

**Southern Shores  
Solid Waste Management Plan**

**July 1, 2009 – June 30, 2019**

**Submitted by the  
Southern Shores  
Board of Commissioners  
June \_\_\_\_ 2009**

**As Part of the Dare County Solid Waste Management Plan**

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## Southern Shores

### Dare County Planning Goals

- Goal 1. To provide everyone in the community with waste disposal capacity, waste collection services, and waste reduction opportunities.
- Goal 2. To increase the efficiency and cost-effectiveness of the solid waste programs.
- Goal 3. To meet the established local waste reduction goals.
- Goal 4. To decrease improper waste disposal.
- Goal 5. To protect the public health and the environment.

### I. Geographic Information and Waste Stream Analysis

**Table 1: Waste Composition FY 07/08**

<b>County / Town</b>	<b>Residential</b>	<b>Commercial</b>	<b>C &amp; D</b>	<b>Industrial is incl. in commercial</b>
<b>Dare</b>	36%	34%	30%	Less than 1% Incl. in Commercial
<b>Duck</b>	48%	40%	12%	
<b>Kitty Hawk</b>	33%	56%	11%	
<b>Kill Devil Hills</b>	42%	43%	15%	
<b>Manteo</b>	16%	39%	45% <sup>1</sup>	
<b>Nags Head</b>	34%	43%	23%	
<b>Southern Shores</b>	78%	14%	8%	

<sup>1</sup> Large municipal construction jobs in 0708 temporarily increased the amount of C & D from Manteo.

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**4-29 update** The Town of Southern Shores was incorporated in 1979. The town's four square miles are entirely located from the Atlantic Ocean to Currituck Sound and Ginguite Creek. The town estimates its current permanent population at 2604 and growth has slowed down along with the economy. Southern Shores normally has thousands of visitors each tourist season (approximately 15,000), staying in rental homes, however due to the economic times that number may be reduced in the near future. Southern Shores has a small commercial sector with small stores and restaurants. The town has contracted with Dare County for curbside residential and commercial solid waste services, Tidewater Fiber, Inc. for residential curbside recycling services and Atlantic Tree for the year-round chipping program. The town currently estimates its waste stream at 78% residential, 14% commercial, and 8% C & D. No industrial waste is generated. To the best of our knowledge the total waste coming from the town that was disposed in FY 07/08 was **2528 tons**, including 192 tons of C & D and 74 tons that were disposed as rejects from the recycling process.

**Table 2: Population Projections**

County / Town	2007	2016	2019/2020
Dare	34,272	38,607	41,103
Duck	507	550	
Kitty Hawk	3461	3,995	
Kill Devil Hills	6820	9,250	
Manteo	1066	1,500	
Nags Head	3113	3,205	
Southern Shores	2604	2727	3100

## II. Waste Reduction Goals

### 4/29/09 Update Southern Shoes

Dare County is the contracted hauler for the municipal waste from the Town of Southern Shores. In FY 0708 the town paid for the collection and disposal of a total of 2,257 tons of residential, commercial, and C & D wastes in local/ regional landfills plus 74 tons of recycling rejects for a total of 2331 tons. That tonnage plus some commercially hauled waste, totaling 2528 tons is represented in **Table 9: Solid Waste Reduction Goals for the Town of Southern Shores**. Some additional commercial waste and C & D waste that is surely from Southern Shores is taken to either the Currituck transfer station or to a C & D processor in nearby Currituck County with the origin designated simply as from 'Dare County'. In the near future we will try to more accurately account for these tons. As the result of those waste tons that are possibly not designated as coming from Southern Shores, a good residential recycling program, and the economic climate of 2007 – 2009, the town has reached a high reduction rate and is projecting less waste in the future. The town has surpassed the waste reduction goal of 28% that had been projected for 2015/16 by attaining a reduction rate of 51.7%. The town will set new goals of maintaining 51.7% waste reduction for 2015/16 and 51.7% for 2018/2019. To do this it will have to reduce waste by 2,590 tons by 2015/2016 and by 2,945 tons by

## Southern Shores

2018/2019. It will achieve this by encouraging businesses and residents and the construction industry to recycle and practice waste reduction.

