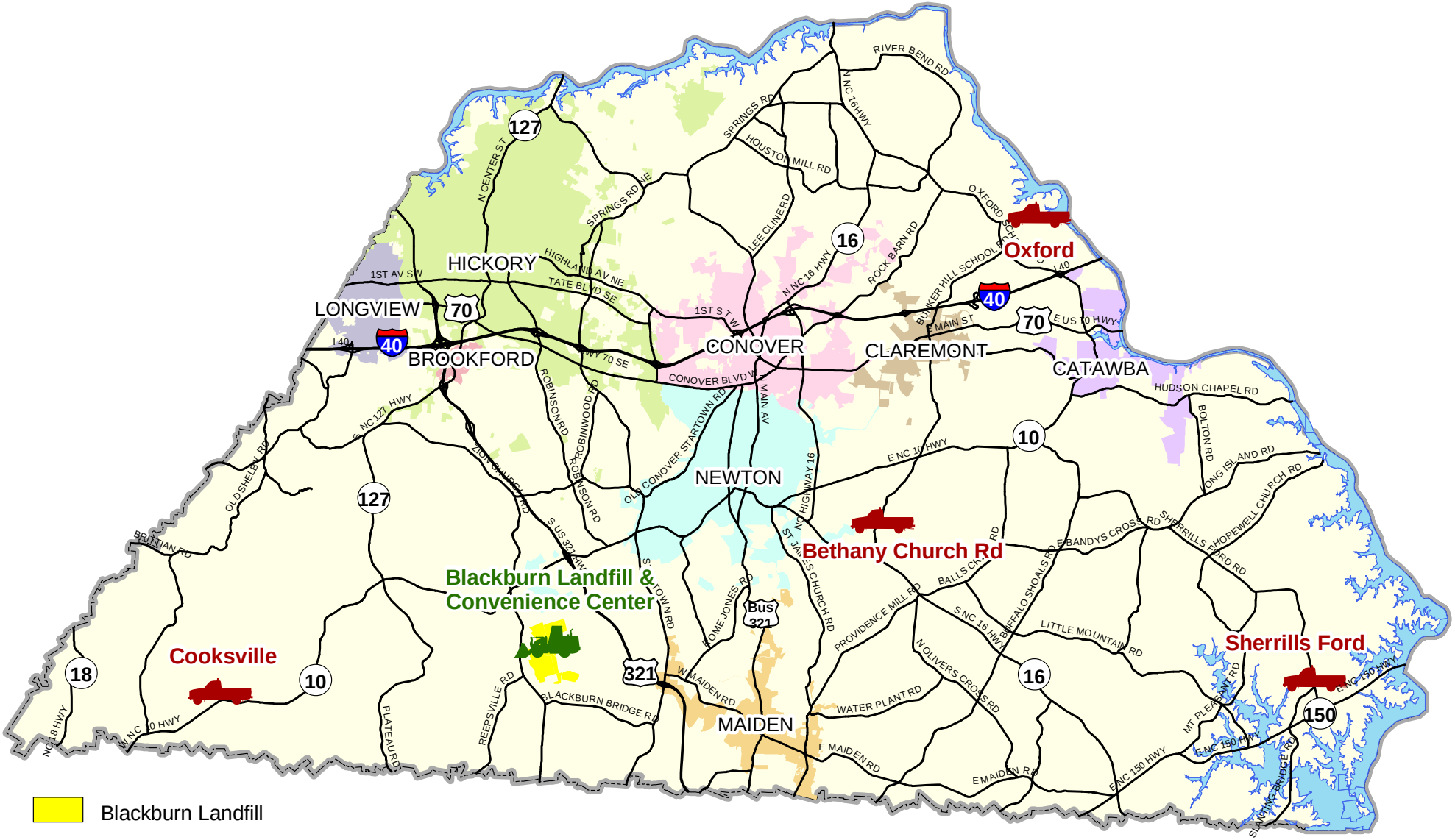
Amy S. Falowski, City Clerk

Appendix C

Map of Catawba County Planning Area

CATAWBA COUNTY

Convenience Center and Landfill Locations



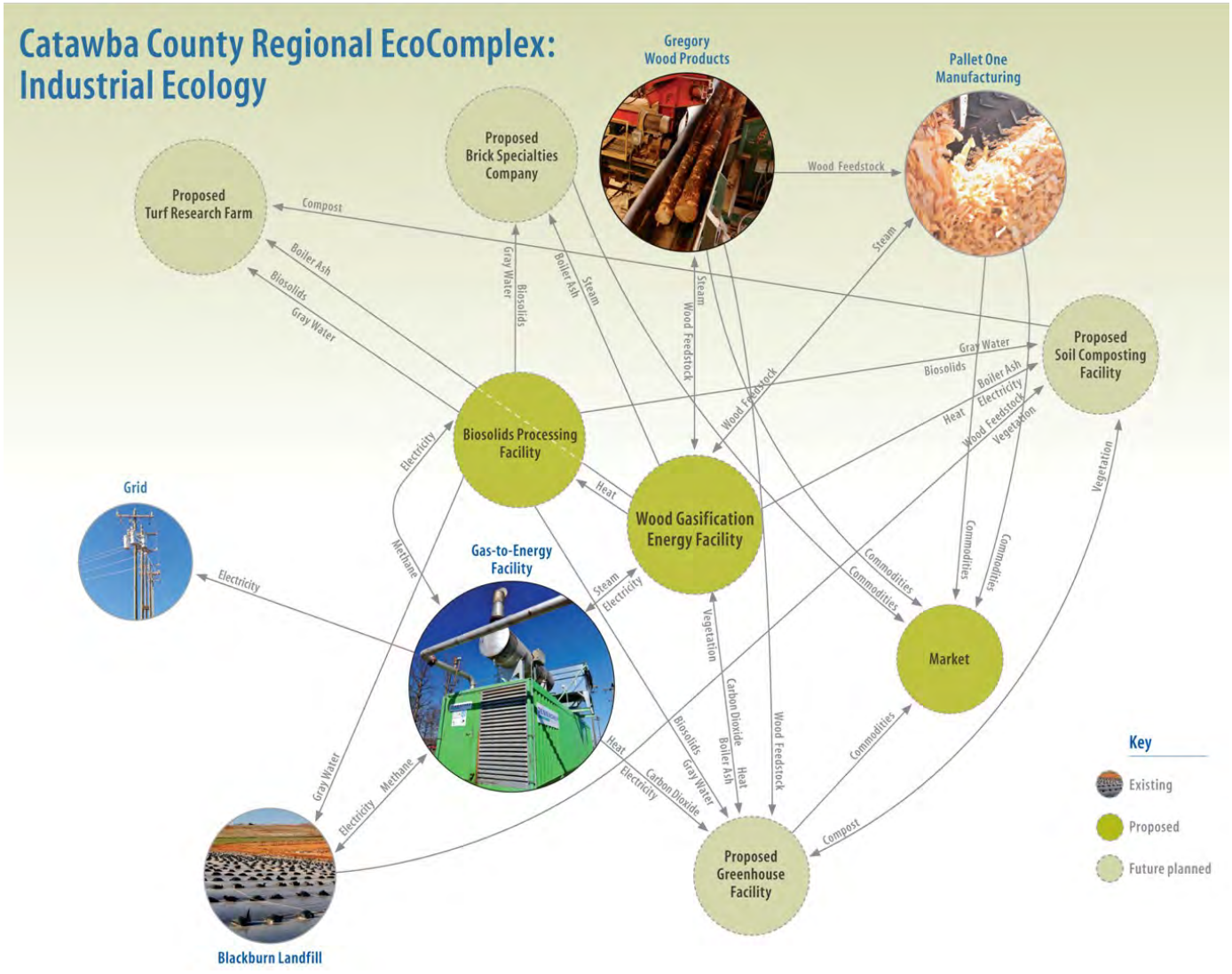
Blackburn Landfill

Blackburn Landfill & Convenience Center Location

Convenience Center Locations

Appendix D

Education Pamphlets



Barry Edwards, PE, Director
Catawba County Utilities & Engineering
100 A South West Blvd
Newton, NC 28658
Phone (828) 465-8261

