

# Three Year Update to the Ten Year Solid Waste Plan 2012



## Principal Author:

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## Municipal Governing Bodies:

Holly Ridge  
Jacksonville  
North Topsail Beach  
Richlands  
Swansboro

EXECUTIVE SUMMARY  
FOR  
THREE YEAR UPDATE TO ONSLOW COUNTY SOLID WASTE PLAN

North Carolina General Statute 130-A-309.09A requires that local governments develop a 10-year comprehensive solid waste management plan. This plan shall be updated at least every three years. The Onslow County plan incorporates approved and adopted plans by Holly Ridge, Jacksonville, North Topsail Beach, Richlands and Swansboro.

The 10-year plan and subsequent three year updates include the population and the evaluation and trends of the solid waste stream in the county. Through this evaluation, the plan outlines the goals for the programs for the management of the solid waste which include land filling and recycling with much emphasis being given to recycling programs. These recycling programs detail the plan methods and goals for waste reduction and reuse. Also included are the community education programs dedicated to waste reduction and recycling. Finally, the plan describes the preparation and response mechanisms put in place in the event of any disaster.

Once approved and adopted, this plan will be submitted to the North Carolina Department of Environment and Natural Resources, Waste Management Division in Raleigh. Copies of the plan will be available at the Meadowview Road Landfill and the Main Library on Doris Avenue. An electronic copy of this plan can be accessed on the Onslow County website at [www.onslowcountync.gov/landfill](http://www.onslowcountync.gov/landfill).

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## Executive Summary:

### Onslow County Solid Waste

#### Mission Statement

To be an innovative and responsive department that aggressively provides comprehensive, cost-effective solid waste management in an environmentally sound manner, and educate the public on responsible waste management.

#### Departmental Overview

We provide the citizens an environmentally sound Subtitle D Landfill, Land Clearing and Inert Debris Landfill, a place to recycle, and convenience center drop-off sites. We operate an enterprise funded department with no tax dollars spent to provide an efficient service with equitable fees.

#### Contacts

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415 Meadowview Rd., Jacksonville, NC 28540	<a href="http://www.onslowcountync.gov/landfill">www.onslowcountync.gov/landfill</a>	

#### Solid Waste Plan Introduction

This plan 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 solid waste management plan update, the Onslow County planning area provides for the management of solid waste and the reduction of solid waste for the next ten years. The planning area includes Onslow County and the following municipalities: Holly Ridge, Jacksonville, North Topsail Beach, Richlands, and Swansboro.

The Onslow County Solid Waste Management Plan is a tool created by and used daily by the Onslow County Solid Waste Department. The plan serves as a guide for future planning decisions as well as a reference for the public and other government agencies. The plan addresses the handling of banned items, recycling efforts, and waste reduction goals. The plan also provides clear projections for waste disposal. The plan includes sources of information that reflect the status of our Solid Waste practices in Onslow County. Viewed comprehensively, this information acts as a gauge of overall success of our programs.

Onslow County's long-range goal is for a comprehensive waste management program that best meets the needs of our citizens and our environmental quality. This program will provide disposal capacity, waste collection services, and waste reduction programs to all Onslow County citizens. The goal includes the elimination of improper disposal of waste and the expansion of waste reduction opportunities that are convenient for residents. The goal is translated into five long-range planning goals:

#### Planning Area Goals

- Goal 1 To provide everyone in the community with waste disposal, waste collection services, and waste reduction opportunities.
- Goal 2 To increase the efficiency and cost-effectiveness of the solid waste program.
- Goal 3 To meet the established local waste reduction goals.
- Goal 4 To educate the general public on source reduction, recycling, reusing, and environmental issues .
- Goal 5 To protect public health and the environment.

## Part I Geographic and Solid Waste Stream Evaluation

### **Geographic Area**

The 2012 Solid Waste Management Plan covers Onslow County and its five incorporated municipalities. The plan does not include Camp Lejeune, or New River Air Station.

**Onslow County Total Population:** 184,228

**Total Unincorporated Population:** 100,393

**Total Municipal Population:** 82,835

Jacksonville 77,343

Holly Ridge 1,269

N. Topsail Beach 744

Richlands 1,521

Surf City 292

Swansboro 2,666

**Total Camp Lejeune Pop:** 46,928

**County Pop. Minus Camp Lejeune** 137,300

\* Sources: State of North Carolina Demographic Web Site (<http://demog.state.nc.us>). Figures based on 2011 Provisional Estimate. Total Municipal Population Based on 2010 U.S. Census Bureau data. The Quarterly Camp Lejeune Area Population Report (March 31, 2012)

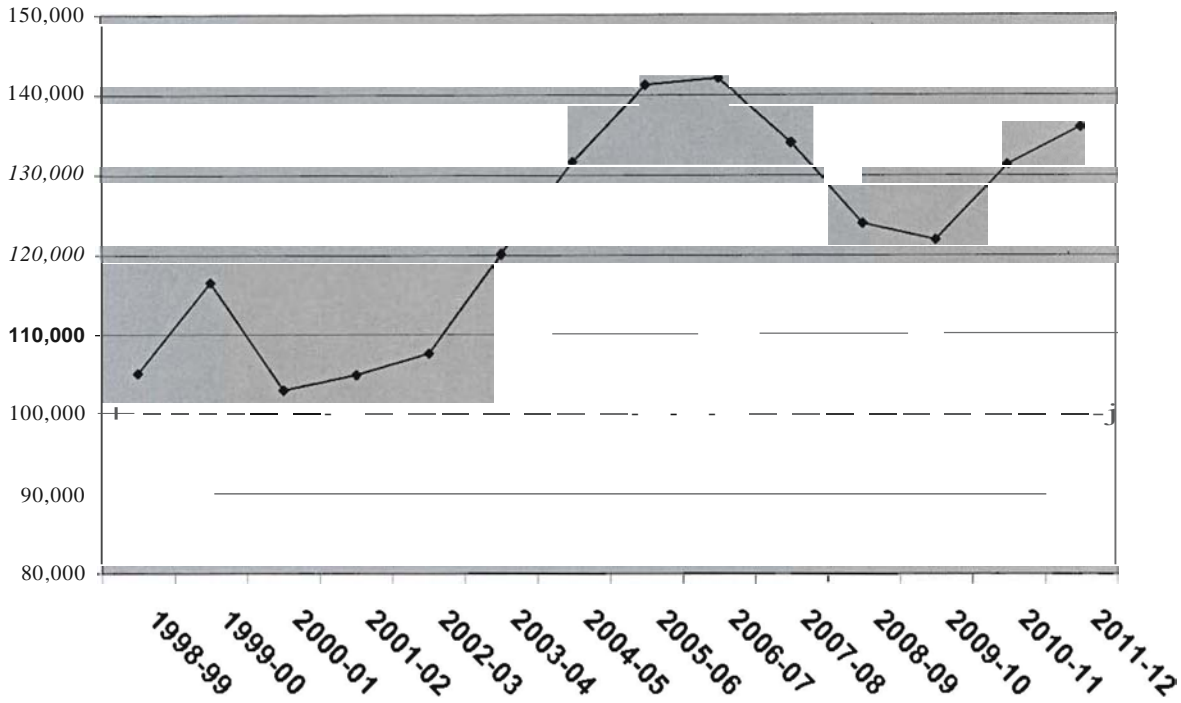
**Unincorporated Areas of the County have increased.**

<b>2001</b>	<b>2004</b>	<b>2009</b>	<b>2012</b>
<b>78,290</b>	<b>81,494</b>	<b>86,840</b>	<b>100,393</b>

### **Waste Stream Evaluation**

An estimate of the waste disposed of at the landfill is shown in the following table. These calculations are based on tonnage reports provided by the Onslow County Solid Waste Department.