**Table 9: Solid Waste Reduction Goals for the Town of Southern Shores**

Year	Population	Tons of Waste Disposed	Per capita disposal rate	% Reduction achieved / predicted	Tons targeted for reduction
<b>Baseline year 2002/2003</b>	2292	4208	1.84		
<b>2007/2008</b>	2604	2528*	0.97	51.7%	
<b>2015/2016</b>	2727	3272	0.89	51.7%	
<b>2009/2019</b>	3100	3720	0.89	51.7%	

\*(includes recycling discards from TFC)

### III. Meeting the Waste Reduction Goals

The towns and Dare County plan to reach these goals as outlined in Section II, above, by targeting certain wastes, as listed in Table 9: Targeted Wastes.

**Table 9: Targeted Wastes.**

Reduction Method	Targeted Materials
Source Reduction	Office paper, junk mail, cardboard, packaging
Reuse	Households goods, textiles, pallets, paint, seafood wastes
Recycling	Office paper, mixed paper, cardboard, plastics, glass, steel cans, aluminum cans, textiles, scrap metals, fluorescent bulbs
Composting and Mulching	Residential and commercial yard waste; commercial food and seafood wastes
Special wastes	Antifreeze, waste oil, pesticides, tires, white goods, hazardous wastes, electronics, gasoline, junk motor vehicles, junk mobile homes

### IV. Planning Process and Public Participation

Dare County and its municipalities began drafting this plan through a series of meetings of public works and other municipal officials, and Albemarle Regional Solid Waste Management Authority staff. Planners, solid waste and recycling personnel, town managers and clerks all participated in gathering facts and ideas for this plan. Each of the town and county plans brings together the opinions and wishes of the residents, county and municipal employees, and elected officials. These ideas were taken into each town and county public meeting to receive public comment. These comments were considered for inclusion into the draft plan that was put before the Boards for approval.

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The Town of Southern Shores' public meeting was held May 5, 2009. The plan was approved by resolution of the Board on May 5, 2009.

Dare County's public meeting was held \_\_\_\_\_ 2009. The plan was approved by resolution of the Board of Commissioners on \_\_\_\_\_ 2009.

### **V. Solid Waste Programs**

#### **A. Source Reduction**

The Town of Southern Shores has worked toward reducing the volume of waste that enters the solid waste stream through a residential curbside recycling program and public education. The Town of Southern Shores encourages its residents and visitors to participate in all town, county and regional source reduction education programs.

##### **Intended Actions:**

The Town of Southern Shores will continue its current waste reduction practices and will utilize existing and future technologies to develop alternatives to landfilling through 2019.

#### **B. Collection**

The Town of Southern Shores provides curbside trash residential service and commercial service for all of its area through a contract with Dare County. Residential service is provided twice a week, on Mondays and Fridays, during the months of May 28 through September 30. During the months of October 1 through April 27, service is provided once a week, on Mondays. Commercial service is provided three times per week, Mondays, Wednesdays, and Fridays year round. Twice a year the Town provides residential bulk waste pickup. Vegetative waste removal service is through a contract with Atlantic Tree. The Town provides curbside recycling residential service and commercial service through a contract with Tidewater Fibre, Inc. Recycling pick up occurs every Monday May 28 through September 30. During the months of October 1 through April 27, service is provided first and third Monday.

##### **Intended Actions:**

The Town of Southern Shores plans to continue with its current contract for waste collections, reviewing it and changing it as needed through 2019.

#### **C. Recycling & Reuse**

The Town of Southern Shores has residential and commercial curbside recycling program through a contract with Tidewater Fiber, Inc. Recyclable materials are commingled in a 96 gallon roll out container for pick up every Monday May 28 through September 30. During the months of October 1 through April 27, service is provided first and third Monday. These materials are then transported to the Tidewater Fiber Materials Recovery Facility located in Chesapeake, Virginia, which is approximately 50 miles from the Town. This service is practical for full-time residents and visitors. For those wanting more options, the Town also encourages the use of County-provided recycling facilities. The percentage of recyclables collected has hovered around 20% of

## Southern Shores

total waste generated, and the town will try to improve the amount recovered through education.

### **Intended Actions:**

The Town of Southern Shores will continue its residential & commercial curbside recycling program and encourage the use of County provided recycling facilities through 2019, making changes when necessary. It will continue to use the Tidewater Fiber Materials Recovery Facility until such time as it is no longer feasible, or through 2019.

