



**HAYWOOD COUNTY**

**SOLID WASTE**

**MANAGEMENT**

**PLAN**

**UPDATE**

**July 1, 2012- June 30, 2022**

Updated April 16, 2012

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## Executive Summary

Haywood County is ranked 14th out of the 100 counties within the state for waste reduction and recycling. This is an improvement from 64th in fiscal year 2007-2008. As of July 2012, the County will have eight convenience centers located throughout the county for residents to drop off recyclable materials. These items may also be dropped off at the Materials Recovery Facility.

During the past ten years, Haywood County has made several improvements to the Solid Waste Program. Those improvements include the following items:

1. A new baling facility and baler at the MRF located in Clyde that gives the county greater baling capacity. (Past)
2. A new ten-acre lined cell at the White Oak Landfill that should last approximately ten years. (Past) Current rule changes only allow for permitting of cells with a life of 5 years.
3. White Goods collection area which was supported by grant funds. (Past)
4. Cell I construction in Phase III to be completed in August of 2010. (Complete)
5. Contract Landfill management to control cost. (Complete)
6. Contract staffing at Convenience Centers to reduce cost. (Complete)
7. Discontinue the Hauling Function from the Treatment and Processing Facility to reduce cost and allow for better recycling services. (July 1, 2012)
8. Redesign Treatment and Processing building to accommodate recycling, small haulers, bulky waste and handicap patrons. (July 1, 2012)
9. Install flare and generator at Francis Farm Landfill. (August 1, 2012)

The County's waste reduction goal for 2009-2010 was 10%, which is considered a more realistic goal from the original 42%. We achieved an 11% reduction by fiscal year 2011. This was better than expected. Haywood County will continue to work with the county schools and civic groups to educate our citizens about waste reduction and recycling. With permit modifications, we expect to set a course for achieving a goal of 20% waste reduction. We hope to continue increasing the waste reduction percentage with the support of the towns, businesses, county residents and county employees.

The County has a Solid Waste Committee comprised of members from the business sector, the private sector and each of the county municipalities. This committee meets as a group to review the 10-Year Solid Waste Management Plan. The committee makes recommendations and changes to the solid waste plan before it is submitted to the state.

## **INTRODUCTION**

This Solid Waste Management Plan Update was prepared in accordance with N. C. General Statute 130A-309.09A (b) for the purpose of meeting local solid waste needs and protecting public health and the environment. (The sections of the plan are ordered as listed in the General Statute.)

Through implementation of this comprehensive solid waste management plan update, the Haywood County planning document provides for the management of solid waste and its reduction for the next ten years. The planning area includes Haywood County and its municipalities: Town of Canton, Town of Clyde, Town of Maggie Valley and Town of Waynesville.

Our vision for Haywood County is to provide the citizens a long-range comprehensive solid waste management program. This program will provide disposal capacity, waste collection services and waste reduction programs to all members of the community at an equitable price. The Solid Waste division is rapidly becoming a self-supporting program relying on fees to support operations, future expansions and closures. Our vision is to decrease improper disposal of waste and to expand recycling/ waste reduction opportunities for the convenience of Haywood County residents.

One goal is to educate the residents of Haywood County about the environmental benefits of recycling/waste reduction and proper waste disposal. The management of this plan is a proper function of Haywood County. The County foresees some financial expenditure; however, the intention is to keep any expenditure reasonable. The planning goals are listed below:

### **Planning Area Goals**

1. To provide every citizen in Haywood County with waste disposal capacity, waste collection services and recycling/waste reduction opportunities.
2. To increase the efficiency and cost-effectiveness of the solid waste program.
3. To meet the established local waste reduction goals.
4. To decrease improper waste disposal.
5. To protect the public health and the environment.

## Haywood County Solid Waste Plan Update

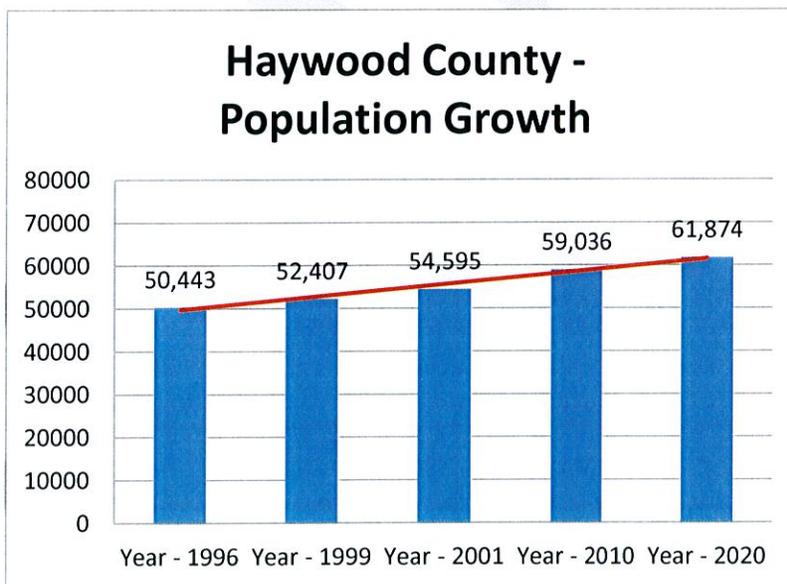
Haywood County, in accordance with North Carolina General Statute 130A-309.09A, is updating the County's 10-year comprehensive Solid Waste Management Plan. The plan update is to revise or set new directions for solid waste management through 2022.

### **Section 1 Local Contacts**

#### Geographic Area

The estimated population for Haywood County, in 1996, was **50,443**. According to the North Carolina Office of State Planning that number was **52,407** in 1999, by July 1, 2001 the population for Haywood County had increased to **54,595**.

The estimated population for **2010** was **59,036**. Estimated population growth by **2020** is projected to be **61,874**.



The Town of Waynesville has its own sanitation department to provide residents and businesses with solid waste collections. The Town of Clyde and the Town of Maggie Valley contract with private haulers for their waste collection and recycling services. The Town of Canton is looking into privatizing the collection of waste and recycling through the RFP process. All four municipalities participate and cooperate in the county-operated solid waste program. The Lake Junaluska Methodist Assembly, unincorporated, has its own sanitation department and participates in the county solid waste program.

## Section 2 Public Participation

The Haywood County Solid Waste Management staff developed this update and the Solid Waste Planning Advisory Committee met as a whole to evaluate the solid waste services and to finalize this update.

A public meeting was held on March 30, 2012.

The Solid Waste Planning Advisory Committee and the community members that attended discussed waste reduction goals and different solid waste management programs. A list of participants, their organization and positions are listed below.

Joy Garland, Town Administrator	Town of Clyde
Tim Barth, Town Manager	Town of Maggie Valley
Mike Mehaffey	Town of Maggie Valley
Buddy Young, Director Residential	Lake Junaluska Assembly
Jim Giauque, Waste Compliance Landfill Supervisor	Evergreen Packaging
Fred Baker, Director, Public Works	Town of Waynesville
David Francis, Tax Collector	Haywood County
Zondra Robinson, Office Manager	Haywood County
Stephen King, Solid Waste Director	Haywood County

A draft of the update will be placed in the County Manager's office at the Haywood County Historic Courthouse, libraries and the Haywood County Solid Waste office. The public meeting will be announced and advertised in the Enterprise Mountaineer, the local newspaper and on the County's web site.

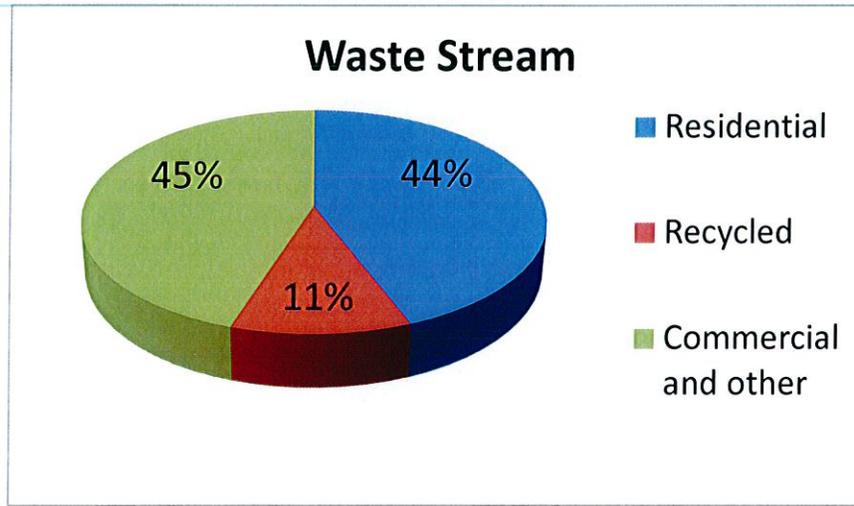
On April 16, 2012 the update was submitted to the elected boards of each participating local government for approval. The public was invited to read the final version of the plan which was placed in the County Manager's office, the Solid Waste Management office and on the County's web site.

## Section 3 Waste Characterization

### Waste Stream Evaluation

The development of the original plan in fiscal year 1995/1996 had tonnages of 42,455.14; Haywood County facilities processed approximately 50,241.46 tons of material in fiscal year 2010/2011. This is broken out to 22,654.71 tons nonresidential waste which includes commercial, industrial, construction and demolition. Residential household waste was 22,203 tons and recycling was 5,383.75 tons. This is an increase of 7,786.32 tons over the base year.

The waste stream is represented by 45% commercial, industrial, construction and demolition, 44% residential house hold and 11% recycled for the physical year. These calculations are based on tonnages weighted by weigh masters. This waste was either disposed of at the facilities permitted under permit 4407 at the White Oak location or processed and sold as recyclables. Through education and convenience we have increased the volume of recyclables over previous years.



In the initial Solid Waste Management Plan, the planning area established a local goal of 40% waste reduction to be reached by June 30, 2001 and a further goal of 42% to be reached by June 30, 2006. This goal was established from the baseline year **1991-1992**.

To meet a more realistic goal for the county, the new waste reduction goal is derived from managed tons minus landfill tons. The county's waste reduction goal for **2009-2019** was 10%, with a waste reduction goal of 25% for **2012-2022**.

The waste reduction goals can be converted from percentages to tons diverted by examining population estimates and past waste disposal figures. The baseline year (FY **7/01/91-6/30/92**) disposal rate was 1.21 tons per capita (figure provided by the N. C. Solid Waste Section). According to the Office of State Budget and Management, Haywood County's estimated population, for **2009-2019**, is estimated at **57,974** with a per capita disposal rate of .91. The estimated population for Fiscal Year **2015-2016** is **63,488** with a per capita disposal rate of 1.03.

## **Section 4 Waste Reduction Goals**

Haywood County met their waste reduction goal of 10% as established in the 10 Year Solid Waste Management Plan 2009-2019. Our goal for the 10 Year Solid Waste Management Plan 2012-2022 was set at 25% in 2009 but a more achievable goal of 20% has been chosen. The county plans on meeting this goal by increasing household/business recycling by setting up areas that are convenient, in addition to making recycling more items possible.

## **Section 5 Waste Handling Characterization**

### **A. Municipal Solid Waste (MSW)**

Waste generated within Haywood County can be brought to the Convenience Centers, Treatment and Processing Facility and Materials Recovery Facility under permit # 44-08TP and the White Oak Landfill permit # 44-07

### **B. Construction and Demolition Waste (C&D)**

The Treatment and Processing Facility will accept construction and demolition items that are recyclable. Construction and Demolition Waste that is disposed will go the White Oak Landfill permit # 44-07.