Visit the EcoComplex at
www.catawbacountyecocomplex.org

CATAWBA COUNTY
EcoComplex

Catawba County Regional EcoComplex and Resource Recovery Facility

Catawba County's EcoComplex components continue to evolve and develop in order to meet the goal of developing a system that will recover all useable products and by-products from a group of private and public partners that will work together to use each other's waste products either as a source of energy or as a raw material for the production of their own product. The EcoComplex is focused on making and using "green" energy and on the economic development of Catawba County.

The Eco-Complex won the national 2007 Thomas H. Muehlenbeck Award for Excellence in Local Government, the 2008 National Association of Counties Achievement Award, and the 2012 Grand Award for Engineering Excellence from the American Council of Engineering Companies.

The EcoComplex is centered in and around the **Blackburn Landfill (Resource Recovery Facility)** which receives approximately 500 tons of municipal and construction waste daily.

The **Landfill Gas-to-Energy Facility** which currently operates three engine/generator sets that have the capacity to generate approximately 3 megawatts of renewable electricity per hour. The engines burn the methane that is produced naturally in the landfill, generating enough electricity to power approximately 1,400 average sized homes.

Gregory Wood Products is a high tech dimensional lumber facility employing 115 people. Its byproducts are used by another business located at the EcoComplex, Pallet One Inc. Gregory Wood Products is the largest producer of sawdust, shavings, bark and chips for use in the future Wood Gasification Energy Facility.

Pallet One Inc is the largest new pallet manufacturer in the United States. Pallet One began recycling used pallets in 2008. Employing 29 people at the Catawba County location, Pallet One is currently operating solely as a pallet recycling facility.

Catawba County-Appalachian State University Biodiesel Research, Development & Production Facility
Catawba County has partnered with ASU to create a LEED Certified Facility for Biodiesel Research and Production. ASU's research will include the testing of feedstock crops that are grown around the landfill buffer area. Research and testing will determine which crops grow best in our climate while producing the best oils for biodiesel fuel. The biodiesel fuel will be used in the equipment at the Blackburn Landfill. Canola and sunflowers are currently being grown and tested onsite.

Crop Processing Facility will process the crops grown on idle landfill property and buffer areas. It will receive, clean, dry, store and crush the harvested crops. Harvested crops will be processed into two products (oil and seed meal) that have a higher value than the seed alone. The oil will be cleaned and stored for future processing into biodiesel fuel. The seed meal has many potential uses such as a livestock feed additive, anaerobic digester feedstock, and a greenhouse soil amendment.

Wood Gasification Energy Facility will use sawdust, shavings, bark and chips from Gregory Wood Products, Pallet One, and the Blackburn Landfill to generate electricity, heat and steam energy. The Wood Gasification Energy Facility will house a newly constructed wood fueled gasification system and steam production plant that is expected to produce 2.5 megawatt hours of electricity and 9,600 lbs of steam per hour. Being developed through partnerships with GE Energy and Nexterra.

The University of North Carolina at Charlotte will have research activities centered on this facility and the synthesis gas generated by the technology will be utilized by this facility.

Wood Ethanol Facility UNCC will study wood and cellulosic ethanol with raw material supplied by EcoComplex partners. UNCC will be researching naturally occurring fungi to convert wood into a form more easily usable for ethanol production.

Multi-Feedstock Anaerobic Digester will process multiple waste products into biogas to produce renewable electricity and heat through an internal combustion engine/ generator set. The multiple waste products that comprise the feedstocks include: agricultural and food wastes, algae, animal wastes including cow and chicken manure, glycerin from the Biodiesel Production Facility, grease waste, mixed paper, and wastewater sludge. The residual solids will be used as soil amendment. This facility is expected to generate 1/2 megawatt per hour of green energy.

A Biosolids Processing Facility will replace the existing Regional Sludge Management Facility. The new facility will have the capacity to serve the wastewater sludge management needs of Catawba County and the Unifour region for approximately twenty years. Universities will study uses for the gray water from the Biosolids Facility such as; use in bioreactor landfill application, anaerobic digester feedstock and algae growth medium. It is planned to use the dried biosolids as a soil amendment.

Greenhouse & Algae Research Lab UNCC will research different strains of algae to determine the best way to optimize the energy stored within the algae. Algae research will include: mitigating/sequestering carbon dioxide (CO_2), wastewater remediation, biofuel feedstock, livestock feed amendment, soil amendment, and anaerobic digester feedstock.

Hmong Demonstration Site The County leased 1-acre of land to the Hmong Association for use as a horticultural demonstration site which includes a high tunnel structure that extends the growing season up to 6 weeks. This project recently completed a "Growers School" providing a series of educational workshops for more than 20 Hmong farmers.

Wireless Broadband Internet Motorola, in partnership with the National Association of Counties (NACo), has provided, through a grant to Catawba County, wireless broadband equipment to enhance Catawba County's internet connectivity at the EcoComplex. This equipment, installed by Double Radius, provides a wireless internet mesh over the EcoComplex to provide increased connectivity and faster internet speeds. Having this wireless connectivity will improve Catawba County's greenhouse gas emissions monitoring and allow its research partners, such as Appalachian State University at the Biodiesel Research, Development, and Production Facility, enhanced data collection and transmission. Now, no matter where you may be at the EcoComplex you will have the ability to collect and send data wirelessly thanks to Motorola and NACo.

Proposed Composting/Soils Amendment Facility will be a privatized Organic Waste Management Facility that will process leaves, yard waste and other EcoComplex products, by-products, and residuals into a compost or soil amendment. This EcoComplex component is waiting on the needed shared relationships of the EcoComplex before it can be realized.

Proposed Greenhouse Facility will be a privatized Greenhouse Facility that is comprised of 25 to 100 acres of greenhouse space for growing vegetables and/or ornamental plants. This EcoComplex component is waiting on the needed shared relationships of the EcoComplex before it can be realized.

Can't make it to an event?

No problem, there are other opportunities to recycle or donate your unwanted computers and televisions.

Optional Electronics Recycling Locations:

Best Buy, Hickory 828-261-0031
bestbuy.com (services)

Accepts 3 items per household per day, free of charge - Includes TV's & monitors up to 32" - Flat panel TV's & monitors up to 60" - Peripherals, DVD players, home and car audio, cell phones, MP3 players, and cables - Desktop or laptop computers.