### **D. Composting & Mulching**

The Town of Southern Shores provides pick up of vegetative waste once a month from September 1 through May 30, with the wood chips returned to property owners upon request for landscaping. This is a well-received program. Residents may contract with a private company to haul away or grind yard waste if so desired or dispose of waste at county provided facilities.

### **Intended Actions:**

The Town of Southern Shores will continue with its current chipping program through 2019, renewing the contract as necessary.

### **E. Incineration with energy recovery**

No solid waste incinerators exist in this region, so this is not an option for the county or the municipalities.

### **Intended Actions:**

Since no solid waste incinerators exist in this region, this will not be an option for the county or the municipalities in the foreseeable future.

### **F. Incineration without energy recovery**

No solid waste incinerators exist in this region, so this is not an option for the county or the municipalities.

### **Intended Actions:**

Since no solid waste incinerators exist in this region, this will not be an option for the county or the municipalities in the foreseeable future.

### **G. Transfer outside geographic area**

### **Intended Actions:**

### **H. Disposal**

## Southern Shores

### **Intended Actions:**

The Town of Southern Shores intends to continue its current operations through the year 2035 as per the agreement that Dare County has with Republic Services.

### **I. Special Waste**

The Town of Southern Shores provides curbside pickups of bulky items twice each year, in the spring and fall, and relies on the county's collection and disposal programs for other special wastes. The Town intends to continue to rely on county collection sites for wastes such as oil, antifreeze, and tires.

### **Intended Actions:**

The Town of Southern Shores plans to continue to provide twice a year, spring and fall, curbside collections of bulky items and will rely on the county's collections for other special wastes through 2019.

### **J. Disaster Response**

The Town of Southern Shores has a Memoranda of Understanding (MOU's) with private contractors to remove debris immediately after a storm. The town also participates in Dare County's Debris Management Plan. Dare County has an emergency operations plan in place that provides guidelines for debris storage and removal.

### **Intended Actions:**

The Town of Southern Shores will annually renew its MOU's with private contractors to remove debris through 2019 and continue to participate in Dare County's Debris Management Plan.

### **K. Education**

The Town of Southern Shores relies on the county and Albemarle Regional Solid Waste Management Authority to conduct in-school educational programs and to speak with citizen's groups. The Town also publishes information regarding solid waste in its newsletter which is distributed to all Town residents annually and has information on its web site. The Town also has electronic broadcast news that provides reminders of solid waste and recycling information weekly. It produces flyers and informative stickers for the trash and recycling cans that are distributed to property owners and renters. In addition, refrigerator magnets are available to provide information including recycling.

### **Intended Actions:**

The Town of Southern Shores plans to rely on the county and the Authority to conduct educational programs and plans to continue publishing information in its newsletter and other sources through 2019.

### **L. Illegal Disposal and Litter Prevention**

## Southern Shores

The Town of Southern Shores adopted a solid waste ordinance that defined acceptable waste, commercial and residential waste and littering, as well as prescribing regulations for residential and commercial containers. The ordinance also prescribes penalties for the violation of the ordinance, number of cans needed etc. The Town also sponsors once a year a Spring Town Cleanup, allowing members of the community to actively get involved in litter collection and disposal.

### **Intended Actions:**

The Town of Southern Shores will enforce its solid waste ordinance that should encourage responsible waste management and prevent litter through 2019. The town shall rely on county and Authority educational programs to prevent litter and on local and state-wide cleanups to control litter. Town will continue to sponsor annual Spring Cleanup through 2019.

### **M. Purchase of Recycled Materials**

The Town of Southern Shores currently has no program that mandates the purchase of recycled products, although the town does typically purchase recycled paper products.

### **Intended Actions:**

The Town of Southern Shores will continue to increase its purchase of recycled paper products and other materials until such time as an official policy is in place, or through 2019.

## **VI. Solid Waste Costs and Financing Methods**

**Southern Shores Fiscal Year 0708** Managed 2331 tons. Solid Waste – 2523, Recycling 668 and Mulching – 144 Households 2376

<b>SOUTHERN SHORES</b>	<b>1. SOLID WASTE COLLECTION</b>	<b>2. SOLID WASTE DISPOSAL</b>	<b>3. REDUCTION, REUSE, AND RECYCLING</b>	<b>4. MULCHING, COMPOSTING, AND OTHER PROGRAMS</b>	<b>TOTAL COST</b>
<b>Program Cost</b>	\$217,308	\$141,389	\$118,794	\$125,000	\$602,491
<b>Cost per Household*</b>	Commercial is included	Commercial is included			
<b>Cost per ton</b>	\$86	\$56	\$178	\$868	\$181

## **VII. Facilities and Resources**

We will list all service providers for Dare County.