### **C. Land Clearing and Inert Debris (LCID)**

Our Treatment and Processing Facility does not collect this kind of material. All residents are to bring any land clearing and inert debris waste to the White Oak landfill permit # 44-07. If markets develop for recycling this material we will look into providing this service at the Treatment and Processing facility.

### **D. White Goods (WG)**

Residents and businesses may bring items to the Treatment and Processing facility permit # 4408TP and the drop off location at White Oak landfill permit # 4407 for recycling

### **E. Scrap Tires (ST)**

Residents and businesses bring the tires to the Treatment and Processing Facility permit # 4408. There are trailers located at different tire dealers for scrap tires. Once trailers are full, they are recycled at or by an approved recycling facility.

### **F. Electronics (EL)**

Residents and businesses may bring electronics to the Treatment and Processing facility permit # 4408TP for recycling. Material is recycled through an approved vender through the state.

## **Section 6 Assessment and Actions**

Each section includes an assessment of initial plan with current status and description of new or revised actions to achieve our goals.

### **A. Reduction at the Source**

In the original program Haywood County contracted with Haywood Vocational Opportunities to present educational programs to civic groups. The Haywood County Solid Waste office gave recycling boxes to each county office encouraging source reduction efforts since paper is a large part of the waste composition.

The residential source reduction program had been targeted to reduce future waste. The county, in conjunction with Haywood Vocational Opportunities, presented educational programs to different civic groups, clubs, etc. This program educated people about being environmentally friendly by recycling, buying reusable items and recycled items.

The non-residential source reduction was also being targeted to reduce future waste. Haywood Vocational Opportunities applied for a grant to start an office paper collection program for businesses throughout the county.

The county's last revised actions of office paper collection, round table discussions, and use of representatives to look for items to recycle or exchange for businesses were dropped due to the economy.

Haywood County Solid Waste Management took over the educational programs for schools and civic groups effective July 1, 2002.

Haywood County developed our Sustainability plan which addresses the source reduction by going paperless where possible. We now require all offices to turn off computers. The County has completed energy audits for several buildings. Solid Waste has stopped printing most tickets with the exception of those where there is a charge. This has saved our department about \$1,500 in paper/ink cost. We are also printing all handouts double sided. E-mails are no longer printed unless needed. We have moved away from Styrofoam cups, and encouraged using reusable items.

**New/Revised Actions:** We will continue to look at ways to reduce waste at its source.

## **B. Collection of Solid Waste**

Waste is collected by haulers, contractors and the four municipalities. Waste is also collected at Convenience Centers located throughout the county. The collection centers are staffed with contracted employees through a private company. An attendant is at each center during the hours of operation 7:00 a.m. to 5:00 p.m. Monday through Saturday; except when the centers are closed.

Residential solid waste is accepted at each Convenience Center and placed in compactors. The county has contracted with a private company to haul the compactors directly to the landfill. A variety of recyclable materials are also accepted at the sites and hauled into the Materials Recycling Facility. The container of commingled material is hauled by the private contractor, while the County hauls the fiber trailer to the Materials Recovery Facility.

The Town of Waynesville collects residential and non-residential wastes utilizing their own department. Town of Canton and Lake Junaluska Assembly also collect residential waste utilizing their own departments. The Town of Clyde and Town of Maggie Valley contract the collection of residential waste with private contractors.

The County has adopted rules and regulations regarding collection and franchising arrangements. A copy of these requirements may be obtained from the Haywood County Solid Waste Management Office.

Ten collection centers serve the unincorporated population of approximately 45,000 people. The collection centers serve households located approximately "five" miles from the centers.

In the interest of protecting public health and safeguarding the environment, private haulers are required to obtain a franchise permit through the Solid Waste office. Such permits would be contingent upon conditions set forth including conforming to the County's recycling plan (commingled or blue bag system and cardboard separation), the covering of transported materials and compliance with local and state law regarding collection, transport and disposal of solid waste.

The County will continue to use collection centers to collect waste and recyclables from rural areas of the county. The towns will continue to collect solid waste in the same manner they have been accustomed.

**New/Revised Actions:** Haywood County will close the Transfer Operation at the Treatment and Processing facility. This will eliminate double handling of the waste. The large haulers will haul directly to the landfill, while small haulers and residents will continue to utilize the Treatment and Processing Facility. Haywood County seeks to make recycling easy and convenient for everyone; providing a

cost reduction opportunity by recycling. We will be closing down two Convenience Centers and moving the centers onto nearby property that is owned by the County.

### C. Recycling and Reuse

#### **Recycling**

The Convenience Centers have recycling trailers for corrugated cardboard, mixed paper and newsprint. These trailers are transported to the Materials Recovery Facility by a county employee. The centers also have collection bins for commingled recyclables (non-sorted recyclables). At the present, all fiber is placed in green trailers and hauled by county staff. All commingled recyclable materials may be put in the roll-off container at the site. Items that are point source separated are baled/boxed and sold to buyers. Commingled items are transported to processing facilities to be separated. Materials being collected for recycling are: aluminum cans, catalogs, third class mail, magazines, newspapers, other paper, corrugated cardboard, paper grocery bags, household boxes (cereal, crackers, and cake mix), aseptic containers, ridged plastic, plastic containers 1-7, telephone books, electronics, carpet, glass that has been previously used as a food or beverage container, metal cans and scrap metal. The scrap metal is accepted only at the Materials Recovery Facility. Three special wastes are also collected. Used motor oil is accepted at all centers, while antifreeze is collected at the Jones Cove Convenience Center and lead-acid batteries are accepted at the Materials Recovery Facility. Personnel at collection centers distribute brochures regarding recycling information.

Comparing the recycling tonnages over the years we noticed the greatest increase of materials is in white goods and metals. The fluctuation of metal volumes directly represents the market values. When scrap metal prices are low residents will haul material to the county but when prices are high residents will actively pursue collecting metal from other residents and selling it directly to scrap buyers.

All residents of Haywood County may use the convenience centers to drop off recyclable materials. The Towns of Canton, Clyde, Maggie Valley, Waynesville and Lake Junaluska Assembly transport their recyclables to the Materials Recovery Facility.

Maximizing recovery of residential recyclables would entail increasing participation through education and increasing the types of materials for recycling.

It is assumed that residents who currently use the solid waste and recycling collection centers will continue to recycle. The county staff and contracted

employees are continually educating residents on recycling efforts throughout the county.

Haywood County Solid Waste Management is continuing educational programs for schools and civic groups.

Haywood County has actively pursued extending the life of our landfill and maximizing profit potential from recyclable commodities. While our compaction ratios for our landfill have increased with loose fill, we are constantly looking at Alternative Cover Materials (ACM) which will increase the compaction ratio even further. Combined with removing more items for recycling we can achieve extended life for our landfill cells. We have combined our Construction and Demolition (C&D) waste stream with our Municipal Solid Waste subtitle "D" landfill so it has become a high priority to find ways to recycle C&D along with other otherwise over looked items.

Our electronics recycling program has been very successful. Other items that are regularly recycled include: glass, cooking oil, yard plastic, all batteries, hardback books, hard cores, granite, porcelain/tile products and hard surface counter tops.

**New/Revised Actions:** The Treatment and Processing facility will cease the transfer operation allowing us to redesign the facility to better accommodate patrons and encourage more recycling. We have started recycling carpet and are investigating other markets including asphalt shingles to allow for recycling more C&D. We are in communications with DEHNR about needed permit modifications to make this work.

## **Reuse**

When cat litter buckets come into the facility we collect, wash and label them for uses such as household battery collection, compact florescent bulbs and oil filter collection at the Convenience Centers. Our recycling truck driver will collect them from the centers once they are full. We will store them until we can separate and send them to the appropriate markets. We have stopped purchasing Styrofoam containers and have purchased and encouraged the use of reusable cups/mugs. These programs have been very successful.

Our maintenance vehicle is a surplus van from the Sheriff's Department converted to accommodate our needs.

We realigned the pre-1993 Gorilla Mosley baler in 2011 to use for baling recyclables instead of purchasing a new baler.

**New/Revised Actions:** We will continue to look for items we can reuse to enhance our operation.

## **D. Composting and Mulching**

### **Composting**

The original program for residential composting was being encouraged in the county through the Cooperative Extension Service. Backyard composting presentations were targeted at the Garden Clubs throughout the county. Citizens were encouraged to get pamphlets and other composting information at the Cooperative Extension Office. Residential composting is still encouraged in the county through the Cooperative Extension Office.

The Town of Waynesville switched to an inert debris landfill permit and no longer attempts to compost yard waste. The town has a monthly cover requirement and a new dozer to push dirt to cover the active face. The town uses sediment from Lake Junaluska which is trucked in from their annual dredging by R.C.F., Inc.

**New/Revised Actions:** No new actions are underway at this time.

### **Mulching**

The original intended program was that residential yard waste was accepted at the county's land clearing and inert debris landfill. The county purchased a grinder to grind brush, chips, clean wood, leaves and pallets. The original plans were to sell the mulch to citizens within the county. Due to complications, this has not materialized.

Some of the towns offer the service of grinding brush to sell or give to residents for their personal use.

The county had planned to grind yard waste at the new construction and demolition landfill for mulch and give the mulch to citizens within the county. The Town of Waynesville offers free mulch to the public. Individuals in or adjacent to the town limits can call the dispatcher at Public Works (456-3706) and arrangements can be made for the Town to deliver the mulch. In **2005-2006** an area in the town East Street Park (Happy Hollow Access Road) was designated where the Town keeps a small stockpile of leaves and mulch for the public to come pickup on their own.

**New/Revised Actions:** As private business are mulching more clean wood waste, pallets, limbs and stumps we are seeing a reduction of material coming to White Oak. This part of the operation will probably be phased out.

### E. Incineration With Energy Recovery

Incineration with energy recovery was not part of the county's original solid waste plan. The county considers it an inappropriate waste management option due to the local waste flow and capital/operating costs. The county does not plan to use incineration with energy recovery.

**New/Revised Actions:** Haywood County is exploring all options for incineration with Energy Recovery but has yet to find a viable cost effective means to make this work. We will continue to seek options such as joint efforts between counties to see if this is a future option.

### F. Incineration Without Energy Recovery

Incineration without energy recovery is not part of the county's solid waste plan. The county considers it an inappropriate waste management option due to the local waste flow and capital/operating costs. The county does not plan to use incineration without energy recovery.

**New/Revised Actions:** No New Actions

### G. Transfer of Solid Waste Outside Geographic Area

Haywood County does not transfer any waste outside of geographic area. Haywood County has no plans to haul waste outside of geographic area.

**New/Revised Actions:** Haywood County has contracted with a management company to operate the White Oak Landfill. We are currently looking to transport waste into the county to reduce the tipping fees and remove the financial obligation for cell development, closure and post closure.

### H. Disposal of Solid Waste

In the original program, Haywood County opened the Materials Recovery Facility and White Oak Landfill on October 8, 1993. Residential and non-residential waste comes through the Materials Recovery Facility. The waste is baled and transported to the White Oak Landfill. Haywood County officials indicated the landfill had five years of permitted capacity and an expected life of forty to fifty years.

Construction and demolition waste is disposed at the county's wood waste landfill. Land clearing and inert debris (LCID) is disposed of at the wood waste landfill and at privately owned permitted land clearing and inert debris facilities.

Haywood County's plan is to continue handling the disposal aspects of the solid waste program in the current manner.

Construction and demolition waste will continue to be managed at the county's wood waste landfill. Planned methods for reducing this segment of the waste stream are to source separate clean wood from painted/treated wood. The clean wood will then be ground as mulch.