### Tons Disposed of in Onslow County Landfill



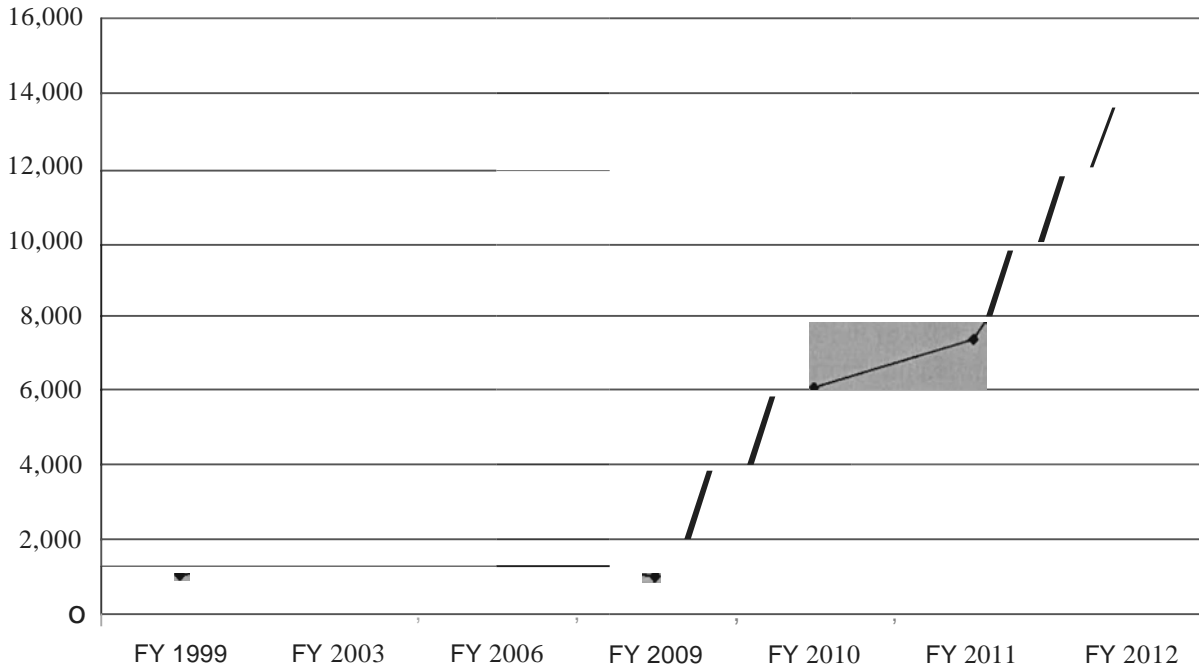
	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
<b>FY Total</b>	105,133	116,419	103,057	104,963	107,638	120,105	131,685
<b>Avg./Mo.</b>	8,761	9,702	8,588	8,747	8,970	10,009	10,975
<b>Cum. Total</b>	152,591	269,010	372,067	477,030	584,668	704,773	836,458

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
<b>FY Total</b>	141,239	142,155	134,127	124,019	122,027	131,328	136,022
<b>Avg./Mo.</b>	11,770	11,846	11,177	10,335	10,169	10,944	11,335
<b>Cum. Total</b>	977,697	1,119,852	1,253,979	1,377,998	1,500,025	1,631,353	1,767,375

\* The is chart show tons of waste disposed of at the Onslow County Subtitle D landfill. The cumulative total is included to show how much waste is in place in the Subtitle D Landfill

## Tons Recycled in Onslow County

(not including the municipalities)



As of early 2009, most private haulers were not offering curbside recycling service. After the plastic bottle ban in late 2009, a lot of private haulers started offering curbside service this helped increase our recycle tonnage in 2008-09 and continues to help with overall recycle tonnage figures.

By 2010, staff had expanded School Recycling Program to all schools which also helped increase recycling. Staff started the year round electronics recycling program in 2010, which also increased our recycle tonnage. We added a metal recycling tank over near the landfill convenience center as well.

In 2012, staff started a recycling program at all County parks and beach accesses and in November of 2011, Sonoco Recycling added more "recycleable" items to their list which also helped increase tonnage. We also were able to capture tonnage from Onslow County supermarkets and retail stores that were recycling cardboard, bailing it on site, and then bringing it to Sonoco Recycling for re-bail. These are some of the contributing factors and staff also believes that more citizens and businesses in the County are recycling and increasing what they recycle.

### Tons Recycled in the Unincorporated Areas of Onslow County, NC by Year:

FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
1,091	1,062	1,387	1,270	1,115	1,283	1,403	1,500
FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	
1,455	1,470	1,720	1,057	6,153	7,437	13,657	

Table 1. Waste Stream Percentages for Onslow in 2011-12

Types of Waste	Tons	Percentage of Waste Stream
Residential	81,613.20	60%
Non-Residential	14,962.42	11%
C&D	39,446.38	29%
Total	136,022.00	100%

An estimate of the waste disposed by sector is shown in Table 1. These calculations are based on tonnages provided by county staff.

The County staff estimates that 60% of the waste disposed of is residential, 11% is non-residential, and 29% is Construction and Demolition. Land clearing and inert debris (LCID) disposed is not shown in table. We collected and disposed of 5,893.04 tons in the Onslow County LCID landfill in FY 2011-12.

Table 2 is taken from Volume I of the North Carolina Recycling and Solid Waste Management Plan.

This state study shows that the most prevalent materials in the residential waste stream are paper, plastics, and organic materials. Using the 81,613.2 tons of residential waste generated by Onslow County and municipalities within Onslow County were disposed in FY 2011-12, the amounts of different materials in the local waste stream can be calculated.

Table 2. Estimate of Residential Waste Composition

Material	State Estimate (%)	Estimated 80,476.2 Tons Disposed
Paper	31%	25,300.092
Cardboard	6%	4,896.792
Plastics	10%	8,161.32
Yard Waste	5%	4,080.66
Organic	19%	15,506.508
Textiles	4%	3,264.528
Glass	8%	6,529.056
Aluminum	1%	816.132
Ferrous Metal	6%	4,896.792
Non-ferrous Metal	1%	816.132
Miscellaneous	9%	7,345.188
Total	100%	81,613.2

\* Source: State Estimates provided by NC Solid Waste Section



## Part II Local Waste Reduction Goals

Our 2012 Plan has increased our Waste Reduction Goals to 15% by FY2016, 20% by FY2019, and 25% by FY2012. Our long term Waste Reduction Goal is to meet the State goal of 50% by FY2036.