**Appendix A**

**Resolution to Adopt Plan**



**Town of Southern Shores**

5375 N. Virginia Dare Trail, Southern Shores, NC 27949

Phone 252-261-2394 / Fax 252-255-0876

info@southernshores-nc.gov

www.southernshores-nc.gov

Resolution 2009-05-01

**Town of Southern Shores Council**

Resolution to Approve

Southern Shores

Solid Waste Management Plan Update

For 2009 - 2019

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


WHEREAS, North Carolina General Statute 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a 10-year comprehensive solid waste management plan; and

WHEREAS, the Town of Southern Shores was actively involved in the planning process;

NOW, THEREFORE, BE IT RESOLVED that the Town of Southern Shores Council approves the comprehensive solid waste management plan.



Adopted this 5<sup>th</sup> day of May, 2009.

  
Don Smith, Mayor

ATTEST:

  
Carrie Gordin, Town Clerk

Southern Shores

**Appendix B**

**Copy of Notices For Public Meetings**



**Town of Southern Shores**

5375 N. Virginia Dare Trail, Southern Shores, NC 27949

Phone 252-261-2394 / Fax 252-255-0876

info@southernshores-nc.gov

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Coastland Times

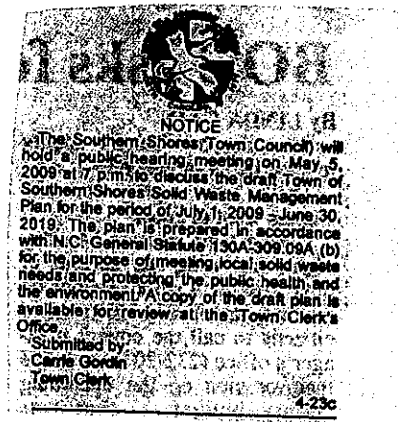
Please post in the legal's, Thursday edition with Town logo.

April 20, 2009

**NOTICE**

The Southern Shores Town Council) will hold a public hearing meeting on May 5, 2009 at 7 p.m. to discuss the draft Town of Southern Shores Solid Waste Management Plan for the period of July 1, 2009 - June 30, 2019. The plan is prepared in accordance with N.C. General Statute 130A-309.09A (b) for the purpose of meeting local solid waste needs and protecting the public health and the environment. A copy of the draft plan is available for review at the Town Clerk's Office.

Submitted by:  
Carrie Gordin  
Town Clerk



**Appendix E**  
**Waste Reduction Goal Sheet**  
**Town of Southern Shores**

<b>Waste Reduction Goal Sheet</b>		
<b>NC Local Government Ten Year Solid Waste Management Plan</b>		
Local Government Name:	<b>Town of Southern Shores</b>	
Previously established waste reduction goal:	FY 2015/2016	28%
After considering your government's current and projected Solid Waste activities, resources, population, and economic growth have you reached your previously established goal?		<b>Yes</b> No
Establish a new waste reduction goal (for 2019)		51.7%
<b>Waste Reduction Calculation</b>		
To provide 10 years of SWM 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.		
<b>Calculation</b>		<b>FY</b>
1. Baseline year per capita disposal rate (FY 1991 – 1992 unless alternate approved by Section) Established 2002/2003		1.84
2. Percent waste reduction goal		51.7%
3. Targeted per capita disposal rate (subtract line 2 from the number 1.0 and multiply result by line 1)		0.89
4. Estimated population in the new waste reduction goal year (2019)		3100
5. Projected tonnage for disposal at baseline disposal rate (multiply line 1 by line 4)		5,704
6. Targeted annual tonnage for disposal (multiply line 3 by line 4)		2,759
7. Targeted annual tonnage to reduce (Subtract line 6 from line 5)		2,945
<b>Waste Reduction Plan</b>		
Given the targeted annual tonnage amount to be reduced, explain how you plan to reach the goal: For Example: ____ tons by increasing recycling; ____ tons by source reduction; ____ tons by utilizing composting; ____ tons by ____ (specify means)		
		<b>TONS</b>
	Recycling;	2,000
	Source reduction:	645
	Composting:	300