Haywood County officials indicated the White Oak Landfill had only one year of permitted capacity left. Haywood County planned to construct a new ten (10) acre landfill cell at the White Oak Landfill in the year 2000. The county was also planning to construct a new baling facility with a stronger more reliable baler. The new facility was to allow for storage of bales in case of bad weather or other problems keeping the county trucks from transferring solid waste to the landfill.

Haywood County plans were to construct a construction and demolition landfill at the White Oak Landfill. This construction process was to be completed by the year 2003.

Haywood County constructed a ten (10) acre landfill cell at the White Oak Landfill and a new baling facility with a more reliable baler and a construction and demolition landfill at White Oak.

In our last new/revised actions, it stated that in the next five (5) years Haywood County will need to construct a new cell at the White Oak Landfill. In the year 2007, Haywood County would open up Phase II of the Construction and Demolition Landfill.

After reviewing many options and cost, Haywood County has moved forward with constructing Phase III at White Oak. Phase III was completed and ready for use in August 2010. With the addition of heavier compactors, breaking bales, ACM's and recycling, we have extended the life of the current cell further than expected. With the introduction of Senate Bill 1492 we closed our C&D landfill by May 30, 2009. We stopped accepting waste at the C&D landfill on June 30, 2008. We are considering moving away from baled waste at our transfer station and going to a live load open top trailers which will bypass the bottle neck effect the baler has when maintenance is needed, or is down for extended periods of time. The baler is inoperable about one quarter (three months) of the year with a cost of about \$17,000 monthly for upkeep and regular service operations. There is a substantial loss in revenues during these times. This fiscal year we figured our down time cost about \$20,000 in revenues each month the baler is inoperable.

Haywood County loose loads all waste into the back of push ram trucks and then transport the waste to the White Oak Landfill as of 2010.

**New/Revised Actions:** Haywood County has contracted with a private company to manage the White Oak Landfill. This will lessen the financial burden of Haywood County citizens from funding much needed improvements while leveling the operating cost. A major permit modification is being drafted to expand the service area to include all 18 western counties. Once enacted, the expanded management portion of the contract will help area businesses with lower disposal cost, and will remove the county's closure and post closure obligations.

## **I. Education with the Community and through the schools**

In the original program Haywood County entered into a contract with Haywood Vocational Opportunities in October of 1996 to establish a community recycling education and public awareness program. At that time Haywood Vocational Opportunities contracted with a freelance media consultant to work with the recycling manager to design a program. The strategy was to target three sectors of the county's population.

The first target would be to educate the **general public** as to what, how and where to recycle. This would be accomplished through mass distribution of fliers, in direct mailings and newspaper inserts, local television and radio interviews and shows, programs at local civic clubs, scouts, churches and extensive coverage by the local newspaper. Free blue bags and information are also given out by several local grocery stores on an ongoing basis. A portable display has been developed for showing at community functions.

Second, we would target the **business community** by educating them on waste reduction practices, recycling opportunities and establish an office paper collection service. A business waste reduction symposium was sponsored by Haywood Vocational Opportunities, the Haywood County Chamber of Commerce, the Town of Waynesville and Haywood Community College. Haywood Community College and the Haywood County Schools are also targeted as "business" and rebuilding their in-house recycling programs is under way.

Third, is the education of **school children**. Haywood Vocational Opportunities has presented almost fifty programs to school age children to date and will be an ongoing effort. Haywood County Schools have in place a curriculum teaching waste management and recycling to third grade children.

For the initial six months of Haywood Vocational Opportunities public awareness and education program, the apparent acceptance of the general public could be gauged by an increase of approximately 60% in incoming recyclables to the Materials Recovery Facility. Businesses have also responded by signing up for the office paper collection service faster than they can be serviced.

Future plans call for the ongoing efforts in all areas listed above as well as the addition of outdoor advertising. The Business Waste Symposium is intended to become an annual event. The hospitality segment of Haywood County's businesses will become a new focus in the near future. Haywood Vocational Opportunities is currently working with the staff at Haywood Regional Medical Center to improve their recycling program. Haywood Vocational Opportunities will be working with the school system to establish training for school teachers in a garbage curriculum that will bolster the current courses. Progress as to the effect of the educational effort will continue to be measured by the volume of recyclables received.

In 2006 Haywood County Solid Waste Management was planning to develop a video on recycling for presentation to county students and civic organizations.

From 2007 to present, Stephen King, Director of Solid Waste and David Francis, Tax Administrator have spent many hours educating the schools and presenting to various audiences in an effort to educate the residents of Haywood County. We have made ourselves accessible to residents and educated the site attendants on recycling to that they may educate patrons who use the sites. All information is on the County's website for review. The Council for a Clean Community has distributed teachers' lesson plans on recycling, Lake Junaluska gives handouts on recycling to weekly renters and Haywood Community College disseminates information on recycling to all new students.

Every property owner in Haywood County is given recycling information printed on the back of their tax bills. This has proven to be very successful and ensures everyone has contact information if any recycling or disposal questions arise.

**New/Revised Actions:** We are looking at further utilizing the Government Channel to educate how recycling not only reduces operating cost for local residents, but how it supports American jobs as well. We are looking to update handout information and distribute the information in a format that others can incorporate into their handouts.

## **J. Special Waste Management**

### **Tires**

The original program was that tires were collected free of charge at the Materials Recovery Facility. Jack Millsaps & Son, Inc. leaves an empty trailer at the facility for private citizens to dispose of their tires. Jack Millsaps & Son, Inc. hauls tires off from tire dealers throughout the county. The full trailers are transported to Waste Recovery in Atlanta, Georgia for shredding.

Our tire disposal program is funded with money collected from household use fees and the statewide tire tax.

**New/Revised Actions:** Haywood County is looking to re-evaluate the program due to state funding cuts. The program is not fully funded from the 2% per capita return to the county. We are currently funding part of the operation through recycling revenues. We are looking into options such as hauling to different locations to grinding at our facility into a usable product.

### **White Goods**

In the original plan white goods are collected free of charge at the Materials Recovery Facility. The county has contracted with Charles Blaylock Trucking to haul all white goods off county property. Metal is hauled to Morristown Shredder and white goods are hauled to State Line Scrap Metal in Gastonia, North Carolina. The contractor adheres to all laws, rules and regulations pertaining to the removal and disposal of chlorofluorocarbons (CFC's).

The last revised actions were that part of the new baler facility, would include a new modernized white goods area. Grants would be applied for to help fund this item. Plans were to start a CFC removal at the Materials Recovery Facility.

In 2006 the new/intended actions, were that CFC removal is now being done at the Materials Recovery Facility.

Haywood County allowed scrap metal contracts to run out in July 2009 to allow the county to receive the full revenue potential and to ensure all CFC's are recovered and recycled.

Haywood County manages the scrap metal pile and markets the metal to different buyers. This has been a successful financial move that ensures our operation works as an enterprise fund.

**New/Intended Actions:** No new actions are anticipated.

### **Electronics**

Haywood County has been involved with recycling electronics for over three years. We offer recycling opportunities for residents six days a week from 7:30 a.m. until 3:30 p.m.

1. County collects electronics at our Materials Recycling Facility (MRF) located at 278 Recycle Road in Clyde. Boxes are placed at the entrance door to the MRF for patrons to utilize. Staff will periodically restack and

assist with items as needed. For heavier items we will assist by unloading with a squeeze lift fork truck.

2. Types of electronics collected include: PC's, Monitors, Laptops, TV's, Large Peripherals, cell phones, stereo equipment and miscellaneous equipment. The boxed electronics are picked up by Creative Recycling 2-3 times per month.
3. Haywood County is the only public entity inside the county with facilities for electronic recycling. At their option, all towns/municipalities within Haywood County may choose to pick up electronics from their residents and bring them to our facility to include with materials that are received directly from the public.
4. We have information available on our website, handouts at Convenience Center, handouts for Municipalities and educational presentations are conducted for anyone.
5. Information on methods to track and report tonnage of computer equipment, televisions, and other electronics is available. Creative Recycling sends us information back on the destruction of materials and the components that made up each load (TV, computer, etc). Each component category shall be tracked separately and reported to the state annually as part of the required local government annual report
6. Information on interactions with other local governments to operate electronics recycling programs. The electronics recycling program is available to all citizens of Haywood County regardless of whether or not they reside within town limits. The Town of Waynesville offers curbside pickup of electronics to their residents on a schedule set by the town. The three remaining towns may offer curbside pickup at their discretion. Haywood County allows all citizens access to the electronics collection site during the hours listed in #1.
7. Information on accounting of expenditure of funds. Haywood County's Finance Department uses MUNIS software for all financial accounting practices including the use of project codes that directly correlate to specific funding aspects. Accounts will be set up that will directly track all revenues and expenditures related to the State's Electronic Management Program Fund, so that all funds received can be used to support the electronics recycling program already in place for Haywood County.

**New/Intended Actions:** No new actions are anticipated.

## **Lead-Acid Batteries**

Lead-acid batteries are collected at the Materials Recovery Facility. Batteries are taken to and/or picked up by Interstate Batteries. Our goal has been achieved to put this program into place.

**New/Intended Actions:** No new actions are anticipated.

## **Used Motor Oil**

Collection of used oil is provided free to all citizens at the collection centers and Materials Recovery Facility. A company collects the used oil on a regular basis at all collection sites.

In 2009, we included oil filter recycling collection at all Convenience Center locations along with additional hydrocarbon recycling efforts.

**New/Intended Actions:** No new actions are anticipated.

## **Yard Waste**

In the original plan, yard waste was collected at the LCID Landfill at a rate of \$15.00 per ton.

The last revised actions were to grind yard waste at the new Construction and Demolition Landfill. The rate for yard waste went from \$15.00 per ton to \$30.00 per ton. The county's plans were to grind yard waste for mulch.

In 2010, Haywood County was pursuing a permit to compost yard waste through a trial demonstration. Once the material was composted it could be utilized for soil amendment around the landfill and other government offices. If any material was left over, we would offer it to the general public.

As more conveniently located private business are mulching all clean wood waste, pallets, limbs, yard waste and some stumps we are seeing a reduction of material coming to White Oak. The trial demonstration was never completed due to the lack of material coming into the facility.

**New/Intended Actions:** No new actions are anticipated.

## **Septage**

Haywood County, at the present, does not have any septage land application permits.

**New/Intended Actions:** No new actions intended.

## **Household Hazardous Waste**

Haywood County has no household hazardous waste (HHW) collection. Citizens may call the Solid Waste office for inquiries on disposing of household hazardous waste.

About 85% of hazardous waste consists of house paint. At the MRF, saw dust is available for residents to dry the paint in the paint buckets making it safe for disposal.

We accept household batteries at all convenience centers and MRF. A container is provided at all Convenience Centers.

Haywood County collects mercury containing items such as thermometers, thermostats and light bulbs. Lake Junaluska also accepts compact florescent bulbs at \$1.00 for proper disposal. Haywood County contracts with a private firm for the proper handling and recycling of mercury containing devices including florescent bulbs.

**New/Intended Actions:** We are looking at establishing a permanent HHW program with a building to properly house the material for recycling and/or disposal.

## **Agricultural Waste**

Empty containers, if triple rinsed, may be put into recycling bins. Any inquiries on agricultural waste are directed to the Cooperative Extension Office.

The last revised actions were that the program remains the same except for the Town of Waynesville. The town offers a liming agent to bulk users for pastures, silage cornfields and hayfields.

**New/Intended Actions:** No new actions intended.

## **K. Prevention of Illegal Disposal and Management of Litter**

### **Illegal Disposal – Operated Sites**

In the original plan there were no county programs in place to deal with illegal disposal of waste; however, illegal disposal of solid waste, construction and demolition waste and inert debris is a problem for Haywood County. The Haywood County Solid Waste office works with regional representatives of the Department of Environment, Health and Natural Resources (DEHNR) to investigate sites that have been reported by concerned citizens.