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 1991-92) disposal rate was 1.04 tons per capita (figure provided by the NC Solid Waste Section). In 2004-05 the baseline per capita rate was 1.12 tons per year. The baseline per capita rate for 2007-08 was 0.83 tons per year. The per capita disposal rate for 2011-12 is 1.04 tons per year.

At the current per capita, with added anticipated population, the disposal rate in Onslow County would be 182,385.72 tons in FY 2012-13 and 197,763.28 tons in FY 2015-16. See Table 3.

Table 3. Per Capita Waste Disposal

Year	Population	Waste Disposal	Per Capita Disposal Rate
Baseline 91-92	107,643	111,948.72	1.04 tons/year
FY 2004-05	117,168	131,685	1.12 tons/year
FY 2007-08	160,906	134,127	0.83 tons/year
FY 2011-12	175,167	182,385.72	1.04 tons/year
Year	Projected Population	Projected Waste Disposal (Tons)	
FY 2013	175,167	182,386	1.04 tons/year
FY 2016	190,157	168,099	0.88 tons/year
FY 2019	208,719	173,654	0.83 tons/year

\* Source: Population data provided by Onslow Planning. The baseline per capita provided by the NC Solid Waste Section.

## Part III Meeting the Waste Reduction Goals

The 2012 Solid Waste Management Plan is designed to reduce Onslow County's waste by 15% in FY 2016, and 20% in 2019. To do this, Onslow County will target the types of waste generated as shown in Table 4.

Table 4. Waste Reduction Goal

Waste Type	Targeted Tons to Reduce by FY 2016	Targeted Tons to Reduce by FY 2019
Residential 60%	13,235	19,839
Non-residential 11%	2,426	3,637
Construction and Demolition 29%	6,397	9,589
Goal 100%	22,058	33,065

## **Residential Waste:**

The 2012 Solid Waste Management Plan targets 15% by FY 2016 for reduction in residential waste sector. Table 5 summarizes the residential waste reduction methods to be used to meet the local goals. (Specific Activities planned are described in Part Y.)

**Table 5. Residential Waste Reduction**

Reduction Method	Targeted Materials	Estimated Percentage-Residential Waste Reduction	Estimated Tons FY 2016	Specific Methods Used
Source Reduction	Paper, plastics, and cardboard	10%	2,206	Environmental Education Outreach Program
Recycling	Newsprint, paper, aluminum, steel, organics, plastic, cardboard, glass, holiday trees, ink cartridges, dry cell batteries, lead-acid batteries, cooking oil, motor oil, white goods, shingles, cell phones, scrap metal, bulk rigid plastics, and carpet.	70%	15,441	Convenience Centers Pay As You Throw Program, Environmental Education Outreach Program, County Office Recycling, School Recycling, Electronics Recycling, White Goods Recycling, Cooking Oil, Motor Oil, Antifreeze, and Construction and Demolition Recycling.
Composting	Household Organic Materials Food Scraps	1%	220	Encouraging Backyard Composting
Reuse	Paper, Household Items, Ink Cartridges, Furniture, Clothing	19%	4,191	Environmental Education Outreach Program

## Non-Residential Waste

The goal for reducing non-residential waste is 4,351 tons in FY 2016. The largest generators of non-residential waste are specifically targeted in this effort. Staff assists local non-residential waste generators such as businesses and schools with sharing information on how to reduce, reuse, and recycle. Keep Onslow Beautiful staff help businesses find markets for their materials. Keep Onslow Beautiful also started the Onslow School Recycling Program in 2006 with 3 schools, expanded to over 20 schools in 2009, and now serves all Onslow County Schools with a School Recycling Program that includes bins in every classroom. Staff also provides access and use of convenience centers to local small businesses and ABC permitted businesses.

Table 6 Targeted Non Residential Waste Reduction

Reduction Method	Targeted Materials	Estimated % of Non-Residential Waste Reduction	Estimated Tons FY 2016	Specific Methods Used
Source Reduction	Paper, Plastic bags, and Cardboard	20%	870	Education Outreach
Recycling	Paper, florescent bulbs, steel, pallets, plastic, and aluminum	50%	2,176	Education Outreach, School Recycling Program, Convenience Centers, Material Recovery Facility (Sonoco Recycling)
Reuse	Paper and plastics	30%	1,305	Education Outreach, Onslow Recycle Info (web & publications)
Total		100%	4,351	

## Construction and Demolition Waste

It is estimated that at least 11,470 tons of construction and demolition waste in FY 2016 can reduce this targeted area. The proposed reduction methods and targeted wastes are shown in Table 7. A shingle recycling program and a carpet recycling program will begin in 2013 to help reduce these specific waste streams from the Onslow County landfill.

Table 7, Targeted Construction and Demolition Waste Reduction

Reduction Method	Targeted Materials	Est. Tons FY 2016
Recycling	Wood, metal, sheet rock, and aluminum	5,735
Reuse	Wood and metal	5,735
Total		11,470

## Part IV

### The Planning Process and Public Participation

Onslow Solid Waste Department staff corresponded with the area Solid Waste Specialist covering our region in spring of 2012 to go over the update. Staff then corresponded via email and copied electronic planning element documents to all municipalities within Onslow County and a request was made for their updates to be sent in by October 2012. A meeting was held with Onslow County Solid Waste staff in August of 2012 to discuss changes to the plan, the new State requirements for the plan, trends over the past three years, and plans for the future.

Information about the update is planned to be shown to Onslow County viewers on channel G10/14 TV station. The public will be invited to review the document online or at the Onslow County Main Library.

The Onslow County Board of Commissioners will review the final document on November 19th, 2012.

An electronic copy will be available on the County website and will be located at [www.onslowcountync.gov/landfill](http://www.onslowcountync.gov/landfill).

## Part V

### Solid Waste Management Methods: Assessment of Programs and Description of Intended Actions

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

Each municipality has submitted a Three-year update to the Ten year Solid Waste Management Plan, which is submitted as an addendum to this document in this order: Holly Ridge, Jacksonville, North Topsail Beach, Richlands, and Swansboro.

#### A. Source Reduction

##### Current Program:

Encourage web-based documents and double-sided paper use to reduce the amount of paper being used in County offices and businesses.

Staff will publish information using email contacts, social media outlets, government television channel G10/14 productions, and the County website at [www.onslowcountync.gov/landfill](http://www.onslowcountync.gov/landfill).

Keep Onslow Beautiful Environmental Education Outreach Program teaches Onslow County K-12 and College students on ways to reduce waste.

Keep Onslow Beautiful Public Education Outreach participates in area festivals and other events and promotes source reduction at display booths, hands on activities, and by coordinating with festival planners to incorporate waste reduction techniques.