Haul away/pick up program available, fees apply.

Computers only

Goodwill Industries of Northwest NC, Hickory and Conover - Accepts residential & business whether they work or not - Free of charge.

Salvation Army, Maiden - Accepts residential & business - Must be in working order - Free of charge.

Televisions only

Caldwell TV Inc, Hickory - Accepts residential & business whether they work or not - Free of charge - Flat panels preferred - Call Diane Young at 828-324-1202 or 828-327-3161 to arrange donation.

Salvation Army, Hickory, Maiden and Newton – Accepts residential & business - Must be in working order - Free of charge.

RECYCLE-It's the Law!

Session Law 2010-67 established an electronics recycling program for the State of North Carolina with shared responsibility between manufactures, retailers, local and state government, and consumers.

Televisions, computers, monitors, printers, scanners, and computer peripherals such as keyboards and mice are banned from disposal in landfills as of **July 1st, 2011**.

For more information please visit the following websites.

- For a full list of materials that are banned from North Carolina landfill disposal: www.p2pays.org/ref/38/38000.pdf
- State website for electronics recycling: www.p2pays.org/electronics/index.asp
- Catawba County Solidwaste Division: www.catawbacountync.gov/ue/solwasmg.asp

Learn more about recycling electronics and other types of materials, read the product label, or call the Catawba County Utilities and Engineering Department at 828-465-8217 or 704-462-1348.

Catawba County

Electronics Recycling Program

A Guide to the Proper Recycling of Electronics

Catawba County
Utilities and Engineering
PO Box 389
Newton, NC 28658
828-465-8217
704-462-1348

www.catawbacountync.gov/ue

Get the Facts about Electronics Recycling!

Did you know that used electronics, such as computers, televisions and cell phones contain potentially dangerous chemicals and heavy metals and should not be placed in the regular trash?

- Television and computer monitors contain cathode ray tubes (CRTs), which have high concentrations of lead; typically 4 to 8 pounds each.
- Circuit boards contain heavy metals such as cadmium, mercury and chromium.
- An estimated 70 percent of the overall toxic materials in landfills is comprised of electronic waste.

Cell Phones: Since the average life span of a cell phone is only 18 months, an estimated half billion obsolete and unused cell phones could potentially end up in our landfills. This translates into roughly 312,900 pounds of lead that could be released into landfills.

Donate your cell phone today!

Many organizations and domestic violence prevention facilities accept cell phone donations. Working cell phones can be used to dial 911, even without an active telephone account. Consider donating to the local facility listed below.

Family Guidance Center
17 Hwy 70 SE
Hickory, NC 28602
828-322-1400

Take advantage of the many opportunities to recycle electronics in Catawba County!

Catawba County's Electronics Collection Events

4 events in fiscal year 11/12

Event dates and locations:

Saturday, August 6th, 2011
9am—3pm
Blackburn Landfill
4017 Rocky Ford Rd, Newton, NC 28658

Saturday, November 5th, 2011
9am—3pm
LP Frans Stadium
2500 Clement Blvd NW, Hickory, NC 28601

Saturday, February 4th, 2012
9am—3pm
Blackburn Landfill
4017 Rocky Ford Rd, Newton, NC 28658

Saturday, May 5th, 2012
9am-3pm
Government Center
100A SW Blvd, Newton, NC 28658

The drive through collection events are for Catawba County residents only and are free of charge.

No business waste accepted.

More Collection Events

If you are a resident of one of the city's listed below please call for more information about an event near you.

City of Conover
Events are held on the 2nd Saturday of each month from 8am-12pm at the Conover Public Works location.
939 4th St SW Conover, NC 28613
828-464-4808

City of Newton
Events are held on the 2nd Saturday of each month from 8am-1pm at the former Farmer's Market location on North Ashe Ave in Newton (old A&P parking lot).
828-695-4294 or 695-4310

City of Maiden
Provides residents curbside service for electronics as part of the city's bulky waste pickup program.
828-428-5000

What's accepted at the Events?

All types of electronic waste such as computers, printers, scanners, keyboards, cables, mice, televisions, cell phones, projection equipment, speakers, cameras, VCR's, DVD players, stereo's, headphones, GPS units, copiers, pagers, calculators, fax machines, iPods, MP3 players and microwaves.

What's not accepted?

Items such as refrigerators, freezers, ovens, washers, dryers, toasters, irons and vacuums.

Minimal hazardous waste accepted at Catawba County Solidwaste Convenience Centers.

The Catawba County Convenience Centers accept the following hazardous waste at no charge.

Only residential waste accepted.

Motor oil (5 gallon limit)
Motor oil filters
(No oil or filters at Sherrills Ford site)
Cell phones-All Centers
Ink cartridges-All Centers
Pesticide containers from area farmers-Bethany, Blackburn and Oxford only.
Antifreeze-Bethany and Blackburn only.

Effective July 1, 2011 paint is no longer accepted at the Blackburn Convenience Center.

County Convenience Center Locations:

Bethany-located on Bethany Church Rd
Open-Tuesday through Saturday
Hours-10:00 am-6:00 pm

Blackburn-located on Rocky Ford Rd
Open-Monday through Saturday
Hours-8:00 am-6:00 pm

Cooksville-located on Rhoney Farm Rd
Open-Friday and Saturday
Hours-8:00 am-6:00 pm

Oxford-located on Lookout Dam Rd
Open-Wednesday through Sunday
Hours-10:00 am-6:00 pm

Sherrills Ford-located on Sherrills Ford Rd
Open-Wednesday through Sunday
Hours-10:00 am-6:00pm

Website: catawbacountync.gov/ue

Co-sponsors:

REPUBLIC SERVICES

N.C. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES - FOUNDED 1877 -

NC STATE UNIVERSITY
A&T STATE UNIVERSITY
COOPERATIVE EXTENSION
Helping People Put Knowledge to Work

HICKORY North Carolina

Printed on Recycled Paper.

Catawba County

CATAWBA COUNTY 1842 SM

Residential Household Hazardous Waste One-Day Collection Events

(Fiscal year 11/12)

Sponsored by:
Utilities and Engineering
PO Box 389
Newton, NC 28658
828-465-8217
704-462-1348

www.catawbacountync.gov/ue

Residential Household Hazardous Waste Collection Events

Fiscal year 11/12

What is household hazardous 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 or store them incorrectly 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.

Take Responsibility for Your Waste!

Catawba County provides bi-annual Household Hazardous Waste collection events for residents, free of charge.

What should I do with hazardous waste after the 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 purchased may be cheaper per ounce but you are often left with extra material which much be disposed of. *Recycle* and *always choose safe alternatives* when you have the opportunity.