There were reports of many persons outside Haywood County using the convenience center sites. Beginning January 1, 2000, Haywood County began issuing decals to Haywood County residents by showing a driver's license and vehicle registration with a Haywood County address. By using decals, the solid waste management staff can easily identify county residents and keep garbage from other counties from going into the Haywood County Landfill. Haywood County still issues decals to Haywood County residents at the beginning of each calendar year.

Haywood County is establishing Standard Operating Procedures (SOP) for calls generated by illegal disposal and other concerns. We plan to investigate and enforce local laws concerning illegal disposal. This aspect will be handled through the Planning Department.

**New/Revised Actions:** No new actions intended.

### **Litter Management and Promiscuous Dumping**

In our original plan, indiscriminant dumping was a problem throughout the county. Shingles, tires, furniture and white goods were common materials found in illegal dump sites. Littering is also a problem along our roadsides in Haywood County.

Community development clubs and several civic groups participate in the state Adopt-A-Highway program to clean roadsides. The Department of Transportation utilizes inmates to clean major highways throughout the county.

Indiscriminant dumping is reported to the Planning Department. A representative from the county investigates dump sites and coordinates the cleanup.

The Big Sweep cleanup program is held annually in Haywood County. Volunteers participating in this cleanup target our rivers and streams.

The Solid Waste Director hopes to work more closely with local law enforcement on the magnitude of the problem of littering and educate on the benefits of tarping loads.

In the Year 2003 update, Clean NC2000 had increased litter awareness. County staff worked with local Citizens for Clean County and the State to educate about litter and help with clean up.

A curriculum "Litter and Pollution – Cleaning Up Our County" was introduced to the Haywood County School System by the Commission for a Clean County.

A proposal was made to employ a special enforcement officer to enforce local ordinances adopted by the County.

The Haywood County Solid Waste staff and a deputy assigned by the Sheriff were to assist the N. C. Solid Waste Section in the location and cleanup of illegal dumps in Haywood County. The municipal administrations were to assist the State and County regarding illegal dumps within their jurisdiction.

A. When a complaint about an illegal dump is filed with or discovered by the County or municipal staff, the appropriate staff will determine the ownership of the property containing the dump.

B. A letter will be sent to the owner of the property advising that there is a complaint of an illegal dump. A copy of the letter will be forwarded to the Asheville office of the N. C. Solid Waste Section and other agencies, as deemed appropriate. The letter will include a copy of the State regulations pertaining to illegal dumps.

C. If the owner, or the person or persons, who dumped illegally, does not clean the site within 30 days, the County or municipality will notify the N.C. Solid Waste Section to take appropriate action.

D. Haywood County, when and where possible, will assist property owners with removal of materials dumped illegally when the property owner is not capable of performing the work. This service will be rendered when staff has time and equipment available.

Since the last update, Haywood County has employed a special officer to enforce local ordinances adopted by the County. The "Litter and Pollution Cleaning Up Our County" curriculum was introduced to the School System by the Commission For A Clean County and is a continuing program.

The Town of Waynesville has an "Adopt a Street" program involving approximately 50 locations. Freida Rhinehart at Town Hall, 456-2024, coordinates the program. Four cleanups each year are expected of the participants.

**New/Revised Actions:** We are looking to gather more participation with roadside cleanup to heighten the awareness of the litter problem. Haywood County's Manager has met with officials about putting a stop to the causes of the problem and has requested the help of the Towns to put a stop to litter. We are looking into becoming an affiliate of Keep America Beautiful to assist with combating the problem of litter on our road sides. We purchased litter bags and will be handing them out to litter cleanup groups and Convenience Center patrons to further educate on this problem.

#### **L. Purchase of Recycled Materials and Products**

In the original plan, no recycled product purchasing program was in place at the time. However, the purchasing agent with Haywood County does purchase recycled and recyclable products through state contracts. Recycled content products are purchased whenever it is economically feasible and practicable.

Our Sustainability Plan encourages the purchase of recycled content material, environmentally friendly products and lower environmentally impacting products. The Haywood County Detention Facility has begun purchasing all biodegradable products used by the inmates and has had an unintended benefit of lessening the risk of creating weapons by the inmates.

**New/Revised Actions:** Continue looking at purchasing recycled content items as they become available.

## Section 7 Solid Waste Management Cost

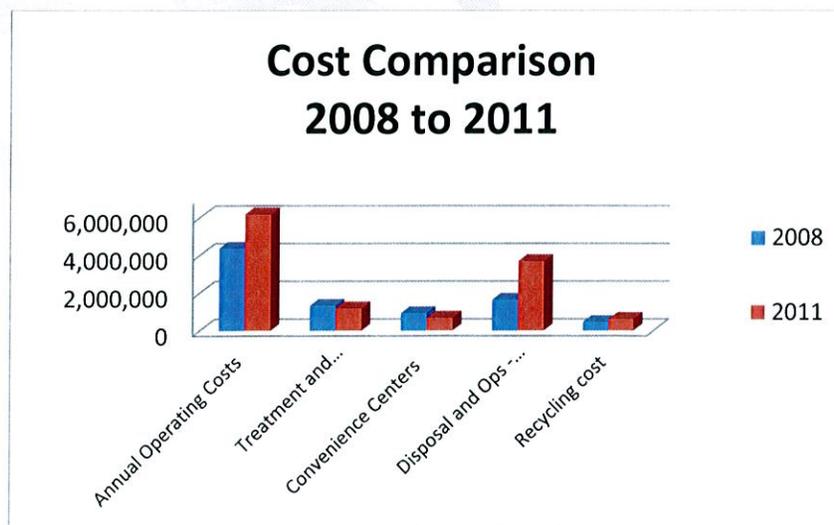
### Description and Assessment of Costs:

#### County Description

Haywood County operates the solid waste program. The total budget for the county-operated program during fiscal year **07/01/07-06/30/08** was **\$4,367,014**. The annual cost of operating the Treatment and Processing Facility was **\$1,331,986**. The annual cost to operate the ten convenience center sites for county collection was **\$933,225**. The disposal cost and operations of the White Oak Landfill including engineering services were **\$1,644,148**. The recycling program costs total **\$457,655**. The cost includes sorting recyclables and pulling recycling trailers from the ten convenience center sites.

Haywood County managed **61,831** tons of waste and recovered **3,484** tons of recyclable materials during the same period.

Haywood County's total operating cost for the fiscal year **07/01/10 – 06/30/11** was **\$6,167,031**. The Treatment and Processing facility cost was **\$1,188,357**. The cost to operate the 10 Convenience Centers was **\$683,155**. The disposal cost and operations of the White Oak and Francis Farm Landfill were **\$3,678,327**. The recycling program costs total **\$617,190**. Haywood County buried **44,857.71** tons of waste and recovered **5383.75** tons of recyclable materials during the same period.



## **County Assessment:**

According to the analysis in 2008, the cost of collection is our largest expense on a per ton basis. To reduce our costs in the collection program, the county would need to reduce the number of personnel and convenience center sites. At present, the county is closing the convenience center sites one day a week. Five are closed on Tuesdays and five on Thursdays.

The next largest expense in the solid waste program in 2008 was baling the waste at the Transfer Station. This includes baling the waste and transporting it by tractor trailers to the White Oak Landfill.

In 2010, Collection costs were reduced by contracting staff along with hauling. We will be closing two sites in August 2012 allowing us to extend hours at the busiest Convenience Centers.

In December 2011, we completed a two year process and contracted with a private firm to operate the landfill to control cost and maximize the airspace available. We are also working with them as they go through the permit process to reach the Expanded Management part of the contract. If this is reached cell development, all closure and post closure cost will be eliminated.

In July 2012, we are eliminating the transfer operation from the Treatment and Processing Facility and redesigning it to accommodate small haulers, handicap patrons and offer more recycling services.

## **Description and Assessment of Financing Methods:**

The current solid waste program is funded through tipping fees, household fees, business availability fee, sale of recyclables, grants, tire tax, white goods tax, vehicle permits and franchise fees.

The funding for the solid waste operational program comes largely from household fees and business fees. Tipping fees are the next largest source of income for the program.

Other revenue options include sale of recyclables and applying for grants as they become available. Loans are obtained for purchases of large equipment or landfill expansions. With the current funds, we cover all of the operating expenses but not expansion expenses. The county is reviewing options for funding expansions which is a necessity to maintain the current demand for disposal of solid waste.

## **Description of Each Funding Method:**

**Household Fees:** At the present, the household fee is \$92.00 annually.

**Business Availability Fee:** This fee is used for shortfalls. Future activity of this fee would be used to support a recycling coordinator position and collection of recyclables.

**Sale of Recyclables:** Revenue from the sale of recyclables is used toward the funding of the county's recycling program. Fluctuations in material prices make it difficult to predict how much revenue will be generated by recycling. The total gross revenue from recyclables for fiscal year 07/01/07-06/30/08 was **\$389,282**. The total gross revenue from recyclables for fiscal year 07/01/10-06/30/11 was **\$642,400** which covered all cost associated with recycling including the scrap tire program.

**Grants:** The County applies for grant funds to cover implementation of new programs or to cover expenses on programs already in progress. The County received a grant for \$15,000 for the purchase of containers in the fiscal year 2009/2010. In fiscal year 2011, the County was awarded a grant for converting Waste to Energy in the amount of \$1,000,000 at the Francis Farm Landfill. The county also received a grant for \$17,242 to refurbish the Recycling baler.

**Tax Reimbursements:** The County recognizes that the revenue received from state tax reimbursements will change in the future. We have concerns this will affect the overrun cost of tire disposal. By taking over the scrap metal, we hope to make up for the short fall of reimbursements from the state. This objective was met and exceeded our expectations.

**Loans:** Loans are obtained at the lowest possible interest rate for solid waste needs such as purchases of large equipment and landfill expansions.

## **Municipality Assessments**

### **Town of Canton – 2009 - 2011**

In 2009, the Town of Canton expressed their support for the direction Haywood County was taking with all aspects of solid waste. The Town of Canton provides curbside collection for solid waste and recyclables for all households within the Town of Canton. Recyclables are picked up by a separate truck(s) in blue bags and transported to the Haywood County Materials Recovery Center. The Town provides collection to each household on a curbside basis unless a medical certificate is issued and those are collected at the back door. A monthly fee of 9.00 dollars is charged on the utility bill. This fee covers the collection of household waste, recyclables, yard waste, brush, appliances, and junk. All collected materials must meet the Haywood County Recovery Center's standards

of disposal or be transported to the White Oak Landfill. The Town has a population of 4,235 (2010 Census). The 1,546 household disposed of 1231.4 tons of waste and 88.91 tons of recyclables. The Town does not pick up any commercial waste. Since there are several contractors providing commercial service the Town is unable to provide any commercial collection data. Due to the current cost of collection by Town crews the Town Board is currently reviewing proposals to have this service provided through a contract. The Town will continue to collect appliances, yard waste, etc... The Town's solid waste program numbers are below:

	<b># Households Served</b>	<b>Tons Collected</b>	<b>Total Cost</b>	<b>Calculated Cost Per Ton Managed</b>
<b>Municipal Solid Waste</b>	1576	1231.4	\$119,669.97	97.18
<b>Recycling Program</b>	1576	88.9	\$8,547.86	96.15
<b>Yard Waste</b>	1576	145	\$14,246.43	98.25
<b>Totals</b>	1576	1465.31	\$142,464.25	

Cost per ton solid waste is \$97.18. Cost per household is \$16.22.