**B. Collection of Solid Waste**

**Curbside Collection:**

**Onslow** County residential waste is collected by six (6) main private haulers and 1. (Some information is provided by private **haulers** and is located in table below)

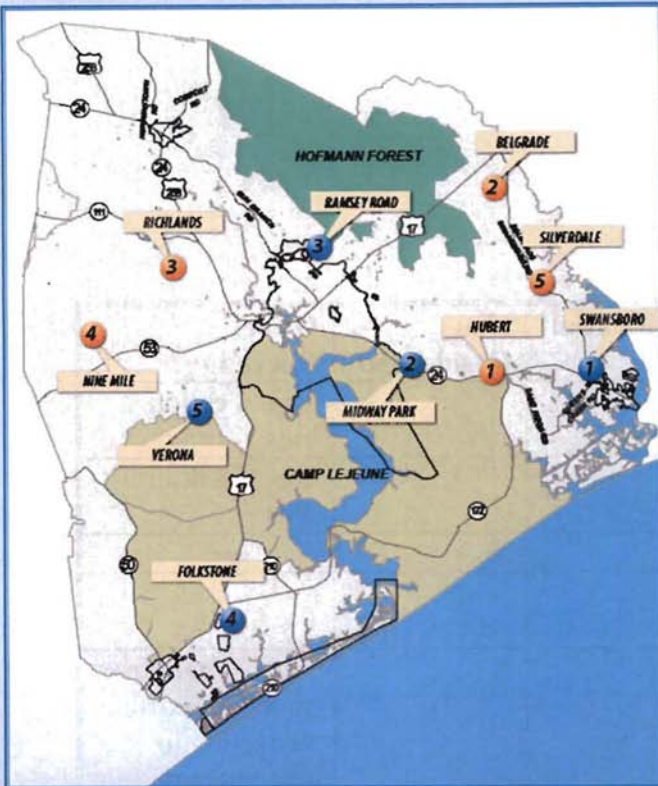
<b>Hauler</b>	<b>Customer Base</b>	<b>Residential</b>	<b>Non-Residential</b>	<b>Offer Recycling?</b>
A-I Marine Sanitation		X		Yes, 4 gallon bins
Rays Rural Garbage		X		Yes, 4 gallon bins
Military Waste		X	X	
Sneads Ferry Sanitation		X		
Waste Management	3,127	X	X	Yes, 96 gallon bins (Only offers Recycling to customers within City/Town Contracts)
Waste Industries	3,000	X	X	Yes, 65 gallon bins

**Convenience Center Site Collection:**

These convenience centers use a Pay as You Throw (PAYT) system that offers a financial incentive to citizens that recycle. (See page 13 for Convenience Center Site details) The PAYT system works by charging the citizen \$1.50 per bag of trash and recycling is free. The landfill charges \$49.00 per ton for mixed loads of waste including the State Disposal Tax. There is no charge to turn in recyclables. (See Landfill Fee List pg 14)

# ONslow COUNTY CONVENIENCE SITES

County Landfill 910-989-2107



## HOURS

Monday, Wednesday, Friday & Saturday  
8 am to 6 pm  
(Close at 5:30 pm in winter)

- |          |                             |   |
|----------|-----------------------------|---|
| <b>1</b> | SWANSBORO<br>910-326-7375   | 698 Swansboro loop Road<br>Swansboro, NC <b>28584</b>   |
| <b>2</b> | MIDWAY PARK<br>910-353-3980 | 122 Carver Drve<br><b>Jacksonville, NC 28544</b>        |
| <b>3</b> | RAMSEY ROAD<br>910-989-2107 | 678 Ramsey Road<br><b>Jacksonville, NC 28540</b>        |
| <b>4</b> | FOLKSTONE<br>910-327-2444   | 320 Old Folkstone Road<br>Holly Ridge, NC <b>28445</b>  |
| <b>5</b> | VERONA<br>910-455-3677      | 2531 Dawson Cabin Road<br><b>Jacksonville, NC 28540</b> |

## MATERIALS ACCEPTED

- |   |   |
|---|---|
| Household Trash   | \$1.50/30 gal. bag                      |
| Large Items   | <b>\$3.00/item</b>                      |
| <b>Tires</b> (5 nres/Trtp)                                  | FREE                                    |
| TVs, Monitors, & Microwaves                                 | \$100/item                              |
| <b>Electronics</b>  | FREE                                    |
| White Goods   | FREE                                    |
| Paper/Paperboard  | FREE                                    |
| Corrugated cardboard  | FREE                                    |
| Metals  | FREE                                    |
| <b>Plastics</b>   | FREE                                    |
| Glass Containers  | FREE                                    |
| <b>Used Motor Oil</b> , Antifreeze,<br>Cooking Oil, Filters | GIVE TO ATTENDANT IN ORIGINAL CONTAINER |

## MOBILE UNIT HOURS

12 pm to 6 pm  
(Close at 5:30 pm in winter)

- |          |           |                  |   |
|----------|-----------|------------------|---|
| <b>1</b> | MONDAY    | HUBERT           | 210 Hubert Blvd.<br>Hubert, NC 28539                  |
| <b>2</b> | TUESDAY   | BELGRADE         | 227 Mattocks Road<br>Maysville, NC 28555              |
| <b>3</b> | WEDNESDAY | <b>RICHLANDS</b> | 436 Cavanaugh Town Road<br><b>Richlands, NC 28574</b> |
| <b>4</b> | THURSDAY  | NINE MILE        | 574 Nine Mile Road<br><b>Richlands, NC 28574</b>      |
| <b>5</b> | SATURDAY  | SILVERDALE       | 1355 Belgrade-Swamboro Road<br>Hubert, NC 28539       |

[www.OnslowCountyNC.gov/landfill](http://www.OnslowCountyNC.gov/landfill)

**ONslow COUNTY LANDFILL FEES EFFECTIVE JULY 1, 2012**

TELEPHONE (910) 989-2107 Fax 455-6339 WEBSITE [www.onslowcountync.gov/landfill](http://www.onslowcountync.gov/landfill)

DEBRIS IS CHARGED BY TONNAGE, AND PRO-RATED STATE DISPOSAL TAX OF \$2.00 PER TON FOR MATERIALS PLACED IN LANDFILL.

DEBRIS ACCEPTED FROM ONSLOW COUNTY ONLY. NO DEBRIS FROM MILITARY BASES ACCEPTED.

We accept Cash and local checks only with two [onns of ID. We accept Master or Visa Cards both Credit and Debit Cards.