Event dates and locations:

Saturday, November 5th, 2011
9am—3pm
LP Frans Stadium, 2500 Clement Blvd NW
Hickory, NC 28601

Saturday, May 5th, 2012
9am-3pm
Government Center, 100A SW Blvd
Newton, NC 28658

Types of hazardous waste accepted:

- ✓ Household cleaners, drain openers, toilet bowl cleaners, oven cleaners, disinfectants, and pine cleaners.
- ✓ Solvents, thinners, shellacs, varnishes, wood preservatives, and sealers.
- ✓ Automotive products including lead acid batteries, brake fluid, antifreeze, used motor oil and filters.
- ✓ Pesticides and insecticides including poisons, aerosols, and weed killers.
- ✓ Miscellaneous materials such as acids, bases, kerosene, household batteries, photographic chemicals, pool chemicals, gas cylinders, mercury, fluorescent tubes and bulbs and microwaves.
- ✓ Latex and oil based paint and spray paint.
- ✓ All types of Electronics will be accepted. Computer equipment, televisions, VCR's, DVD players, scanners, stereo's, cell phones, copiers, pagers, calculators, fax machines, etc.

Effective July 1, 2011: NC Landfill ban on computer equipment and televisions.

The County also provides two additional collection events to dispose of latex paint and electronics only.

Events are for Catawba County residents only and are free of charge.

Paint and Electronics Collection Events are held at the Blackburn Landfill, 4017 Rocky Ford Rd, Newton, NC 28658 from 9am until 3pm on the following dates:

Saturday, August 6th, 2011

Saturday, February 4th, 2012

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 at any event?

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

For more information about collection events, household hazardous waste and recycling options within Catawba County please contact the Utilities and Engineering Dept at 828-465-8217 or 704-462-1348.

Residential Household Hazardous Waste and Electronics One-Day Collection Event

May 5th, 2012
9am—3pm
Government Center
Newton, NC
Rain or Shine

Something New!

Medicine Disposal Drop
Bring unwanted medications for safe and proper disposal.

Event is free of charge to citizens of Catawba County

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

- Household cleaners
- Paint products
- Automotive products
- Pesticides / Fertilizers
- Kerosene
- Batteries
- Pool chemical
- Metallic mercury
- Microwaves
- Computer monitors
- Televisions
- VCRs
- Stereos
- Cell phones
- Pagers
- Calculators
- Fax machines
- and much more…

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

Catawba County Paint Collection Events

4 events in fiscal year 11/12

Event dates and locations:

Saturday, August 6th, 2011
9am—3pm
Blackburn Landfill, 4017 Rocky Ford Rd
Newton, NC 28658

Saturday, November 5th, 2011
9am—3pm
LP Frans Stadium, 2500 Clement Blvd NW
Hickory, NC 28601

Saturday, February 4th, 2012
9am—3pm
Blackburn Landfill, 4017 Rocky Ford Rd
Newton, NC 28658

Saturday, May 5th, 2012
9am-3pm
Government Center, 100A SW Blvd
Newton, NC 28658

The drive through collection events are for Catawba County residents only and are free of charge.
No business waste accepted.

Can't make it to an event?

No problem, call one of the Reuse stores listed below.

Resource Warehouse & Gallery
451 11th St NW, Hickory, NC 28601
828-256-2695
www.resourcewarehouse.org

Habitat for Humanity
(Accepts only new unopened cans of paint)
1615 8th St Dr SE, Hickory, NC 28602
828-328-4663

Helpful Hints...

Whenever possible, purchase latex or other water-based paints rather than oil-based products. Latex paint is not considered hazardous and is less harmful to the environment. It also cleans up easily with soap and water.

Aerosol paint can be sprayed on paper or cloth material and left to dry. Once dry, it can be disposed of in the trash along with the empty can.

Small amounts of paint can be mixed with other colors and used as a primer coat or on jobs where the final finish is not critical.

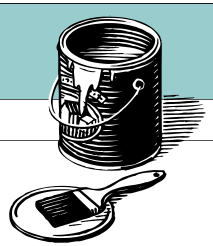
For more information on the proper disposal of paint and other types of household hazardous waste, read the product label, or call the Catawba County Utilities and Engineering Dept at 828-465-8217 or 704-462-1348.

Paint Disposal

A Guide to the Proper Disposal of Paint Products

Catawba County
Utilities and Engineering
PO Box 389
Newton, NC 28658
828-465-8217
704-462-1348

www.catawbacountync.gov/ue



Brush up on the Facts

Paint is a common product that can become household hazardous waste when it is not completely used. Paint contains chemicals, such as solvents and metals, that can damage the environment and endanger human health if disposed of improperly.

Liquid paint should not be poured down the drain, sewer, dumped on the ground or thrown into the trash.

Use it up!

The easiest way to dispose of your leftover paint is to use it!

- Apply an extra coat.
- Touch up scrapes and smudges.
- Paint closet interiors, garage walls, or storage shelves.
- Use as primer or undercoat.
- Give usable paint to neighbors, friends, relatives, or local outlets such as community service organizations, theater groups, or recreation departments for their use.

Pass it on!

Donate unopened cans of paint. Many schools, community groups and other organizations will accept unopened cans of paint, especially white paint.

Consider donating to the local Reuse stores listed on the reverse side of this brochure.

Dry it up!

Empty cans - remove lids from cans, and dispose of both lids and empty cans along with your regular trash.

Cans 1/4 or less full - Simply remove the lid and place can in a safe, well-ventilated area. Liquid will dry in a few days. Dispose in regular trash when completely dry.

Cans more than 1/4 full - Use mulch, sand, kitty litter, or shredded paper as a drying agent.

- Protect your work surface by lining it with old newspaper.
- Add drying agent.
- Stir and mix thoroughly.

Once the paint is completely dry you can dispose in the regular trash.

Please be sure that paint is **completely solidified** before placing into the trash. Liquid paint can spill during the collection process; paint leaking into trucks and onto roadways poses tremendous cleanup challenges.

Avoiding Future Paint Disposal

- Avoid creating the waste from the start!
- Buy only the amount of paint you need. Measure the area to be painted (deduct window and door areas) so you'll be sure to purchase the correct amount.
- Use up existing paint before purchasing more.
- Apply another coat to use up leftover paint.
- Store leftover cans upside down and it will create a seal around the rim and keep the paint fresh.
- Store paint in dry area, where it will not freeze.

Did you know…

Paint produced after 1978 will not contain lead, with the exception of some industrial paints. If you are unsure about the age of your paint, do not use it. Save all paint containing lead and bring to the County's paint collection events (schedule on reverse side).

Because disposal costs through hazardous waste collection can be very costly for a community, it is important for citizens to look at all available use and disposal options.

Convenience Centers

Catawba County offers five (5) Solidwaste Convenience Centers located throughout the County for solidwaste disposal and recycling opportunities. The Centers are operated as part of a franchise agreement with Republic Services.

Bethany Church Road Convenience Center
2436 Bethany Church Rd
Newton, NC 28658
(828) 465-4635
Hours of Operation: 10:00am - 6:00pm
Tuesday through Saturday

Blackburn Convenience Center
3864 Rocky Ford Rd
Newton, NC 28658
(704) 462-2496
Hours of Operation: 8:00am - 6:00pm
Monday through Saturday

Cooksville Convenience Center
3659 Rhoney Farm Rd
Vale, NC 28168
(704) 462-1497
Hours of Operation: 8:00am - 6:00pm
Friday & Saturday only

Oxford Convenience Center
4637 Lookout Dam Rd
Catawba, NC 28609
(828) 241-3774
Hours of Operation: 10:00am - 6:00pm
Wednesday through Sunday

Sherrills Ford Convenience Center
8876 Sherrills Ford Rd
Sherrills Ford, NC 28673
(828) 478-2248
Hours of Operation: 10:00am - 6:00pm
Wednesday through Sunday

Catawba County U&E Dept.
PO Box 389
Newton, NC 28658

Catawba

County Programs

reduce.reuse.recycle

what is recycling all about?