Cost per ton recyclables is \$ \$97.15. Cost per household is \$ 16.39.

The Town of Canton's population increased 5.1% in 2010 census compared to 2000 census.

The Town of Canton does not have a source reduction program.

The Town of Canton does not currently have a reuse program.

The Town of Canton does have a C&D recycling program.

Brush pickup is provided to the residents of Canton and is converted to mulch which is used for landscaping throughout the Town.

The Town collects curbside recyclables in blue bags for all residents inside the corporate limits. It is estimated that a majority of our residents participate in the recycling program and in excess of 50% participate on a weekly basis. As new customers apply for water service information concerning recycling is given to them.

The Town does not currently have a special waste program. The Town Board has indicated an interest in having shredding and hazardous chemical disposal days or all citizens.

The previously established waste reduction goal for the Town of Canton was 10%. Our new waste reduction goal will remain at 10%.

### Town of Clyde 2007 - 2008

The Town of Clyde contracts with Henson's Sanitary Service for curbside collection. Town personnel pick up commingled recyclables in blue bags and cardboard which they transport to the Haywood County Materials Recovery Facility. The Town provides collection to each household. A monthly fee is charged on the utility bill. This fee covers the collection of household waste, yard waste, brush, leaves, appliances and junk. The Town of Clyde has placed some restrictions on the pick-up of brush and leaves. All other junk including appliances must meet the Haywood County Materials Recovery Center's standards of disposal.

The Town has a population of 1,372. In Fiscal Year 2007-2008, 505 households disposed of 875 tons of waste and 18.15 tons of recyclables. The Town does not pick up commercial waste. There are several contractors providing this service to the business owners: therefore, the Town of Clyde cannot provide collection or disposal data. The Town of Clyde's solid waste program costs are summarized in the table below. These totals are derived from the full cost of collection and from charges assessed by the Haywood County Solid Waste Management.

<b>Residential Program Cost</b>	<b>Collection/ Disposal</b>	<b>Waste Reduction</b>	<b>Total</b>
\$38,976.00	\$7,630.00	\$46,606.00	\$93,212.00
<b>Cost per Ton</b>			
\$44.91	\$44.55	\$420.39	
<b>Cost per Household</b>			
\$77.18	\$15.11	\$92.29	

Each household in the Town of Clyde paid a \$65.00 landfill fee to the County in addition to the above charges.

On a per household basis, the Town of Clyde's recycling program cost less than the collection and disposal. As volume increases the cost will go down.

### Town of Clyde 2011- 2012

The Town has a population of 1,225. In fiscal year July1, 2010-July 30, 2011, the 504 households disposed of 1,096 tons of waste and 51.72 tons of recyclables. The Town does not pick up commercial waste. There are several contractors providing this service to the business owners, therefore the Town of Clyde cannot provide collection or disposal data. The Town of Clyde's solid waste program costs are summarized in the table below.

	# Households served	Tons Collected	Collection Cost	Total Cost	Calculated Cost Per Ton Managed
<b>Municipal Solid Waste</b>	504	1096	\$37,258.20	\$37,258.20	33
<b>Recycling Program</b>	504	51.72	\$9,271.80	\$9,271.80	179

Cost per ton for solid waste is \$33.99. Cost per household is \$73.93.

Cost per ton for recyclables is \$179.27. Cost per household is \$18.40.

The Town of Clyde's population decreased 7.6% in the 2010 census compared to the 2000 census.

The Town of Clyde currently does not have a source reduction program.

The Town of Clyde does not currently have a reuse program.

The Town of Clyde does have a clean wood recycling program. Brush pickup is provided to the residents of Clyde and what can be chipped is done so and mulch given to residents that request it.

Henson Waste Services picks up the curbside recyclables for the residents inside the town limits. It is estimated that the majority of residents regularly participate in the recycling program. As new residents apply for water service in the Town, information concerning recycling is distributed to them. Articles will appear from time to time in the town newsletter encouraging the recycling program as well.

The Town does not currently have a special waste program.

The previously established waste reduction goal for the Town of Clyde was 10%. The new waste reduction goal will remain at 10%.

#### **Town of Maggie Valley 2007 - 2008**

The Town of Maggie Valley contracted with GDS for curbside collection of household refuse and recyclable materials. The Town provides collection to each household. There is no charge for this service. The Town of Maggie Valley picks up yard waste and white goods. All appliances must meet Haywood County Materials Recovery Center's standard of disposal.

The Town had a population of 1251. In Fiscal Year 2007-2008, 685 households disposed of 407 tons of waste and 22.27 tons of recyclables. The Town does not pick up commercial waste. There are several contractors providing this service to the business owners: therefore, the Town of Maggie Valley cannot provide collection or disposal data. The Town of Maggie Valley's solid waste program costs are summarized in the table below. These totals are derived from the full cost of collection and from charges assessed by the Haywood County Solid Waste Management.

<b>Residential Program Cost</b>	<b>Collection/Disposal</b>	<b>Waste Reduction</b>	<b>Total</b>
	\$61, 568.00	\$9940.00	\$71, 508.00
<b>Cost per ton</b>			
	\$151.27	\$172.00	-----
<b>Cost per household</b>			
	\$89.88	\$14.51	\$104.39

Each household in the Town of Maggie Valley paid a \$60.00 household availability/landfill fee to Haywood County in addition to the above charges paid by the Town of Maggie Valley.

On a household basis, the Town of Maggie Valley's recycling program cost less than the collection and disposal. As volume increases the cost will go down.

#### **Town of Maggie Valley 2010 - 2011**

The Town had a population of 1152. In fiscal year July 1, 2010 – June 30, 2011, the 841 households disposed of 328.25 tons of waste and 85.2 tons of recyclables. The Town does not pick up commercial waste. There are several contractors providing this service to the business owners: therefore, the Town of Maggie Valley cannot provide collection or disposal data. The Town of Maggie Valley's solid waste program costs are summarized in the table below. These totals are derived from the full cost of collection and from charges assessed by the Haywood County Solid Waste Management.

	<b># Households Served</b>	<b>Tons Collected</b>	<b>Collection Cost</b>	<b>Total Cost</b>	<b>Calculated Cost Per Ton Managed</b>
<b>Municipal Solid Waste</b>	841	328.25	\$75,348	\$75,348	\$229
<b>Recycling Program</b>	841	85.2	\$11,976	\$11, 976	\$140

Cost per ton for solid waste is \$229. Cost per household is \$89.59.

Cost per ton for recyclables is \$140. Cost per household is \$14.24.

The Town of Maggie Valley's population increased by 7% in the 2010 census compared to the 2000 census.

The Town of Maggie Valley does not currently have a source reduction program.

The Town of Maggie Valley does have a clean wood recycling program. Brush pick up is provided to the residents of Maggie Valley.

Consolidated Waste Services (CWS) picks up the curbside recyclables for the residents inside the Town limits. It is estimated that the majority of residents regularly participate in the recycling program. As new residents apply for trash service, information concerning recycling is distributed to them. We also send out an annual newsletter encouraging our residents to recycle and recycling information is on our Town of Maggie Valley website.

The Town does not currently have a special waste program.

The previously established waste reduction goal for the Town of Maggie Valley was 10%.

The Town of Maggie Valley contracts with GDS, Inc. for curbside residential solid waste collection which was started in July, 2002. The town does not charge its residential customers for this service. All materials designated for collection must fit into the 90-gallon rollout containers provided in order to be collected. The town has a full-time population of 1,593. This number is somewhat misleading in that Maggie Valley has a significant number of residences that are occupied on a part-time basis that are provided the collection service in the same manner as full-time residences. The Town of Maggie Valley does not provide for commercial solid waste collection. All commercial solid waste is disposed of by the individual business owner, either by private contractor or by the owners themselves.

Even though solid waste is contracted, the Town of Maggie Valley Public Works Department plays a big role in this service. The town delivers cans, pick-up cans, repair cans, pick-up missed trash, resolve complaints and monitors the solid waste contractor.

The town has started two new services in recent years. The first new service is brush and limb pickup. This service is provided on an as needed basis, and is scheduled as people call for service. The second service is white goods (appliances) pickup and disposal for residences. This service is in combination with brush and limb pickup and the contracted garbage pickup make the town's solid waste service a comprehensive service to residences.

### Town of Waynesville 2007-2008

For residents of the Town of Waynesville, four separate collection routes provide weekly curbside service. Rear loader packer trucks pick up household and downtown business's solid waste, a flat bed dump truck collects recyclables in blue bags. A flat bed dump truck picks up bulky items such as white goods, old furniture and mattresses. Two yard waste collection trucks come by vacuuming leaves in the fall and chipping brush and yard trimmings throughout the year. Cardboard is no longer collected but residents are encouraged to bring it to either the Convenience Centers or the Materials Recovery Facility located in Clyde for recycling.

Based on 4,600 households, the following residential costs were calculated:

Residential, Commercial and Bulky Waste Collection	\$505,000
Commercial Solid Waste Disposal Cost	\$215,000
Residential Recycling Collection Cost	\$65,000
Mulching, Composting Program Cost	<u>\$415,000</u>
<b>Total Cost =</b>	<b>\$1,200,000</b>

The town's cost for residential services are paid from the property tax levy and a \$5.00 per month user charge on the utility bill. The disposal cost for residential solid waste delivered to the Haywood County Materials Recovery Facility is funded by a solid waste user fee of \$65.00 charged by Haywood County on the property tax bill. The recycling program is the least expensive program offered.

The town does not collect or accept construction materials, demolition products, shingles, old carpet, tires nor items too heavy for their crews to lift such as engine blocks, stumps, or limbs greater than 3 ½" diameter. Those items must be taken to the proper county facility for disposal.

For Fiscal Year 2007/2008, the town paid the county \$190,443 in tipping fees for 3,820 tons of commercial solid waste (\$55.00 per ton). The town's commercial collection of solid waste is either dumpster service or curbside weekly. The town attempts to recover the tipping fee costs by charging a user fee on the monthly utility bills. At the present, the town charges \$61.00 for 4 yard container, \$85.00 for 6 yard and \$109.00 for an 8 yard per dumpster for once a week service. The collection costs are funded from property tax revenues.

The town abandoned the collection of commercial cardboard to Hazelwood Truck Service in December, 1998. In 2009, Henson Waste Disposal took over the collection of commercial cardboard within the town limits. Prior to 1998, the town collected cardboard from commercial customers who chose to purchase dedicated dumpsters for cardboard. Those dumpsters still exist but are not serviced by the town. Most large scale cardboard generators in town use another private service since loose cardboard in dumpsters does not handle their volume satisfactorily.

### **Town of Waynesville 2010 – 2011**

The estimated population for the Town of Waynesville is 9,869 per US Census 2010. From 7-1-2010 thru 6-30-11 the Town transported 6183.32 tons of Municipal Solid Waste (MSW) to the Haywood County Transfer Station per County report, including 2,895.35 tons of residential waste, 2,896.01 tons of commercial waste, 345.23 tons of recyclables, etc. According to the recent study by Land of Sky, the Town's commercial and residential waste makes up around 75% of the total waste stream handled by the Town.

The Town provides once a week curbside collection of residential solid waste and blue bag recyclables and delivers the material to the Haywood County MRF. The Town provides twice a month curbside collection of yard waste, bulky trash and junk. All scrap metal and white goods, as well as electronic recyclables goes to the County MRF. Non residential solid waste is picked up by the Town and also by private haulers. Generally private haulers handle large volume generators like Wal-Mart, Ingles and Associated Packaging.

