



Beaufort County Solid Waste and Recycling Board Meeting Agenda March 22, 2012

# Location: Beaufort Industrial Village, BIV 2, Beaufort, SC 29906

- 2:00 P.M.
- Call to Order: Mr. Dietz
  - Approve meeting Agenda
  - Approval of the Minutes from previous meeting: February 23, 2012 (backup)
- Introductions
- Public Comment
- Reports:
  - Finance Department Reports (backup)
  - Solid Waste & Recycling Division Monthly Reports, February 2012 (backup)
  - Recycling Rates 10 year review
  - Litter Officers' Report
  - Recycling Coordinators' Report
  - 2good2waste.org Report
- Unfinished Business:
  - Daufuskie Island Convenience Center Design/Build No Update
  - Transfer Station Fatal Flaw Analysis-Site Analysis Minor
  - Solid Waste initiatives
  - FY 2013 Budget
- New Business:
- Public Comment
- Adjournment
- Solid Waste Management Plan Workshop Session
  > Review of Solid Waste Management Plan Section 5 (backup)
- Next Meeting, April 26, 2012, at Beaufort Industrial Village, BIV 2



# Beaufort County Solid Waste and Recycling Board Meeting Thursday, February 23, 2012, 2:00 pm BIV – 2 Conference Room

## Attendees:

Earl Dietz, Chairman & District 8 Representative David R. Uehling, District 6, Representative George Potts, District 9 Representative Ben Wheatley, District 7 Representative Tammy Malone, District 4 Representative(Ex Officio) Rob McFee, Director of E&I Gary Dukes, MCAS Liaison Eddie Bellamy, Public Works Director Billie Lindsay, Planning James Minor, Solid Waste Manager John Miller, Supt. Solid Waste & Recycling Beth Lewis, Information Coord/Analyst Carol Murphy, Recycling Coordinator

## Absentees:

Leland McCormack, DHEC Liaison Brad Woods, MCRD Liaison Leroy Norris, District 5 Representative (Resigned 1/1/2012) Alice Darian, District 3 Representative (Ex-Officio) Isaiah Smalls, District 1 Representative (Ex-Officio) Van Willis, District 2 Representative (Ex-Officio)

## Guests

Tom Soder, S&P Recycling Kent Berry, The Greenery Mike Bennett, IC Recycle

- Call to Order: Chairman Dietz called the meeting to order at 2:05 pm.
- Agenda: The Agenda was approved as written (board should disregard email version).
- Minutes: The minutes of January 26, 2012, were approved as written.
- Introductions: All present were introduced.
- **Public Comment:** Mr. Dietz called for public comment. There being none, the meeting continued.

## Monthly Reports

- Finance Report:
  - The Finance Report for January 2012 was distributed. Mr. Minor asked that any questions be emailed to him for review.

## • SW&R Monthly Reports:

- Mr. Minor reviewed the January 2012 reports including Tonnage Maps for each type of waste.
- Total Tonnage for January was 4,822 tons vs. 4593 in 2011. Disposal 2% higher indicating improvement in the economy.
- Total January disposal costs were \$178,987. Total hauling costs were \$46,642. Related budgets are on target.
- o Traffic flow was noted 129,869 w/Pritchardville counter not working.
- January recycling includes 388.50 tons curbside, 395.06 tons from centers. Total to date residential including newspapers was 855.43 tons. 4,435 tons YTD
- Total January recycling costs were \$152,602 noting budget expended 44%. Annual recycling tonnage was 5210 tons.
- Recycling proceeds for the year includes: \$113,266 in Credits from our contract with Waste Management, \$167,304 in revenue from scrap metal, newspaper, oil, etc.

# • Litter Officers' Reports

• Mrs. Murphy reported cleanup of the Cole Tire pile in St Helena was completed. 60.12 of tires (~6,000 tires) were removed from the marsh and tree line and recycled

# • Coordinators' Report

- The public was reminded of the next Hazardous Household Waste and Prescription medication collection event will be held 3/3/2012. Other special events include
  - May 5, 2012—Saturday 9-3 Electronics Waste & Shredding at 2 Locations Bluffton & Shanklin Public Works
  - March 3, 2012-Saturday 9-3 Hazardous Waste & Prescription Medications Collection, Bluffton Public Works Site,
  - April 28, 2012-Saturday 9-3— Town of Hilton Head Sponsored(Residents) EWaste, Hazardous Waste & Prescription Medications Collection
  - May 12, 2012-Saturday 9-3—Hazardous Waste & Prescription Medications Collection
  - o Shanklin Public Works Site, 140 Shanklin Rd.,
  - Mr. Potts asked about the traffic issues at the Feb event in Bluffton. Mr. Minor explained that those issues were being addressed for future events.
- o Average Weekly office recycling collection holding at @ 1,400lbs
  - o Totals July-Dec 2011
    - $\circ$  Office Program = 27.62 tons
    - $\circ$  Records Dept Secure Program = 14.57 tons
    - Book recycling = 19.14 tons
- Assisted TCL Technical College of the Lowcountry with recycling program and bins.