It is a way of diverting solid waste from our landfills. It's about turning trash into commodities. It is a responsible, cost effective way to help solve disposal problems. Recycling helps preserve our natural resources, reduce pollution and save energy. Recycling Just Makes Sense!

want curbside pickup?

For information on residential curbside recycling and garbage pickup, please call Republic Services at **828-256-2158**.

what about hazardous waste? Check out the County's website for more information about our residential household hazardous waste, electronics & paint collection events.

what if I am unsure about whether something can be recycled? Call the County's Waste Coordinator at 828-465-8217 or Garbage Disposal Services at 828-256-2158.

what is not recyclable?
Medical waste and supplies
Styrofoam
Waxed cardboard
Food waste
Food and candy wrappers

what about other county programs?

County Landfill Programs: Asphalt, Concrete, Brick and Block Recycling — Metal/Appliance Recycling — Pallet Recycling — Wood and Yard Waste — Mulch and Compost Sales — Tire Disposal — Household Hazardous Waste, Electronics & Paint One-Day Collection Events.
Educational tours: Catawba County Regional EcoComplex — Blackburn Resource Recovery Facility/Landfill — Co-Generation Facility — Biodiesel Research and Production Facility
To learn more about Catawba County Solid Waste and Recycling programs and more contact:

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

Contact Information:
Phone: 828-465-8217
amandak@catawbacountync.gov
www.catawbacountync.gov

Items that are **BANNED** from **LANDFILL DISPOSAL** in N.C. and **MUST BE RECYCLED**
Statute: G.S. 130A-309.10(f)

Aluminum cans
Antifreeze
Beverage containers from ABC permitted facilities
Computer equipment
Lead acid batteries
Motor oil and filters
Oyster shells
Plastic bottles
Televisions
White goods (appliances)
Whole scrap tires
Wooden pallets
Yard trash

Fluorescent lighting and Mercury thermostats are banned from disposal in any unlined landfill.

recycle	how	where	leave out
aluminum and steel cans	remove lids and rinse	**curbside** and all centers	pie plates and aluminum foil
glass bottles & jars (*brown, clear, and green*)	remove lids and rinse	**curbside** and all centers	light bulbs, windows, ceramics, broken glass
newspaper with inserts, magazines & phone books		**curbside** and all centers	bags
plastic bottles *(neck must be smaller than base of bottle)*	remove lids and rinse	**curbside** and all centers	any other type of plastic
cardboard	break down and flatten	all centers	pizza boxes or waxed cardboard
cell phones	leave battery intact	all centers	no accessories
ink cartridges	put in plastic bag	all centers	
mixed paper *(junk mail, office paper, envelopes, colored paper and cereal boxes)*	break down and flatten	all centers	bags
antifreeze	limit 5 gallons	Blackburn and Bethany	
appliances	must lift into dumpster	Blackburn	remove doors and food from refrigerators
cooking oil	pour into container	Blackburn	
electronics	residential only	4 collection events	check website or call
hazardous waste	residential only	2 collection events	check website or call
medicine		Law Enforcement offices	year round
motor oil and filters	limit 5 gallons	Blackburn, Bethany Cooksville, Oxford	
paint	residential only	4 collection events	check website or call
pesticide containers *(from area farmers)*	triple rinse	Blackburn, Bethany Oxford	

Burning trash is illegal

Backyard burning is a serious threat to public health and has been banned by Catawba County. Burning household waste produces toxic chemicals and is very dangerous even at low levels. Please dispose of your waste in a proper manner.

Your Participation Matters! Events to consider:

- Litter Sweep bi-annual roadside litter clean up drive the last two weeks in April and September.
- Adopt-A-Highway
- North Carolina Big Sweep
- Residential Household Hazardous Waste one-day collection events the 1st Saturday in May at the Government Center, Newton and the 1st Saturday in November at the LP Frans Stadium, Hickory.
- Residential Electronics and Paint one-day collection events the 1st Saturday's of August and February at the Blackburn Landfill.

For questions about the events listed above call Amanda Kain, Waste Reduction Coordinator at 828-465-8217.

Take Responsibility for Your Waste!

Don't litter or dump illegally. Take advantage of Republic Services curbside service or take your waste and recycling to one of the County's five Solidwaste Convenience Centers or the Blackburn Landfill.

Remember:

Litter trashes everyone.

Don't do it!

Catawba County Utilities and Engineering Department

Helpful Hints for Keeping your Property Litter Free

Solid Waste Local Code Compliance Division
Ed Barton 828-312-2292
Kim Sue 828-312-5710

http://www.catawbacountync.gov/ue

Keeping Catawba County Green, Clean and Litter Free

- Dispose of your waste at one of the County's five Solidwaste Convenience Centers.
  Only Residential Waste accepted.
  1-5 bags (32 gallon) is $1.25 per bag

- Recycle! You will have less trash to dispose of therefore reducing your overall cost.

- Compost or recycle yard waste, bush trimmings, loose grass and leaves (de-bagged) free of charge at the Blackburn Landfill.

- Appliance (White Goods) recycling, doors must be removed from refrigerators and freezers. Accepted free of charge at the Blackburn Landfill.

- Tire recycling, must be free of mud and water and taken off rims. Please call the Blackburn Landfill for disposal instructions.

Blackburn Landfill or Convenience Center questions call 704-462-1348.

Solidwaste Convenience Centers

Catawba County offers five (5) Convenience Centers located throughout the County for solid waste disposal and recycling opportunities. The centers are operated as part of the franchise agreement with Republic Services.

Convenience Center Locations:

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

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

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

Sherrills Ford-located on Sherrills Ford Rd
Open-Wednesday through Sunday
Hours-10:00 am-6:00 pm
Phone-828-478-2248
Closed-Monday and Tuesday

Want curbside pickup?

- Fee schedule:
  Once a week pick up curbside service:
  Residential recycler - $17.38 monthly
  Non-Recycler - $22.73 monthly
  Trash can rental:
  96 gallon rollout cart-$2.50 monthly

- Provides quarterly billing.

- Drop-off containers available.
  Fee applicable.

- For information on curbside service, please call Republic Services at 828-256-2158.

REPUBLIC SERVICES

Appendix E

Solid Waste Disposal Fee Schedule

Solid Waste Management Disposal
Fee Schedule Effective July 1, 2010

All buried waste is subject to being charged $2.00 per ton State disposal tax in accordance with N.C. General Statute 105-187.61.

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

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

Banned Materials Removal and Handling Fee (Effective 1/1/10)
Applies to each load that contains any materials banned by North Carolina State Law or Solid Waste Management Rules, current and future..... $100.00 per load

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

Revised October 5, 2009

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

Demolition debris is defined as follows: Waste produced from the demolition of a structure (house, building, etc.).

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.

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.

Non-grindable loads are subject to an additional $2.00 per ton State disposal tax.