The Town also picks up curbside from small businesses once a week and twice a week in the DWA District. We also pick up around 45 non-residential customers with front-loaders. All solid waste is taken to the County. A small number of blue bags are collected from the commercial users. Due to ABC and County regulations, the Town stopped accepting glass from ABC permit holders due to the fact that the volume from bars and restaurants is too large for the blue bag system.

The Town will not collect construction and demolition waste. Some material generated by Town departments such as old power poles are taken to the White Oak Landfill. The Town also takes the street sweepings to the WOLF. From 7-1-2010 thru 6-30-11 there were 222.82 tons of street sweepings.

Residential waste is hauled by the Town of Waynesville. Some of the non-residential waste is hauled by the town, some by private haulers and most of the commercial cardboard is hauled by Henson Waste Disposal. Construction and demolition waste is hauled by private haulers

The Town uses a quarterly newsletter, e-newsletters, newspaper ads/articles, and the Town of Waynesville website to educate our customers. A handout at the Town Hall is provided to new customers. We partner with the Agricultural Extension Agent and Master Gardeners for composting and mulch promotion and distribution.

The Town will continue to collect recyclables curbside in blue bags for now but, the Town is strongly looking at going to a 96 gal cart system for recyclables. The Town is looking at grants in order to funds to offset costs. Hopefully this can be implemented in the next couple of years in order to cut back on waste going to WOLF. The Town prohibits commercial cardboard from our collection routes and refers generators to a private hauler.

The Town currently has a mulching and composting program. We grind larger items collected by the town crews and compost all leaves, grass and other smaller yard waste debris. As part of the composting and mulching program, the Town will continue to compost leaves and grass at the Bible Baptist Drive site. Distribution of compost is scheduled for April 12-14 & 19-21 2012 to the public at \$10 per pickup or trailer load. Double ground mulch is offered for \$25 distribution. The town will deliver mulch freshly collected on the chipping route to in-town locations. The town plans to grind stock piled wood waste and material mined from the inert debris landfill on an annual basis and offer it for distribution.

In FY 2010-11 the Town of Waynesville spent \$1.45 million on Solid Waste Program services, which included the collection of residential waste, commercial waste, recyclables, yard waste, bulky items, and street sweepings. Expenditures for the collection of residential and commercial solid waste, which is currently transported to the Haywood County Transfer Station, were \$291,342 and \$396,024 according to the LOS study.

### **Section 8 Emergency/ Disaster Debris Management and Animal Mortality**

In the original plan, Haywood County did not have a disaster response plan.

In our 2003 update, Haywood County Emergency Management Office had a debris management plan which is recommended by the Federal Emergency Management Administration. County staff identified three public sites on which wood waste could be collected in the event of a disaster where trees were felled.

These sites are as follows:

County Wood waste Processing Site - # 44-07 - White Oak Land Fill  
Waynesville Yard Waste Facility (Waynesville only)

In the event of a disaster involving solid waste such as shingles, sheet rock or other building materials, County Emergency Management will work with the towns and County Solid Waste staff to collect and dispose of solid waste created by the disaster. In the towns, their staff will pick up these materials as usual. A sample intergovernmental Emergency Mutual Aid Agreement is attached for information. Additional staff and equipment can be hired by the Towns or the County as needed in case of disaster.

Haywood County applied for a grant to update the county's emergency management plan.

**New/revised actions:** Haywood County now has an Emergency Debris Management Plan. Haywood County plans to follow the Emergency Debris Management Plan as previously posted.

## **Animal Mortality**

**New/Intended Actions:** Haywood County does not have any large operations of animal farming. We currently place all mortalities in the working face of the daily operation. We only see a few animals at any given time so we have no need for any additional action.

## **Section 9 Resolutions**

See Attached Resolutions

## **Section 10 Ordinances**

### **Solid Waste Disposal**

**[http://www.haywoodnc.net/downloads/solid\\_waste/SOLID WASTE DISPOSAL ORDINANCE 072610.pdf](http://www.haywoodnc.net/downloads/solid_waste/SOLID_WASTE_DISPOSAL_ORDINANCE_072610.pdf)**

## **Waste Reduction Goal Sheets – See Appendix E**

## **Facilities and Resources Available Through Private Enterprise**

Haywood County uses a combination of publicly and privately operated programs. A portion of recycling in Haywood County is privately operated.

The County, at the present, has nineteen (19) private haulers permitted to haul residential and commercial waste.

# APPENDIX A

## RESOLUTIONS

DRAFT

## **APPENDIX B**

# **AFFIDAVIT OF PUBLIC MEETING PUBLICATION**

Copy will be added after publication  
is posted and affidavit from  
newspaper completed

# APPENDIX C

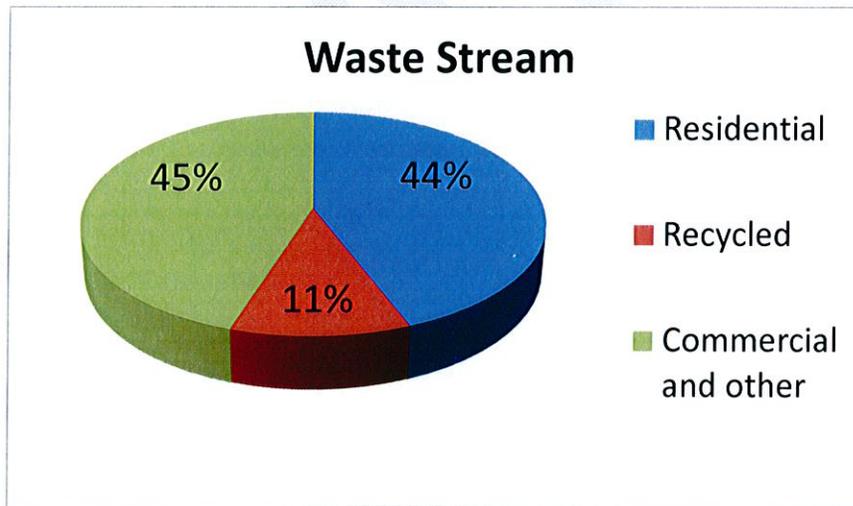
## MAP OF FACILITIES AND DISPOSAL SITES

DRAFT

# APPENDIX D

## WASTE CHARACTERIZATION CHART

The waste stream is represented by 45% commercial, industrial, construction and demolition, 44% residential house hold and 11% recycled for the physical year. These calculations are based on tonnages weighted by weigh masters. This waste was either disposed of at the facilities permitted under permit 4407 at the White Oak location or processed and sold as recyclables. Through education and convenience we have increased the volume of recyclables over previous years.



# APPENDIX E

## WASTE REDUCTION GOAL SHEETS

**Haywood County** — attached

**Town of Clyde** — information included in update

**Town of Waynesville** — information included in update

# APPENDIX F

## PLANNING ELEMENTS

DRAFT

## **APPENDIX G**

# **APPROVED STAGING AREAS OR DISPOSAL SITES, CONTACT LIST, COPY OF EMERGENCY MANAGEMENT PLAN AND INTERGOVERNMENTAL EMERGENCY MUTUAL AID AGREEMENT**

Copies available by contacting  
Solid Waste Department

# **APPENDIX H**

## **SUSTAINABILITY PLAN**

Copy available by contacting the  
Solid Waste Department or via the  
Haywood County website

# **APPENDIX I**

## **ORDINANCES**

Copies of all ordinances are available on the Haywood County website, in the County Manager's office and in the Solid Waste Department

# APPENDIX J

## **“LITTER AND POLLUTION” CURRICULUM INTRODUCED TO HAYWOOD COUNTY SCHOOLS**

Copies are available by contacting  
the Solid Waste Department

# **APPENDIX K**

## **FULL COST ACCOUNTING ANALYSIS – HAYWOOD COUNTY**

Copies available by contacting  
Solid Waste Department;  
information included in update

DRAFT

# APPENDIX L

## SOLID WASTE COMMITTEE

Joy Garland, Town Administrator	Town of Clyde
Tim Barth, Town Manager	Town of Maggie Valley
Mike Mehaffey	Town of Maggie Valley
Buddy Young, Director Residential	Lake Junaluska Assembly
Jim Giauque, Waste Compliance Landfill Supervisor	Evergreen Packaging
Fred Baker, Director, Public Works	Town of Waynesville
David Francis, Tax Collector	Haywood County
Zondra Robinson, Office Manager	Haywood County
Stephen King, Solid Waste Director	Haywood County

**APPENDIX A**

**RESOLUTIONS**

## **APPENDIX B**

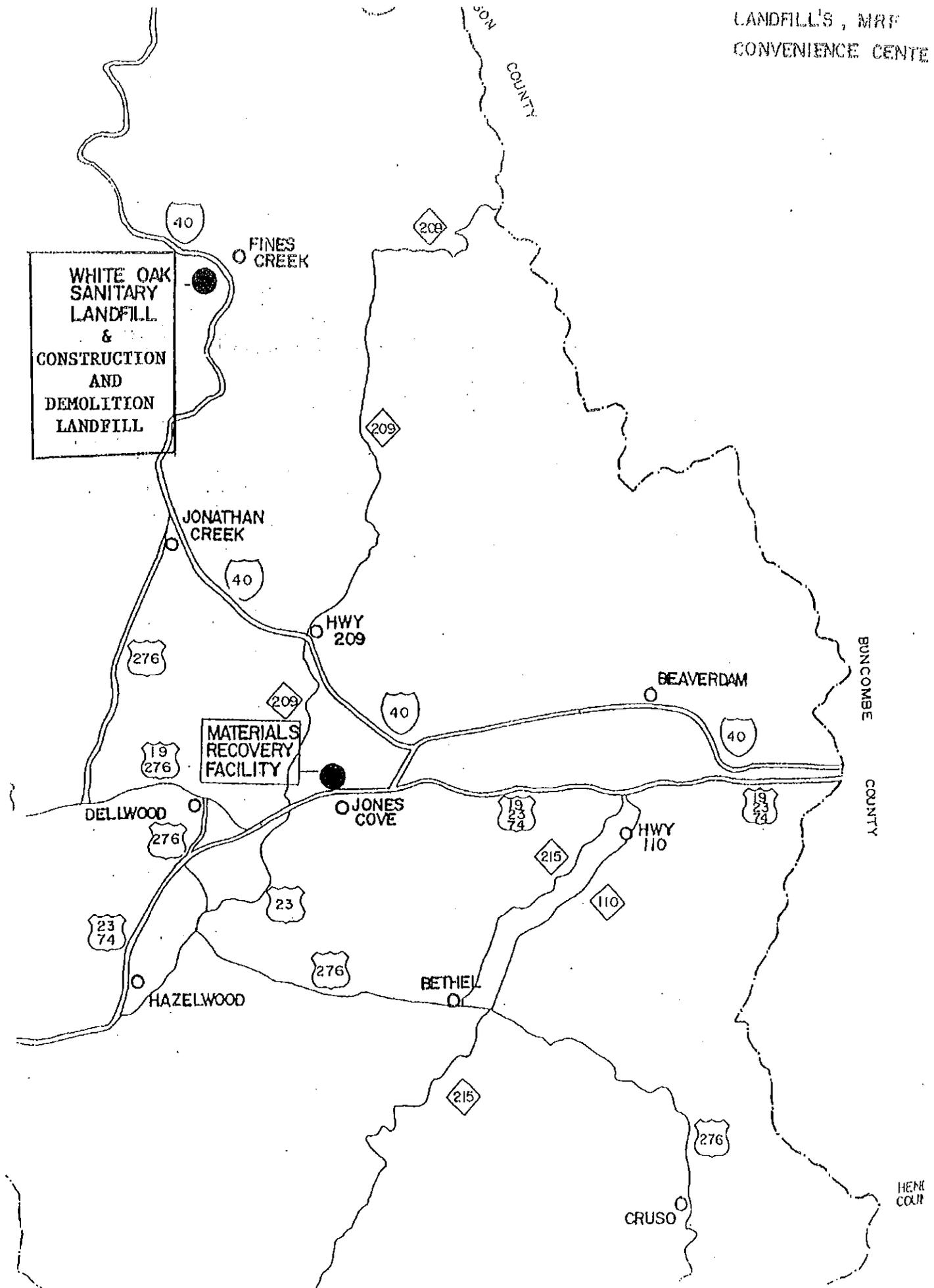
# **AFFIDAVIT OF PUBLIC MEETING PUBLICATION**