NO LIQUID HAZARDOUS WASTE ACCEPTED IN LANDFILL SUCH AS: \*Cooking Oils, Paints, Thinners, Kerosene, Pesticides, Garden Chemicals & Related Items. (For pesticides and garden chemicals, we accept triple rinse containers)

PLEASE CALL FOR ADDITIONAL INFORMATION FOR PROPER DISPOSAL (Call 910-289-4811 or 910-293-7917

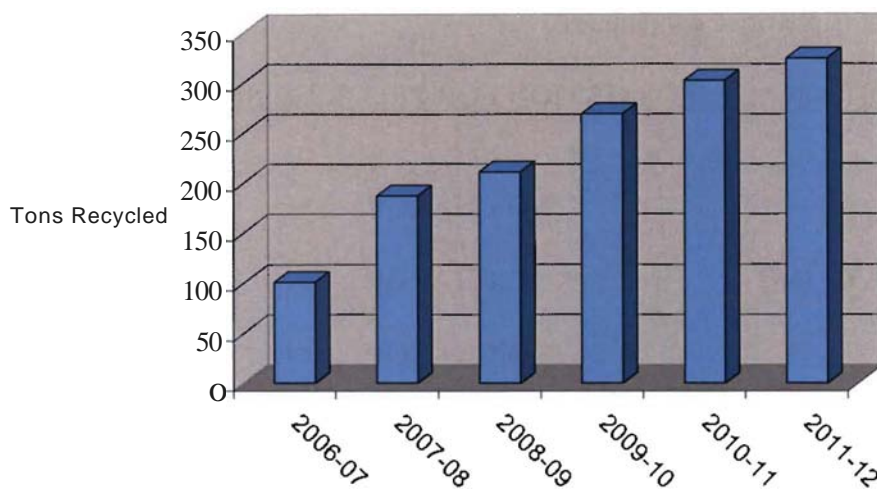
CAR OIL	NO CHARGE
* COOKING OIL for RECYCLING	NO CHARGE
APPLIANCES	NO CHARGE
ANTIFREEZE	NO CHARGE
ASBESTOS	\$52.25 PER TON
BATTERIES	NO CHARGE
CONSTRUCTION & DEMOLITION	\$49.00 PER TON
HOUSEHOLD TRASH	\$49.00 PER TON
INERT DEBRIS	\$25.00 PER TON
RECYCLING	FREE
SLUDGE (PLEASE CALL)	\$52.25 PER TON
SPECIAL HANDLING (animal carcasses, documents)	\$52.25 PER TON
MOBILE HOMES	\$200.00 FLAT FEE
TV/ MONITORS/ AND MICROWAVES	\$3.00 EACH ITEM
TIRES	FREE (Check in with scale house first)
TIRES WIRIMS	\$.025 EACH
TIRES Not Eligible for free disposal	\$0.75 EACH
YARD WASTE	\$25.00 PER TON

### C. Recycling and Reuse

#### Current Program:

Keep Onslow Beautiful School Recycling Program has now expanded to all Onslow County schools and continues to work with schools, businesses, and citizens to increase recycling and reduce waste across the County\_

### Onslow County School Recycling



The ten convenience centers and private haulers serve as the primary sources of Onslow County's recycling collection program. (See information on private hauler on page 11 and convenience center sites on page 12)

The convenience centers all have collection programs for tires, white goods and metals, electronics, antifreeze, cooking oil, motor oil, lead-acid and dry cell batteries, commingled recyclables (paper, plastic, glass, metals, and cardboard). In FY 2013, a new recycle station will be built at the landfill address which will consolidate the various recycling programs in one area. The program now includes recycling of cooking oil, motor oil, antifreeze, scrap metal, wooden pallets, oyster shells, bulbs, concrete, asphalt, and brick recycling. We will also add shingles and carpet in 2013.

In November of 2011, Sonoco Recycling took on the contract to lease the Material Recovery Facility (MRF) building and provide recycling service for the next 10 years. The Sonoco Recycling MRF has since more than doubled the tonnage received at the facility, Sonoco Recycling has invested in almost \$2 million in upgrades, new equipment, and Sonoco has also increase the capacity for materials from 500 to 3,000 tons per month. Sonoco Recycling has expanded the types of materials they will accept as well as the quantity of materials they will accept.



#### D. Composting and Mulching

##### Current Program:

**Staff** encourages backyard composting and provides information about how to start a backyard composting program for citizens. In the summer of 2009, staff held a workshop on composting for a group of 25 citizens. The workshop includes a 4 hour presentation on composting, a compost bin for attendees, a bag of seed packets, and an instructional workbook on how to compost.

Staff also held a compost bin giveaway at the 2012 Earth and SurfFest.  
([www.earthandsurffest.com](http://www.earthandsurffest.com))

##### Intended Actions:

**Staff** will work with local Cooperative Extension services to provide an educational workshop for County departments on backyard composting during the FY 2014.

#### E. Incineration with Energy Recovery

Current: None      Intended: None

#### F. Incineration without Energy Recovery

Current: None      Intended: None

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

Current: None      Intended: None

#### H. Disposal of Solid Waste

##### Current Program:

Onslow County closed its unlined Municipal Solid Waste Landfill in January 1998.

After receiving a permit for a Subtitle D Landfill, Onslow County opened a Subtitle D Landfill in January 1998 and is currently operating this landfill.

The Onslow County Subtitle D Landfill site has the capacity to accept solid waste at the rate it is being generated at present until FY 2020.

All municipalities dispose of their solid waste at the Onslow County Subtitle D Landfill. The tipping fee is \$49.00 per ton (\$47.00 per ton plus \$2.00 per ton State Disposal Tax).

In 2011, we completed a partial closure of the West and South slopes of the Subtitle D landfill to assist with management of stormwater, leachate, and landfill gas.

In 2012, we completed a request for proposals (RFP) process in order to seek possibilities to capture and use landfill gas for energy.

##### Intended Actions:

Go forward as currently operating, fund new waste reduction programs, and study the feasibility of other waste reduction methods.

Continue to move forward with the process to capture and use landfill gas for energy.

In FY 2013-2014, staff and contractors will begin construction of a new cell in the already permitted section of the Subtitle D landfill.

**Part VI**  
**Education, Special Wastes, Illegal Disposal, Electronic Recycling, Abandoned**  
**Mobile Homes, and Purchasing:**  
**Assessment of Programs and Description of Intended Actions**

**A. Community and School Education**

Current Program:

Onslow County Planning employs full time environmental enforcement officers to enforce the State litter laws and Solid Waste Ordinance.

Keep Onslow Beautiful Environmental Education Outreach Program serves to educate the community about current waste reduction, recycling, reuse, compost, and other environmental programs. A high quality environmental education experience is presented to all Onslow County Schools by Keep Onslow Beautiful staff and volunteers. Environmental Education provides the "bridge between scientific facts with the way society acts." In the last decade environmental education has become very popular, as documented in a 2002 survey by researchers at East Carolina University on behalf of the Environmental Education Fund of N.C. The survey that was conducted found that 94% of citizens living in N.C. agree or strongly agree that "individuals make a difference in environmental quality." About 90% said that "environmental education of both children and adults is important." In the survey 94.3% stated that environmental education should be taught in N.C.'s schools, and just over half stated that N.C.'s government is not spending enough money on the environment. Keep Onslow Beautiful environmental educators track the number of contacts made and presentations given throughout the year. Keep Onslow Beautiful Environmental Education programs, events, cleanups, and beautification projects annually reach 23,000 citizens in communities and schools across Onslow County.