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
Residential Waste Only

Bethany Church Road
Open-Tuesday – Saturday
Closed-Sunday & Monday
Hours-10:00 AM – 6:00 PM
Phone-828.465.4635

Blackburn-located on Rocky Ford Road
Open-Monday - Saturday
Closed-Sunday
Hours-8:00 AM – 6:00 PM
Phone-704.462.2496

Sherrills Ford-located on Sherrills Ford Road
Open-Wednesday – Sunday
Closed-Monday & Tuesday
Hours-10:00 AM – 6:00 PM
Phone-828.478.2248

Cooksville-located on Rhoney Farm Road
Open-Friday & Saturday
Closed-Sunday – Thursday
Hours-8:00 AM – 6:00 PM
Phone-704.462.1497

Oxford-located on Lookout Dam Road
Open- Wednesday - Sunday
Closed-Monday & Tuesday
Hours-10:00 AM – 6:00 PM
Phone-828.241.3774

All Convenience Centers are closed on January 1, July 4, Thanksgiving and Christmas Day

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 pickup, please call Garbage Disposal Service at 828.256-2158.
For disposal information, please call the Blackburn Landfill at 704.462-1348.

Appendix F

Public Meeting Advertisement

Catawba County
Board of Commissioners
Notice of Public Meeting

Public notice is hereby given that the Catawba County Board of Commissioners, at its Monday, June 18, 2012, meeting beginning at 7:00 p.m., will conduct a public meeting and allow for citizen comments in the Robert E. Hibbitts Meeting Room of the 1924 Courthouse in Newton on the 3-Year Mandatory Update to the 10-Year Comprehensive Solid Waste Management Plan. The plan will be available for review online at www.catawbacountync.gov/ue and in printed form during normal operating hours at the Catawba County Library located at 115 West C Street, Newton, and the Catawba County Utilities & Engineering Department at the Government Center located at 100-A South West Blvd, Newton, from June 8 through June 18, 2012.

In accordance with NCGS §130A – 309.90A, the Board of Commissioners adopted a state mandated 10-Year Solid Waste Management Plan, as submitted to the North Carolina Department of Environment and Natural Resources. The plan must be updated every 3 years.

Any person with a disability needing special accommodations, should contract Barbara Morris at 828-465-8990 or TDD 828-465-8200 before 5:00 p.m. on Friday, June 15, 2012.

Please print the information above the dotted line as a legal advertisement on June 8, 2012.

Please provide an affidavit.

Please send bill to:
Catawba County Utilities and Engineering
Attention: Cindy Meadows
PO Box 389
Newton, NC 28658-0389

If you have any questions, please call Cindy Meadows at 828.465.8160 or email cindym@catawbacountync.gov. Thank you.

Hickory Daily Record

Advertising Affidavit

Account Number
3178407

North Carolina Community Newspapers
PO Box 968
Hickory, NC 28603

Date
June 08, 2012

RECEIVED
JUN 13 2012
UTILITIES AND ENGINEERING

CATAWBA CO. UTILITIES & ENGINE
ATTN: AMANDA KAIN
PO BOX 389
NEWTON, NC 28658

Date	Category	Description	Ad Number	Ad Size
06/08/2012	Legal Notices	Catawba County Board of Commissioners Notice of Public Mee	0002676720	1 x 33 L

Catawba County
Board of Commissioners
Notice of Public Meeting

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Publish: June 8, 2012.

Media General Operations, Inc.

Publisher of

Hickory Daily Record

Catawba County

Before the undersigned, a Notary Public of Catawba County, North Carolina, duly commissioned, qualified, and authorized by law to administer oaths, in said County and State; that he/she is authorized to make this affidavit and sworn statement; that the notice or other legal advertisement, a copy of which is attached hereto, was published in the Hickory Daily Record on the following dates:

06/08/2012

and that the said newspaper in which such notice, or legal advertisement was published, was a newspaper meeting all the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina.

Rachel Church
Assistant Bookkeeper

Newspaper reference: 0002676720

Sworn to and subscribed before me, this 8th day of June, 2012

Evelyn L. Hefner
Notary Public

My Commission expires: March 11, 2014

EVELYN L. HEFNER NOTARY PUBLIC CATAWBA COUNTY, NC

THIS IS NOT A BILL. PLEASE PAY FROM INVOICE. THANK YOU

The Observer News Enterprise
PO Box 48
Newton, NC 28658

Catawba County Utiltilies & Engineering
PO Box 389
Newton, NC 28658

Date	Description	Charge	Balance
6/08/12	3-Year Mandatory Update Solid Waste	$76.00	$76.00

North Carolina

Catawba County

Matthew Tessnear ... BEING DULY SWORN SAYS: That he is the Editor of the OBSERVER NEWS ENTERPRISE, a newspaper published at Newton, North Carolina. And that it is a newspaper of general circulation in Catawba County and surrounding counties. The Notice of 3-Year Mandatory Update Solid Waste, was published in said newspaper and not a supplement thereof and is a true copy of the notice as it was published in the regular and entire edition, beginning on the 8th day of June, 2012, and ending the 8th day of June, 2012, and that said OBSERVER NEWS ENTERPRISE was regularly distributed to the subscribers during said period.

Sworn to and subscribed before me this 15th day of June 2012.

Matthew J. Tessnear

NOTARY PUBLIC Vickie M. Drum

My commission expires May 6 2017

VICKIE M. DRUM NOTARY PUBLIC CATAWBA COUNTY, N.C.

Catawba County Board of Commissioners Notice of Public Meeting

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Publish: June 8, 2012.

Appendix G

Management Plan for Abandoned Manufactured Homes

Catawba County
Management Plan for Abandoned Manufactured Homes

Planned implementation date: July 1, 2009
Plan's statutory basis: HB1134 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 ordering abatement by the responsible party within 90 days. The notice will be in writing and will be served on the person/s as provided by Rule 4(j) of the Rules of Civil Procedure, G.S. 1A-1. This notice will include the basis for the action and advise that a hearing will be held in Catawba County before a designated public hearing officer. The hearing will be set not less than 10 days and no more than 30 days after the serving of the notice. The notice will also advise that the responsible party shall be given the right to file an

answer to the order and appear in person, or otherwise, and give testimony at the place and time fixed in the notice and that the rules of evidence prevailing in courts of law or equity shall not be controlling in hearings before the public hearing officer.

If, after notice and hearing, the public hearing officer determines, based upon the investigation and/or facts presented at the hearing, that the unit is in fact "abandoned," the public hearing officer will prepare a written decision including findings of fact in support of the determination and ordering, on behalf of Catawba County, the responsible party to dispose of the abandoned manufactured home within 90 days of the date of the decision.

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 HB1134 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

Appendix H

Electronics Recycling

SOLID WASTE MANAGEMENT PLAN AMENDMENT

Electronics Recycling

Intended Actions:

Effective July 1, 2011, Catawba County will implement a new recycling program for all electronic waste. Material to be recycled includes, but is not limited to; computer equipment, televisions, hard drives, scanners, fax machines, copiers, and other miscellaneous electronic equipment. Catawba County will contract with an electronics recycling company (vendor) that has received all certifications in compliance with the requirements of the State of North Carolina.