Copy will be added after publication  
is posted and affidavit from  
newspaper completed

# **APPENDIX C**

## **MAP OF FACILITIES AND DISPOSAL SITES**

LANDFILL'S , MRF  
CONVENIENCE CENTE

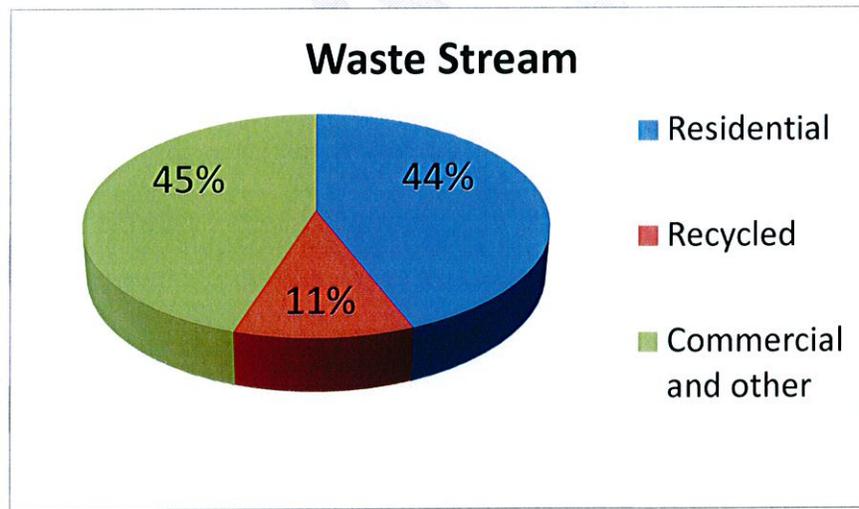


APPENDIX C.

# APPENDIX D

## WASTE CHARACTERIZATION CHART

The waste stream is represented by 45% commercial, industrial, construction and demolition, 44% residential house hold and 11% recycled for the physical year. These calculations are based on tonnages weighted by weigh masters. This waste was either disposed of at the facilities permitted under permit 4407 at the White Oak location or processed and sold as recyclables. Through education and convenience we have increased the volume of recyclables over previous years.



# **APPENDIX E**

## **WASTE REDUCTION GOAL SHEETS**

**Haywood County** — attached

**Town of Clyde** — information included in update

**Town of Waynesville** — information included in update

**WASTE REDUCTION GOAL SHEET**  
**NC LOCAL GOVERNMENT TEN YEAR SOLID WASTE MANAGEMENT PLAN**

Local Government Name: Haywood County

Previously established waste reduction goal: 25 %

After considering your government's current and projected solid waste activities, resources, population, and economic growth have you reached your previously established goal?  Yes  No

Establish a new waste reduction goal: 20 %

**WASTE REDUCTION CALCULATION**

To provide 10 years of solid waste management planning, as per G.S. 130A-309.09A(b), waste reduction goals need to be updated. Use the following chart to determine the tonnage needed to be diverted from landfills in order to reach the new waste reduction goal.

**CALCULATION**

**FY 2012-2022**

1. Baseline year per capita disposal rate <i>(FY 1991-1992 unless alternate approved by Section)</i>	1.21
2. Percent waste reduction goal	20 %
3. Targeted per capita disposal rate <i>(Subtract line 2 from 1.0 and multiply result by line 1)</i>	.97
4. Estimated population in the new waste reduction goal year <i>(Available at Office of State Budget and Management website: Projected Annual County Population Totals 2010-2019)</i>	61,874
5. Projected tonnage for disposal at baseline disposal rate <i>(Multiply line 1 by line 4)</i>	74,867
6. Targeted annual tonnage for disposal <i>(Multiply line 3 by line 4)</i>	60,018
7. Targeted annual tonnage to reduce <i>(Subtract line 6 from line 5)</i>	14,849

Population Link: [http://www.osbm.state.nc.us/ncosbm/facts\\_and\\_figures/socioeconomic\\_data/population\\_estimates/demog/cpa2010p.html](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/cpa2010p.html)

**WASTE REDUCTION PLAN**

Given the targeted annual tonnage amount to be reduced, explain how you plan to reach the goal:

The county plans on meeting this goal by increasing household/business recycling by setting up areas that are convenient, in addition to making recycling more items possible.

## HAYWOOD COUNTY SOLID WASTE MANAGEMENT QUESTIONNAIRES

### Town of Clyde Information for Haywood County Solid Waste Management Plan Questionnaire

1. The population of Clyde is 1,372. The growth rate for the Town of Clyde has actually decreased by about 5%.
2. The Town of Clyde contracts with Henson Waste Disposal for the pick up of residential solid waste. The town picks up blue bags and cardboard.
3. Currently the population seems to be decreasing since the floods of 2004.
4. The total tons of residential disposed of in 2008 were 875 tons.
5. N/A
6. Henson's Waste Disposal Service hauled approximately 875 tons of residential waste to the Haywood County Material Recovery Facility from July 1, 2007 thru June 30, 2008.
7. The Town of Clyde hauled 18.15 tons of commingled recyclable waste to the Haywood County Recycling Facility from July 1, 2007 thru June 20, 2008.
8. N/A
9. The Town of Clyde currently does not have a source reduction program.
10. The Town of Clyde does not currently have a reuse program.
11. The Town of Clyde does have a C&D recycling program. Brush pickup is provided to the residents of Clyde and what can be chipped is done so and mulch is given to residents that request it.
12. The Town of Clyde does have a curbside recycling program. Employees from the local government collect blue bags and cardboard following the contractors' trash pick-up. We estimate that of the 505 households in Clyde, approximately 300 regularly participate in the recycling program.
13. As new residents apply for water service in the Town of Clyde, information concerning recycling is distributed to them. Articles will appear from time to time in the town newsletter encouraging the recycling program as well.
14. Not at this time.

15. The Town of Clyde does not currently have a special waste program.
16. The Town of Clyde experienced a natural disaster in 2004. Haywood County assisted the town through the disaster. There was an enormous amount of debris hauled to Haywood County Landfill including the demolition of several houses. We understand that disasters of this nature decrease the amount of available space in the landfill tremendously.
17. Unsure
18. N/A
19. The previously established waste reduction goal for the Town of Clyde was 10%. The new waste reduction goal will remain at 10%.

### **Town of Waynesville Information for Haywood County Solid Waste Management Plan Questionnaire**

1. The estimated population for the Town of Waynesville is 9,972. The town expects an increase of 1.1%.
2. The town provides once a week curbside collection of residential solid waste and blue bag recyclables and delivers the material to the Haywood County MRF. The town provides twice a month curbside collection of yard waste, bulky trash and junk. The junk truck generally goes to the county MRF but diverts some metals to Schulhofer's Junkyard and some white goods to Hazelwood Truck Service prior to 2009. Yard waste in 2008 was switched from an inert debris landfill to composting. The landfill is being mined and separated for grinding and recycling as mulch in 2009.

Non-residential solid waste is picked up by the Town and also by private haulers. Generally private haulers handle large volume generators like Wal-Mart, Ingles and Associated Packaging. The town has a dumpster service which was converted over from side loader to front loader in 2008.

The town also picks up curbside from small businesses twice a week in the downtown area. This service will be reduced to once a week in 2009 for businesses outside the Central Business District. All solid waste is taken to the county. A small number of blue bags are collected from the commercial users. Due to ABC and County regulations, the town stopped accepting glass from non-

residential generators. The volume from bars and restaurants is too large for the blue bag system and the county requires separation by color.

The town will not collect construction and demolition waste. Some material generated by town departments such as old power poles are taken to the White Oak Landfill.

3. The town's growth in population has been 8% from 2000 to 2007. Industrial growth has been negative. Only Giles Chemical and Associated Packaging remain as industrial customers and they are not growing. Until 2009, the town was adding 100 to 120 connections per year to the water system, but some of these dwelling units were outside town limits. In 2008 this rate was cut in half. Many of these dwelling units are only seasonal residents. Recently commercial growth has been moderately strong due to conversion of the old Dayco industrial site to big box retail. However, Home Depot has dropped plans at that site and the Wal-Mart store replaced the Clyde store with a supercenter. Best Buy is a quality addition to retailing in the area.

Due to economic conditions, seasonal populations and an aging demographic, I predict that the decade ending in 2010 will show fewer than 10% growth in Waynesville's permanent population. The town does not annex aggressively. Many fast developing neighborhoods are taking advantage of Waynesville's ample water and sewer capacity but are not inside town limits.

4. In 2008, the town disposed of 3,396 tons of residential waste in the landfill. There were 3,785 tons of commercial waste, 13 tons of industrial waste, and 0.1 tons of construction and demolition waste. The commercial waste makes up 53% of the waste stream while residential waste makes up 47% of the waste stream.
5. The non-residential waste generators located in the municipality that are picked up the town are Belk, K-Mart, Waynesville Country Club, Waynesville Middle School, and Whitman's Bakery. Other non-residential waste generators within the city limits that are picked up by private haulers are Associated Packaging, Bilo, Giles Chemical, Ingles and Wal-Mart.
6. Residential waste is hauled by the Town of Waynesville. Some of the non-residential waste is hauled by the town, some by private haulers and most of the commercial cardboard is hauled by Henson Waste Disposal. Construction and demolition waste is hauled by private haulers. All of the waste is disposed of in the county landfill.
7. In 2008, the town disposed of 1,360 tons of yard waste, 217 tons of commingled recyclables (blue bags) and 4.4 tons of white goods.

8. It is unknown how many tons of recyclables are picked up by private haulers.
9. Associated Packaging's pallets are now diverted to Kevin Barker as part of the town's source reduction program.
10. Associated Packaging's pallets will continue to be diverted for reuse as part of the town's reuse program.
11. As part of the composting and mulching program, the town will continue to compost leaves and grass at the Bible Baptist Drive site. Distribution of compost is scheduled for April to the public at \$10 per pickup or trailer load. Mulch is offered for free distribution. The town will deliver mulch freshly collected on the chipping route to in-town locations. The town plans to grind stockpiled wood waste and material mined from the inert debris landfill on an annual basis and offer it for distribution.
12. The town will continue to collect recyclables curbside in blue bags. The town picks up and delivers white goods to the county. When the junk run picks up a lot of metals, it is taken to Schulhofer's which is closer for the town to deliver to and may continue to get some material otherwise sent to the county. The town prohibits commercial cardboard from our collection routes and refers generators to a private hauler.
13. The town uses a quarterly newsletter to educate our customers. A handout at the Town Hall is provided to new customers. We partner with the Agricultural Extension Agent and Master Gardeners for composting and mulch promotion and distribution.
14. The town buys recycled when it is the low price.
15. The town has no household special waste program. Municipal facilities recycle batteries and use Holston Energy to recycle used oil, antifreeze and oil filters.
16. By notifying the state, the town can store tree limbs at the yard waste site until a grinder can be procured.
17. Litter pickup is performed by N.C. Department of Corrections and Public Works. Public Works supports community cleanup efforts with collection services. The town has an active "Adopt A Street" program and one "Adopt A Creek."