Intended Actions:

Continue Environmental Education Outreach Program to reach more students and citizens each year.

Continue to distribute an updated recycle and reuse information at convenience center locations, festivals, social media outlets, email contact lists, "Onslow Today" productions on GIO/14 television channels, and print media.

**B. Special Wastes**

**Electronics**

Current Program:

Electronics are collected for recycling at the landfill site and all the other ten (10) convenience center sites located throughout the County. This service is available to businesses, citizens, and municipalities within Onslow County. The electronics are hauled by utility trailer to the central collection point at the landfill convenience center and collected by Synergy Electronic Recycling and they do hold the proper documentation (required certifications by State).

We currently hold a separate budget account for electronics to ensure that any funds collected from the State for use on this program are properly managed and go straight towards the expenses related to our Electronics Recycling Program.

We keep track of electronics tonnage and track tonnage on TVs and other specific materials separately.

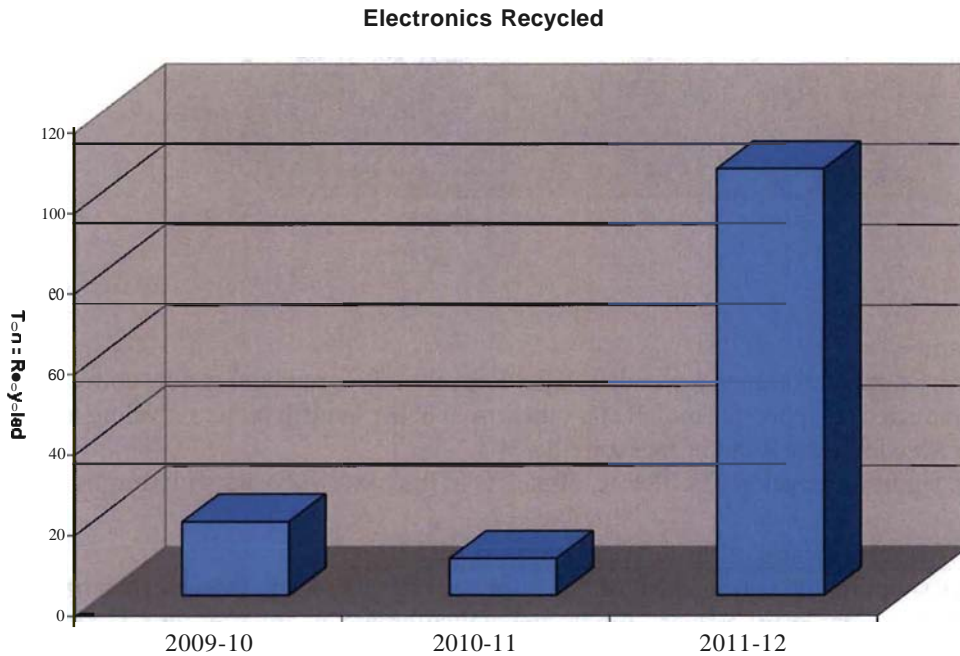
Electronics ban information and information about how to recycle all electronics are located on our website [www.onslowcountync.gov/landfill](http://www.onslowcountync.gov/landfill) and is also included in our handout that is given out at festivals, convenience centers, and other locations.

All Onslow County residents, municipalities, and businesses have the opportunity to use our Electronics Recycling Program.

We track tonnage of our Electronics Recycling Program and use that data to track trends.

**Intended Actions:**

Continue to research new electronics recycling possibilities to make sure that we have an efficient, sustainable, and environmentally sound program for the handling of electronic materials.



**Concrete, Asphalt, and Brick**

**Current Program:**

Onslow County Solid Waste has been reusing concrete on road beds for several years. In 2013, we will begin tracking out tonnage on how many tons of concrete, asphalt, and brick has been reused or recycled.

**Shingles**

**Current Program:**

Onslow County Solid Waste will begin a pilot Shingle Recycling Program in early 2013. Shingles will be collected for recycling at the Shingle Recycling Station that will be located at the landfill address.

**Carpet**

**Current Program:**

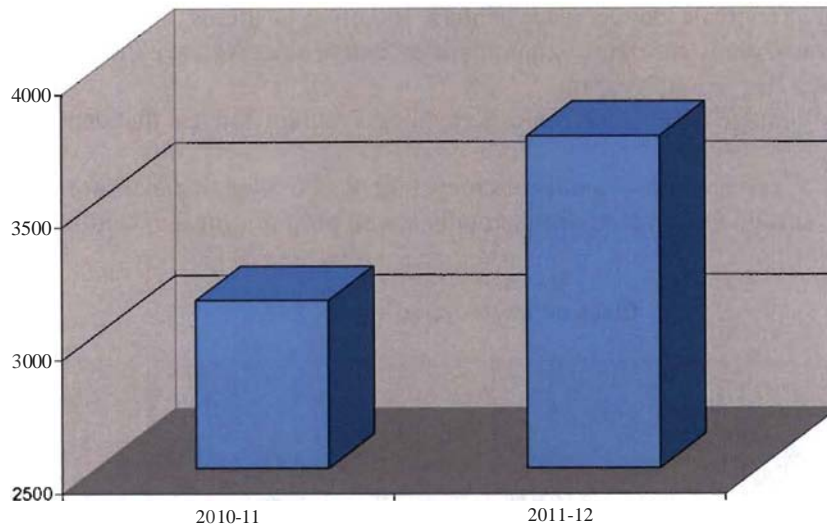
Onslow County Solid Waste will start a Carpet Recycling Program in 2013. Collection of Carpet for Recycling will begin in 2013 and the drop off site for Carpet will be at the recycle station located at the landfill address.

**Scrap Tires**

**Current Program:**

Onslow County currently accepts scrap tires at the ten (10) convenience center sites and at the landfill address.

Tire Recycling



### **Pallets**

#### **Current Program:**

Onslow County developed a wooden Pallet Recycling Program and is now collecting pallets to be recycled (chipped for mulch and other uses) at the landfill pallet recycling area located at 415 Meadowview Road in Jacksonville, NC.

So far, we have recycled 434.88 tons of pallets in the past two years with this program.

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

Onslow County supports the enforcement of NC litter laws through Keep Onslow Beautiful programs and environmental enforcement officers. Environmental enforcement enforces the NC Solid Waste laws and the Onslow County Solid Waste Ordinance. Education regarding litter laws presented to other enforcement agencies will help increase litter law enforcement.

In 2004, the Onslow County Board of Commissioners adopted a resolution that would add a litter prevention statement on all NC privilege licenses.

In 2006, the Onslow County Board of Commissioners adopted the new Onslow County Solid Waste Ordinance.