Existing Program

Catawba County accepts a full range of electronics from residents at the County's two Household Hazardous Waste (HHW) one-day collection events held the first Saturdays of May and November. The May event is held at the Government Center in Newton and the November event is held at the LP Frans Stadium in Hickory, both from 9am to 3pm. These events are free of charge to the residents of the county.

New Program

In addition to the two existing collection events, Catawba County will offer two electronics one-day collection events located at the Blackburn Landfill, 4017 Rocky Ford Road in Newton. These collection events will be held on the first Saturdays of August and February from 9am to 3pm and will be free of charge to the residents of the county.

The electronics recycling site at the Blackburn Landfill will be maintained by county staff. County will contract with a vendor that will accept, organize and palletize the material on site then transport back to their facility for recycling and further disposal.

After collection of electronic waste, the vendor will send to Catawba County a statement that lists the tonnage of material disposed broken down by computer equipment, televisions, and other electronic material. The vendor will, also, have this statement in its files as a record of material collected and disposed by each unit of local government.

Optional Electronic Recycling Locations:

Computers

Goodwill Industries of Northwest NC, Hickory and Conover – Residential & Business
Goodwill Industries of Southern Piedmont, Lincolnton – Residential & Business
Salvation Army, Maiden – Residential & Business
Best Buy, Hickory – Residential only
Staples, Lincolnton – Residential & Business

Televisions
Goodwill Industries of the Southern Piedmont, Lincolnton – Residential & Business
Salvation Army, Hickory, Maiden and Newton – Residential & Business
Best Buy, Hickory – Residential only

These locations will be updated periodically as changes are made. Citizens may call the Blackburn Landfill at 704-462-1348 for an updated list of locations.

Catawba County will use flyers posted at each of the county's solidwaste convenience sites to inform citizens of the electronics recycling program. Signs will be posted at the landfill explaining the landfill ban on computer equipment and televisions and the locations of collection sites. Articles in the local newspaper will inform citizens of the new law, its requirements, and the options Catawba County has established.

All residents of Catawba County will have access to the recycling program, including those that reside in the municipal areas of the county.

A separate line item has been established in the budget for the receipt and disbursement of state funds for the electronics disposal. All state funds received will be used solely for the purpose of the electronics recycling program.

CONTRACT NO. 43-12-0199

CATAWBA COUNTY

CONTRACT FOR COMPUTER AND ELECTRONIC MATERIAL COLLECTION RECYCLING, TRANSPORTATION AND DISPOSAL

THIS CONTRACT dated this 8th day of July, 2011, by and between **CATAWBA COUNTY** ("County") and **ECYCLESECURE** ("Contractor"), and collectively referred to as "the parties";

WITNESSETH:

WHEREAS, the County proposes to contract for four (4) one-day Electronics Material Collection Events ("Project"), as specified in this Contract;

WHEREAS, the parties desire to set forth in writing the terms and conditions of this contract;

NOW THEREFORE, the parties intending to be legally bound hereby agree as follows:

1. Contractor will manage commodities and materials for asset recovery and recycling. All commodities will be managed in accordance with applicable local, state and federal laws, rules and regulations.

2. Contractor will perform its duties pursuant to the terms of this Contract and will accept following items:

Cameras	Mainframe Computers	Recording Equipment
Cell Phones	Mice	Servers
Consumer Electronics	Monitors	Speakers
Copiers	Network Equipment	Stereos
Fax Machines	Parts and Accessories	Telephones
Ink/Toner Cartridges	PDAs	Televisions
Intact CRT Tubes	Personal Computers	Test & Measuring Equip
Keyboards	Printers	Typewriters
Laptops	Projection Equipment	Video Games
LCD Monitors	Rechargeable Batteries	VCRs
Lead Acid Batteries		

3. Contractor will provide computer and electronics collection, sorting, package, hauling, and recycling services at no charge to County.

4. Contractor will accept all electronic materials whether operational or not.

5. Contractor shall commence and complete the Projects on the following schedule for FY11-12. All Projects will be held from 9am until 3pm.

- August 6th, 2011 at the Blackburn Landfill, 4017 Rocky Ford Rd., Newton, NC 28658
- November 5th, 2011 at the LP Frans Stadium, 2500 Clement Blvd. NW, Hickory, NC 28601
- February 4th, 2012 at the Blackburn Landfill, 4017 Rocky Ford Rd., Newton, NC 28658
- May 5th, 2012 at the Government Center, 100A SW Blvd., Newton, NC 28658

6. The Contractor shall agree to meet with the County staff at a minimum of one (1) time prior to the event to review the program, the schedule, and all operatives and coordination necessary to achieve a smooth-running collection effort. The meeting may be waived if agreed upon by both parties.

7. The Contractor shall assemble all of the necessary personnel and equipment on the site of the collection effort no later than one hour before the starting time of the collection, so as to be ready to begin the processing of the vehicles bringing computer/electronic material promptly at 9:00 a.m.

8. The Contractor shall provide for the comfort and safety of its personnel.

9. The Contractor shall prohibit public access to all active work locations and waste storage areas with highly visible signs, markers, ropes, etc.

10. The Contractor shall conduct a safety meeting for all Contractor staff prior to the start of the collection day.

11. The Contractor shall utilize every effort to unload the participant's vehicles in such a manner that no vehicle waits in line for more than 15 minutes when possible, and/or the vehicle waiting line does not exceed 20 vehicles.

12. The Contractor shall politely approach the participant's vehicles and remove the Computer/Electronic material from the vehicles as quickly and safely as possible. Contractor staff shall be courteous to all citizens and remind them to stay in their vehicles if necessary.

13. The Contractor shall utilize wheeled chemical resistant carts to safely transfer Computer/Electronic material from the participant vehicle to the unloading area.

14. Contractor shall immediately clean up and prepare for removal of all spilled electronics materials and broken containers resulting from resident or Contractor accidents. The Contractor shall bear the costs for cleanup of spilled materials.

15. Contractor is performing this Contract as a "Recycler" consisting of the following
Principal office at: eCycleSecure
4300 North Lake Court Suite K
Charlotte, NC 28216
Telephone: 704-376-1116

16. The Contractor or its successors and assigns shall indemnify and hold harmless the County, their officers, agents, servants and employees from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses and attorney fees resulting from any willful or negligent act or omission of the Contractor or its successors or assigns, its officers, agents, servants and employees in the performance of this Contract; provided however, that the Contractor or its successors and assigns shall not be liable for any suits, actions, legal proceedings, claims, demands, damages, costs, expenses and other attorney fees arising out of the award of this Contract or the willful or negligent act or omission of the County, their officers, agents, servants and employees.

17. Either party may terminate this Agreement upon sixty (60) days prior written notice to the other, provided that such termination shall be without prejudice to any other remedy the party may have. In the event of termination, any work in progress will continue to completion.

18. The validity, interpretation and performance of this Agreement shall be governed and construed in accordance with the laws of North Carolina and the parties agree to submit to the jurisdiction of the courts of North Carolina for any disputes arising under this Agreement. Venue for any action shall be in Catawba County.