# **APPENDIX F**

## **PLANNING ELEMENTS**

**PLANNING ELEMENTS**  
**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

Check appropriate element      **PLANNING YEARS 20 12**      through **20 22**

- |   |   |  |   |  |
|---|---|--|---|--|
| <input type="checkbox"/> Reduction                        | <input type="checkbox"/> Disaster Response                          | <input type="checkbox"/> Illegal Disposal/Litter                               | <input type="checkbox"/> Disposal                     | <input type="checkbox"/> Collection    |
| <input type="checkbox"/> Transfer outside geographic area | <input type="checkbox"/> Education with community & through schools | <input type="checkbox"/> Collection of Computer Equipment and Televisions      | <input type="checkbox"/> Purchasing Recycled Products | <input type="checkbox"/> Special Waste |
| <input type="checkbox"/> Composting and Mulching          | <input type="checkbox"/> Incineration with/without energy recovery  | <input checked="" type="checkbox"/> Management of Abandoned Manufactured Homes | <input type="checkbox"/> Recycling and Reuse          |  |

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS		ESTIMATED TONS DIVERTED IN 10TH YEAR
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	KEY ACTIONS	DATE DUE	
				Utilize the grant process provided by Senate Bill 1134  Assist with mobile homes that the owners will voluntarily allow for removal		

**PLANNING ELEMENTS**  
**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

Check appropriate element **PLANNING YEARS 20 12** through **20 22**

- |   |   |   |   |  |
|---|---|---|---|--|
| <input type="checkbox"/> Reduction                        | <input type="checkbox"/> Disaster Response                          | <input type="checkbox"/> Illegal Disposal/Litter                          | <input type="checkbox"/> Disposal                     | <input checked="" type="checkbox"/> Collection |
| <input type="checkbox"/> Transfer outside geographic area | <input type="checkbox"/> Education with community & through schools | <input type="checkbox"/> Collection of Computer Equipment and Televisions | <input type="checkbox"/> Purchasing Recycled Products | <input type="checkbox"/> Special Waste         |
| <input type="checkbox"/> Composting and Mulching          | <input type="checkbox"/> Incineration with/without energy recovery  | <input type="checkbox"/> Management of Abandoned Manufactured Homes       | <input type="checkbox"/> Recycling and Reuse          |  |

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS		
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR		
Resident Sticker Identification program to stop out of county waste		none		Change recycling containers at convenience center sites for easier accessibility  Collecting household batteries, oil filters and cooking oil  Spring clean up; each year placing containers at sites for collection of bulky waste and scrap metal	2,500	

**PLANNING ELEMENTS  
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

**Check appropriate element**      **PLANNING YEARS 20 12**      **through 20 22**

- Reduction
- Transfer outside geographic area
- Composting and Mulching
- Disaster Response
- Education with community & through schools
- Incineration with/without energy recovery
- Illegal Disposal/Litter
- Collection of Computer Equipment and Televisions
- Management of Abandoned Manufactured Homes
- Disposal
- Purchasing Recycled Products
- Recycling and Reuse
- Collection
- Special Waste

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS	
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR	
Use products for compost feedstock		Mulching all clean wood waste, pallets, limbs and some stumps to assist with the LEEDS program	Ongoing	3,000	
		Use some grindings for Alternative Cover Material			
		Sell some to Ever Green			

**PLANNING ELEMENTS  
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

**Check appropriate element**      **PLANNING YEARS 20 12**      **through 20 22**

- |   |   |   |   |  |
|---|---|---|---|--|
| <input type="checkbox"/> Reduction                        | <input checked="" type="checkbox"/> Disaster Response               | <input type="checkbox"/> Illegal Disposal/Litter                          | <input type="checkbox"/> Disposal                     | <input type="checkbox"/> Collection    |
| <input type="checkbox"/> Transfer outside geographic area | <input type="checkbox"/> Education with community & through schools | <input type="checkbox"/> Collection of Computer Equipment and Televisions | <input type="checkbox"/> Purchasing Recycled Products | <input type="checkbox"/> Special Waste |
| <input type="checkbox"/> Composting and Mulching          | <input type="checkbox"/> Incineration with/without energy recovery  | <input type="checkbox"/> Management of Abandoned Manufactured Homes       | <input type="checkbox"/> Recycling and Reuse          |  |

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS	
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR	
Haywood County has adopted an Emergency Debris Management Plan			Ongoing		

**PLANNING ELEMENTS  
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

Check appropriate element **PLANNING YEARS 20 12** through **20 22**

- |   |   |   |   |  |
|---|---|---|---|--|
| <input type="checkbox"/> Reduction                        | <input type="checkbox"/> Disaster Response                          | <input type="checkbox"/> Illegal Disposal/Litter                          | <input checked="" type="checkbox"/> Disposal          | <input type="checkbox"/> Collection    |
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COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS		ESTIMATED TONS DIVERTED IN 10TH YEAR
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	KEY ACTIONS	DATE DUE	
Haywood County has completed construction on Phase III at the White Oak Landfill		Closed C&D Landfill	Waiting on DENR	Considering moving away from baled waste to live loads in open top trailers	Completed 2011	

**PLANNING ELEMENTS**  
**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

Check appropriate element **PLANNING YEARS 20 12** through **20 22**

- |   |  |   |   |  |
|---|--|---|---|--|
| <input type="checkbox"/> Reduction                        | <input type="checkbox"/> Disaster Response                                     | <input type="checkbox"/> Illegal Disposal/Litter                          | <input type="checkbox"/> Disposal                     | <input type="checkbox"/> Collection    |
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| <input type="checkbox"/> Composting and Mulching          | <input type="checkbox"/> Incineration with/without energy recovery             | <input type="checkbox"/> Management of Abandoned Manufactured Homes       | <input type="checkbox"/> Recycling and Reuse          |  |

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS		ESTIMATED TONS DIVERTED IN 10TH YEAR
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	KEY ACTIONS	DATE DUE	
Develop recycling video for presentation to students and civic organizations	Regular updates	Haywood County is doing presentations at schools, civic organizations and Key Note Speaker engagements Educate staff/contracted staff on recycling to relay to patrons who use our facilities Handing out brochures at Convenience Center Sites Information on County web site Run educational information on the Government Channel	Continuous			3,000   1,000  1,000  500

**PLANNING ELEMENTS**  
**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

**PLANNING YEARS 20 12 through 20 22**

**Check appropriate element**

- |   |   |   |   |  |
|---|---|---|---|--|
| <input type="checkbox"/> Reduction                        | <input type="checkbox"/> Disaster Response                          | <input type="checkbox"/> Illegal Disposal/Litter                          | <input type="checkbox"/> Disposal                     | <input type="checkbox"/> Collection    |
| <input type="checkbox"/> Transfer outside geographic area | <input type="checkbox"/> Education with community & through schools | <input type="checkbox"/> Collection of Computer Equipment and Televisions | <input type="checkbox"/> Purchasing Recycled Products | <input type="checkbox"/> Special Waste |
| <input type="checkbox"/> Composting and Mulching          | <input type="checkbox"/> Incineration with/without energy recovery  | <input type="checkbox"/> Management of Abandoned Manufactured Homes       | <input type="checkbox"/> Recycling and Reuse          |  |

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS		ESTIMATED TONS DIVERTED IN 10TH YEAR
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	KEY ACTIONS	DATE DUE	
				Haywood County accepts all electronics and TV's at the MRF. A certified electronics recycling company picks them up. We use palletized boxes and shrink wrap to contain items for storage and transportation.	Continuous	2,000



**PLANNING ELEMENTS**  
**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

**Check appropriate element**      **PLANNING YEARS 20 12**      **through 20 22**

- |   |   |   |   |  |
|---|---|---|---|--|
| <input type="checkbox"/> Reduction                        | <input type="checkbox"/> Disaster Response                          | <input type="checkbox"/> Illegal Disposal/Litter                          | <input type="checkbox"/> Disposal                       | <input type="checkbox"/> Collection    |
| <input type="checkbox"/> Transfer outside geographic area | <input type="checkbox"/> Education with community & through schools | <input type="checkbox"/> Collection of Computer Equipment and Televisions | <input type="checkbox"/> Purchasing Recycled Products   | <input type="checkbox"/> Special Waste |
| <input type="checkbox"/> Composting and Mulching          | <input type="checkbox"/> Incineration with/without energy recovery  | <input type="checkbox"/> Management of Abandoned Manufactured Homes       | <input checked="" type="checkbox"/> Recycling and Reuse |  |

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS		ESTIMATED TONS DIVERTED IN 10TH YEAR
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	KEY ACTIONS	DATE DUE	
Video on Recycling for presentations to county students and civic organizations	Not economical	Verify recyclable tonnages through private enterprise	continuous	Pursuing permits for Alternate Cover Materia	continuous	15,000
	Company went out of business	Sheetrock Recycling	continuous	Pursuing permit modifications to recycle wood waste	continuous	
	No funding for the position	Hiring a Recycling/Sustainability Coordinator Position	continuous	Recycling electronics including TV's cooking oil, yard plastic and glass	continuous	
			continuous	Interested in recycling carpet, roofing shingles,	continuous	
			continuous	Using cat litter containers for battery and oil filter recycling	continuous	
			continuous	Using reusable cups instead of styrofoam	continuous	



**PLANNING ELEMENTS**  
**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**

**PLANNING YEARS 20 12 through 20 22**

**Check appropriate element**

- Reduction
- Transfer outside geographic area
- Composting and Mulching
- Disaster Response Education with community & through schools
- Incineration with/without energy recovery
- Illegal Disposal/Litter Collection of Computer Equipment and Televisions
- Management of Abandoned Manufactured Homes
- Disposal
- Purchasing Recycled Products
- Recycling and Reuse
- Collection
- Special Waste

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW / REVISED ACTIONS	
KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR	
Haywood County entered into a management contract with Santek to manage landfill.					

## **APPENDIX G**

# **APPROVED STAGING AREAS OR DISPOSAL SITES, CONTACT LIST, COPY OF EMERGENCY MANAGEMENT PLAN AND INTERGOVERNMENTAL EMERGENCY MUTUAL AID AGREEMENT**

Copies available by contacting  
Solid Waste Department

# **APPENDIX H**

## **SUSTAINABILITY PLAN**

Copy available by contacting the  
Solid Waste Department or via the  
Haywood County website

# **APPENDIX I**

## **ORDINANCES**

Copies of all ordinances are available on the Haywood County website, in the County Manager's office and in the Solid Waste Department

# **APPENDIX J**

## **“LITTER AND POLLUTION” CURRICULUM INTRODUCED TO HAYWOOD COUNTY SCHOOLS**

Copies are available by contacting  
the Solid Waste Department

# **APPENDIX K**

## **FULL COST ACCOUNTING ANALYSIS – HAYWOOD COUNTY**

Copies available by contacting  
Solid Waste Department;  
information included in update

# APPENDIX L

## SOLID WASTE COMMITTEE

Joy Garland, Town Administrator

Tim Barth, Town Manager

Mike Mehaffey

Buddy Young, Director Residential

Jim Giauque, Waste Compliance Landfill Supervisor

Fred Baker, Director, Public Works

David Francis, Tax Collector

Zondra Robinson, Office Manager

Stephen King, Solid Waste Director

Town of Clyde

Town of Maggie Valley

Town of Maggie Valley

Lake Junaluska Assembly

Evergreen Packaging

Town of Waynesville

Haywood County

Haywood County

Haywood County