#### **Onslow County Solid Waste Management Ordinance, Updated 11/9/06**

The Onslow County Solid Waste Management Ordinance was updated and approved by the Onslow County Board of Commissioners in January of 2006. It is not the typical solid waste ordinance. It encompasses a broader **range** of items than the ordinances used by most counties. Other counties tend to focus on their landfills, while the Onslow County ordinance concentrates on junkyards and littering. Most counties have a separate burning ordinance, abandoned car ordinance, abandoned manufactured home ordinance, solid waste ordinance, etc. Due to the nature of the work performed by Zoning and Environmental Enforcement Officers, Onslow elected to go with a single ordinance as the administration, enforcement, and employees are the same for each chapter of the Solid Waste Management Ordinance.

The Solid Waste Management Ordinance includes provisions that strenuously regulate various activities which involve screening requirements for junkyards/salvage yards. The ordinance also enforces the removal of abandoned and junked motor vehicles, abandoned manufactured homes, littering, and other related nuisances. Other focuses of the ordinance address other pertinent solid waste issues such as open disposal practices, construction sites and demolition sites.

The Solid Waste Management Ordinance is designed to be an effective tool in keeping Onslow County an attractive and healthy place to live.

The Solid Waste Management Ordinance regulates junkyards/salvage yards. All junkyards/salvage yards in Onslow County are now required to have screening. Existing junkyards have 12 months to comply with screening regulations and have until January 9, 2007 to have their items completely screened from public view. The Zoning & Environmental Officers worked with local junkyards to explain the screening requirements and assist with plans for compliance by the amortization deadline. In the Summer of 2012, the Z&E Officers completed a new survey of the junkyards and letters were sent to those few who are no longer in compliance. Any new junkyards that come into Onslow County will have to not only screen from public view, but also from any adjoining churches, schools or residences.

Provisions have been added to the Solid Waste Management Ordinance to regulate abandoned manufactured homes. This process is entirely complaint driven. Any citizens that know of manufactured homes in the county that may be a potential hazard to the health, safety, or welfare of the general public should contact the Onslow County Zoning and Environmental Enforcement Division.

Open burning has become a major issue for several counties in eastern North Carolina. The Onslow County Solid Waste Ordinance now regulates open burning that does not take place in wooded areas or on forestland. The open burning of leaves, tree trimmings, or yard trash, excluding logs and stumps is permitted provided that:

The material burned originates on the premises of a private residence and is burned on that premises;

There are no public pick-up services available for the material identified for burning;

The burning does not create a nuisance;

The material is not burned when any state agency has banned burning for that time or area.

Camp fires used solely for outdoor cooking and other recreational purposes or for ceremonial occasions or for human warmth and comfort and that do not create a nuisance and do not use synthetic materials or refuse or salvageable materials for fuel are also permissible. Also

permissible are fires set for the instruction and training of fire-fighting personnel and prescribed burning that is conducted in accordance with state and federal regulations. All

other types of open burning are prohibited.

#### D. Management of Abandoned Manufactured Homes

Current Onslow County Dilapidated Home Demolition Assistance Program

The Onslow County Dilapidated Home Demolition Assistance Program (DHDAP) is a financial assistance program designed to facilitate enforcement of public nuisance regulations requiring the demolition of abandoned manufactured homes under the County's Solid Waste Management Ordinance, dilapidated homes under the County's Minimum Housing Standards, and homes condemned as unsafe under G.S. 153A-366 and the State Building Code. Homes condemned as unsafe under G.S. 153A-366 qualify for the DHDAP if cited by either an Onslow County Code Enforcement Officer or City of Jacksonville Building Inspector, if the structure is located within the City's ETJ. The **program** provides grants to persons who are ordered by authorized County staff to demolish homes under these regulations, but simply haven't the financial means to do so. Grant amounts range from 70% to 100% of demolition costs, depending on the applicant's family income. While the County recognizes that the applicant is solely responsible for complying with the regulations and orders to demolish the violating home, it acknowledges that demolition costs can be a substantial barrier to elimination of the public nuisance created by the home.

Onslow County Manufactured Home Demolition Assistance Program (MHDAP)  
Program Guidelines

September 2012

The Onslow County Manufactured Home Demolition Assistance Program (MHDAP) is a financial assistance program designed to facilitate enforcement of public nuisance regulations requiring the demolition of *abandoned manufactured homes* under the County's Solid Waste Management Ordinance and Minimum Housing Standards. The program provides grants to persons who are ordered by authorized County staff to demolish abandoned manufactured homes under these regulations, but simply haven't the financial means to do so. Grant amounts range from 70% to 100% of demolition costs, depending on the applicant's family income. The maximum number of abandoned manufactured homes eligible for this Program shall be limited to five (5) per site. For those whose family income is greater than 125% of the median income category, Onslow County will demolish abandoned manufactured homes at a 1:1 ratio. For example, if the County demolishes five abandoned manufactured homes from a site, the applicant must agree to demolish five from the same parcel(s) at their own expense. The Program applies only to individual home and property owners and excludes corporate entities. While the County recognizes that the applicant is solely responsible for complying with the regulations and orders to demolish the violating home, it acknowledges that demolition costs can be a substantial barrier to elimination of the public nuisance created by the abandoned manufactured home.

Program Eligibility and Grant Amount

A person is eligible for the program if:

- (a) he or she is the owner of
  - an abandoned manufactured home ordered to be demolished pursuant to the Solid Waste Management Ordinance; or
  - a manufactured home found to be dilapidated and ordered to be demolished under the County's Minimum Housing Standards;
  - an abandoned manufactured home designated by the applicant as abandoned on an official, "Request For Abandoned Manufactured Home Designation Form" and verified as being either a public health hazard or nuisance by the Onslow County Land Use Enforcement Division.
- (b) his or her family income falls within one of the income ranges noted in Table A below, which are based on percentages of the median family incomes for family size most recently published for the Jacksonville MSA under the federal government's HUD Section 8 program.
- (c) he or she is the owner of an abandoned manufactured home and one of the following conditions are met in addition to provisions a and b above:
  - The abandoned manufactured home is classified as real property and there are no bank liens on the property. If the property is being used as collateral, a letter of authorization from the lien holder is required prior to demolition.

The amount of a grant provided by this program to an eligible applicant will be an amount equal to the percentage of the total demolition cost contracted for by the County that corresponds to income range in which the applicant's family income falls, as shown in Table A.

Table A

Homeowner's family income (as percentage of median family income*)	Grant Limit (as percentage of demolition cost)
<50%	100%
50% < 80%	90%
80% < 100%	80%
100% < 125%	70%
Income > 125%	I: I Ratio

\*2012 HUD Income Classifications used to determine median family income.

Upon application approval, the applicant shall relinquish all of their ownership rights to the structure(s) being removed or demolished.

#### Application and Demolition Contracting Process

To receive a grant under this program, a person must apply to the program administrator within the Onslow County Planning and Development Department. The application must be completely filled in and be accompanied by a signed hold harmless agreement, verification of income (e.g., W-2 income tax form and/or a copy of a tax return for the previous year), and proof of title to or ownership of the home. If the applicant is the owner of an abandoned manufactured home, but not the underlying real property, the application and hold harmless agreement must also be signed by the real property owner.