19. The Contractor shall obtain and maintain in full force and effect for as long as necessary to fund the Contractor's indemnification and defense obligations, the following types and amounts of insurance: Workers Compensation-Statutory; Bodily Injury 1,000,000-subject to aggregate; General Liability 1,000,000; Property Damage 1,000,000; Automobile Liability Bodily Injury 500,000; Property Damage 500,000; Contractor's Protective Liability Bodily Injury 250,000-500,000; Property Damage 100,000. At least 10 days before the collection day, Contractor shall provide the County with a Certificate of Insurance showing coverage listed above, naming the County as additional insured on the Contractor's General Liability Insurance Policy.

20. County will furnish site security, personnel, traffic control barriers and signs to assist in orderly traffic movement.

21. The County will also provide restroom facilities and water to the Contractor and the Contractor's personnel at the collection site.

22. The County will provide the necessary personnel to direct and stop vehicles for unloading purposes.

IN WITNESS WHEREOF, the parties hereto have herein set their hands and seals on the dates set forth.

eCycleSecure LLC

Chris Virtue
Member

_____ **Date** 7/11/11

ATTEST:

_____ **Date** 7/11/11

Catawba County

Barry Edwards
Director, Utilities and Engineering

_____ **Date** 7/13/11

ATTEST:

Cindy Meadows **Date** 7/13/11

THIS INSTRUMENT has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act as amended.

Date: 7-13-11

Rodney N. Miller, Director of Finance

APPROVED AS TO FORM:

Date: 7-12-11

Anne Marie Pease, County Attorney

PERRY JOHNSON REGISTRARS, INC.

Certificate of Registration

Perry Johnson Registrars, Inc., has assessed
the Environmental, Health and Safety Management System of:

eCycleSecure
4300 Northlake Court, Suite K, Charlotte, NC 28216 United States

(Hereinafter called the Organization) and hereby declares that the Organization has been audited by an ISO 17021 accredited certification body in conformance with applicable ANAB requirements and is found to be in conformance with all requirements of the

Responsible Recycling© (R2) Rev. 10/2008

This Registration is in respect to the following scope of supply:

Collection, Transportation, Segregation, Destruction, Reuse, Recovery and Disposal of Electronics, and the Destruction of Digital Data

Such products shall be manufactured by the Organization at, or such processes or services shall be offered at or from, only the address given above. This Registration is granted subject to the system rules governing the Registration referred to above, and the Organization hereby covenants with the Assessment body duty to observe and comply with the said rules.

For PJR:

Terry Boboige

Terry Boboige, President

Perry Johnson Registrars, Inc. (PJR)
755 West Big Beaver Road, Suite 1340
Troy, Michigan 48084
(248) 358-3388

Responsible Recycling R2 Perry Johnson Registrars, Inc.

ANAB ACCREDITED

PERRY JOHNSON REGISTRARS, INC.

The validity of this certificate is dependent upon ongoing surveillance.

Effective Date:	Expiration Date:	Certificate No.:
February 25, 2011	February 24, 2014	C2011-00703

Appendix I

Recycled Product Purchasing Policy

Catawba County Buy Recycled Policy
August 1, 2007

Catawba County is committed to cost effective recycling and waste prevention methods. All county departments and divisions are expected to maximize the procurement of recycled products that are reasonably competitive with non-recycled products, and recover as many recyclable materials from their daily operations as possible.

The County Purchasing Agent will oversee the implementation of this policy. The County Waste Reduction Coordinator will synchronize the efforts of procurement officers in buying recyclable and recycled content products.

Buy Recycled Purchasing
County departmental divisions will seek to buy and use recycled products and materials if the items are reasonably competitive with non-recycled products, and meet or exceed the quality specifications expected of comparable products.

Buyers, employees who purchase goods, are required to make every effort to identify recycled products and communicate to the distributors/vendors the desire to purchase recycled products.

Recycled Paper
Buyers shall purchase paper products and materials made with recycled content. County Departments shall use recycled paper for all documents when possible.

Product Cost
Buyers are advised that the purchase of some recycled products may exceed the costs of non-recycled products. This factor alone should not determine the purchase. Cost should be compared to the environmental benefits, performance quality, and the life cycle of the product before making a final purchasing decision.

Tracking
Buyers are expected to track and enter all purchases related to recycled products through a tracking program which is accessible through PeopleSoft. Reported information will be used to create the Buy Recycled Annual Report which will be presented to the Board of Commissioners. This information will also be included in the State Recycling Report submitted by the Waste Reduction Coordinator to the NC Department of Environment and Natural Resources.

Responsibility
Buyers and procurement officials:

- Buy recycled content products when feasible.
- Become familiar with items that contain recycled content.
- Become familiar with the different buy recycled sources of information.
- Evaluate all goods and equipment requested to buy, lease, or rent to be compatible with the use of recycled products.
- Maintain procurement education of how to buy recycled.

- Ensure contracting procedures, purchasing documents, and product specifications include buying recycled and waste reduction language.
- Required to report all purchases related to recycled products into the tracking program found on the County's PeopleSoft Financial System.

County Purchasing Agent:

- Conduct buy recycled training program for county employees.
- Encourage the purchase of products with the highest percentage of recycled content materials and continuous procurement education for appropriate staff.
- Establish product specifications and boilerplate procurement language to specifically support the reduction of waste and toxins.
- Track County's total annual dollar purchases of recycled content goods and products.
- Compile the tracked information from the procurement officials to assist in the development of the Buy Recycled Annual Report.
- Actively seek ways to educate and promote the intent of this policy.

County Waste Reduction Coordinator:

- Assist in any training on buy recycled purchasing and waste reduction.
- Assist in the development of the Buy Recycled Annual Report.
- Assist buyers, purchasing agents, and purchasing officials in creating, maintaining, and improving recycling efforts.
- Work with purchasing agent and staff to meet the goals of this policy.

Waste Reduction

All County employees are asked to reduce waste at its source. This means finding ways to prevent waste before it is created such as:

- Use e-mail when possible to avoid using paper.
- Reuse interoffice envelopes when possible instead of new ones.
- Save reusable paper and use the blank side when possible.
- All copying should be executed with caution to avoid paper waste.
- Make double-sided photocopies whenever feasible. New copy machines and printers shall have duplexing capabilities when feasible.
- Reusable mugs should be used for coffee/beverages, as opposed to using disposable cups.

You're invited to attend:

The Green Vendor Exhibition

Hosted by Catawba County

Catawba County strives to promote the purchase of recycled and environmentally friendly products whenever possible. This event will provide the opportunity for anyone involved in procurement or facilities maintenance to learn more about these products and meet local suppliers!

★★★★★★★★★★★★★★★

The exhibition will showcase vendors who provide green products, including:

- office supplies/furniture
- printing/promotional
- janitorial
- vehicles
- maintenance/facilities
- copiers
- And much more!

★★★★★★★★★★★★★★★

Date: **Wednesday, July 27, 2011**

Time: **1:00 pm -3:30 pm**

Location: **Hickory Convention Center**

1960 13th Avenue Dr. SE

Hickory, NC 28602

Register for this free event online

http://www.catawbacountync.gov/purchase/purcmain.asp

Bring your business cards!

If you have questions or need further clarification, contact:

Emily Leik, Intern, County Manager's Office | eleik@catawbacountync.gov | (828) 466-7201