On receiving a complete application, the program administrator will:

- review the application and determine whether the applicant is eligible for a program grant, as well as the amount of the grant, as a percentage of total demolition cost;
- use an informal bid process to select a local contractor to demolish the home; and
- mail the applicant a certified letter clearly stating the amount of the grant (as both a percentage of the total demolition cost and a dollar amount) and the remaining amount (if any) the applicant is required to contribute to the demolition cost.

Contractor bids will remain valid for 90 days.

The applicant must pay the County his or her required contribution to the demolition cost within 45 days after receiving the certified letter. No demolition will be authorized until the payment is made. If the applicant fails to make the required payment within the specified time period, or approved extensions thereof without good cause, he or she will be disqualified from the program – but will still be held responsible for complying with the order to demolish the home.

Before demolition begins, the owner/grant recipient must clear the abandoned manufactured home of all personal items and other items not originally part of the home structure.

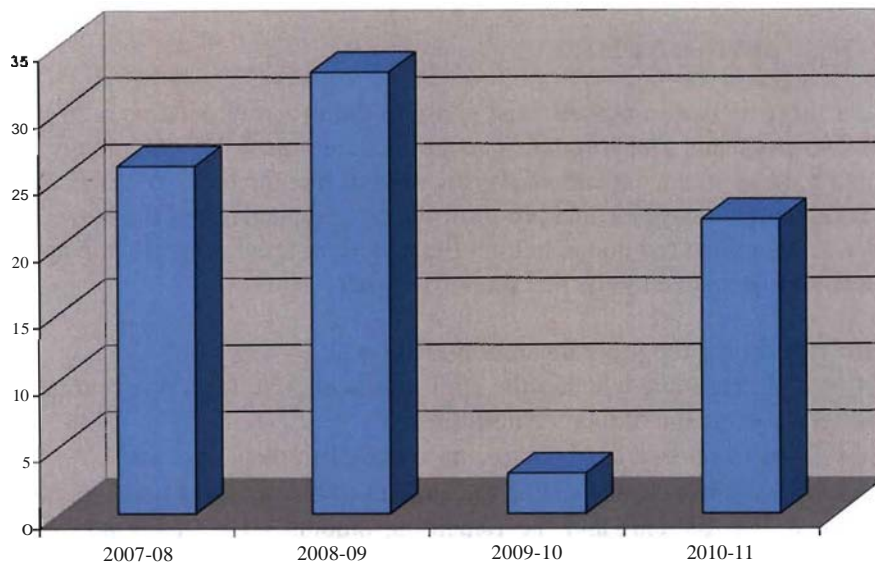
Before demolition begins, the contractor must obtain a demolition pennit, arrange for any required asbestos inspection and report, disconnect and secure all utilities, and arrange for a pre-demolition inspection by a County Code Enforcement Officer or City of Jacksonville Building Inspector if located within the ETJ.

During demolition, the contractor must adhere to the demolition inspection checklist and properly dispose of debris resulting from the demolition.

Contractors hired to demolish abandoned manufactured homes under the MHDAP shall be responsible for separating and recycling thermostat mercury switches attached to the abandoned manufactured home prior to the deconstruction of the structure. The contractor shall remove the mercury-containing convenience switch assembly or the mercury-containing capsule contained in the assembly, commonly referred to as a "bullet" from the abandoned manufactured home before the structure is crushed on or off-site. The switch assembly or the bullet shall be stored safely and recycled under the Universal Waste regulations.

After demolition is completed, a County Code Enforcement Officer or City of Jacksonville Building Inspector will inspect the site and verify that the home has been thoroughly demolished, that all demolition debris has been properly removed, and that the site has been seeded. On receiving such verification, the program administrator will arrange for payment to the contractor.

Abandoned Mobile Homes Removed



E. Purchase of Recycled Materials and Products

Onslow County encourages the purchase of recycled products and materials. Through Keep Onslow Beautiful programs, Onslow County educates on markets and encourages Onslow County citizens and businesses to purchase recycled materials and product.

## Part VII Solid Waste Costs

The total cost of Solid Waste services including disposal, collection, recycling program, equipment, maintenance, and staff in 2011-12 was \$9,823,628.67. The Onslow County Solid Waste Department operates with an Enterprise Fund and does not use tax dollars.

## Part VIII Disaster Response

### Consulting Services

The County entered into a contract with Beck Disaster Recovery, Inc. (BDR) on June 14, 2010. BDR will assist the county with disaster debris monitoring services, emergency management planning and training, and damage assessment and reconstruction services in the event of natural disaster. The initial term of the contract was for a three period with the option to extend the contract for three (3) additional one year periods under the same terms and conditions. The County has the option to extend the contract through June 2016.

### Clearance and Removal

In addition, the County has two (2) contracts in place for disaster debris clearance and removal. The initial contract periods are from June I, 2011 to May 31, 2016 with no options to extend. The primary contractor is Crowder-Gulf Joint Venture; the secondary contractor is Crowder-Gulf Joint Venture: the secondary contractor is Unified Debris Haulers, LLC.



**Part IX**  
**Resolution**

**RESOLUTION ACCEPTING AND ENDORSING THE SOLID WASTE  
MANAGEMENT PLAN OF 2012-13 FOR ONSLOW COUNTY, NC**

WHEREAS, it is a priority of this community to protect human health and the environment through safe and effective management of municipal solid waste;

WHEREAS, the reduction of the amount and toxicity of the local waste stream is a goal of this community;

WHEREAS, equitable and efficient delivery of solid waste management services is an essential characteristic of the local solid waste management system;

WHEREAS, it is a goal of the community to maintain and improve its physical appearance and to reduce the adverse effects of illegal disposal and littering;

WHEREAS, Onslow County recognizes its role in the encouragement of recycling markets by purchasing recycled products;

WHEREAS, involvement and education of the citizenry is critical to the establishment of an effective local solid waste program;

WHEREAS, the State of North Carolina has placed planning responsibility on local government for the management of solid waste;


WHEREAS, NC General Statute 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to update the Ten Year Comprehensive Solid Waste Management Plan at least every three years;

WHEREAS, the Onslow County Solid Waste Management Department has undertaken and completed a long-range planning effort to evaluate the appropriate technologies and strategies available to manage solid waste effectively;

NOW, THEREFORE, BE IT RESOLVED BY **THE** GOVERNING BOARD OF ONSLOW COUNTY:

That Onslow County's 2012-13 Ten Year Comprehensive Solid Waste Management Plan is accepted and endorsed and placed on file with Clerk to the Board on this day, 19 Nov. 2012.

ONSLow COUNTY BOARD OF COMMISSIONERS:

  
\_\_\_\_\_  
W.C. Jarnan, Chairman

ATTEST:

  
\_\_\_\_\_  
Julie Wand, Clerk