# • 2 Good 2 Waste

- o Bookmarks advertising 2good2waste will be distributed to County libraries and schools
- o Slide placed on county website

# • Unfinished Business

- o Daufuskie Island Convenience Center
  - Mr. McFee reported that the SC Supreme court reviewing the case. The SC Circuit Court found in favor of the county.

# • Transfer Station

o No Update

# • New Business

# • Council Retreat Power Point

- Mr. Minor reviewed the power point presented to County Council:
- Current Issues:
  - Inefficient Collection Methods
  - Convenience sites cannot handle future growth
  - o Limited Disposal and Recycling Alternatives
  - o Lack of Accountability in Disposal
  - o Wide variance between County and each Municipal program
  - Minimal system for special waste streams
  - Lack of Control / No Limits on Disposal
  - Beaufort County pays disposal for MSW, C&D, yard waste
  - Lack of Disposal Alternatives
  - o Convenience Center Operating Day Too Long
  - Lack of time for maintenance
  - Inadequate supervisory coverage
- Ideal System:
  - Emphasis on 3R's- Reduce, Reuse, Recycle

- o Last Option is Disposal
- Convenient for Citizens
- Flexible and Adaptable
- System to Process all Waste Streams
- Cost Effective
- Costs Controllable or at Least Predictable
- SWOT Analysis
  - o Strengths:
    - o Our Citizens Respond to Leadership for the Right Cause
  - o Weaknesses:
    - Lack of Disposal and Recycling Alternatives
    - Paying for Disposal of Waste Without Control; Estimated at \$100,000 each year
  - Opportunities:
    - Synergy from Existing Municipal Programs
    - Reduction in Hours; Systematic Changes in Services; Modernization & Consolidation of Convenience Centers
  - o Threats:
    - No Control of Future for Hickory Hill Landfill
    - o Major Hurricane will Cripple Present Collection System

## • Three Major Initiatives

- o Select a site and build the Recycling / Transfer Facility
- Begin to transition away from Convenience Center based services
- o Incrementally begin curbside service in unincorporated Beaufort County

## • Funding

- Good Ideas without funding are just good ideas; to have an action plan it must be funded
- Proposed: Solid Waste and Recycling Fee
  - o 50% toward curbside transition
  - o 50% toward Recycling / Transfer Facility
  - Estimated Annual Fee \$50 \$75 per taxable property

# o Review of the Solid Waste Management Plan for Beaufort County-

• Mr. Minor asked that members stay for a brief workshop to review a draft of Section 5 immediately following this meeting,

# • Public Comment:

- Mr. Dietz called for the final public comment.
- Tom Soder, SP Recycling, spoke to the group about considerations in using single stream recycling in its future plans.

# • **The Meeting ended** at 3:15 pm.

 The next regular board meeting will be held March 22, 2012, 2:00 pm in BIV 2 Conference Room.

• A Solid Waste Management Plan Workshop will be held immediately after the regular March meeting.

Cc: Mr. Gary T. Kubic, County Administrator
 Miss Suzanne Rainey, Clerk to Council
 J. Robert McFee, PE, Division Director, Engineering and Infrastructure
 Eddie Bellamy, PW Director

UNAUDITED BEAUFORT COUNTY, SOUTH CAROLINA SCHEDULE OF REVENUES AND EXPENDITURES - BUDGET (GAAP BASIS) AND ACTUAL SOLID WASTE AND RECYCLING For the Period Ending February 29, 2012

	E	Budget		Actual		√ariance Positive Negative)	Percent of Budget
Revenues Sale of Recyclables	\$	300.000	\$	167,427	\$	(132,573)	56%
Waste Disposal Fees	Ψ	7,500	Ψ	6,500	Ψ	(1,000)	<u>87%</u>
Total Revenues		307,500		173,927		(133,573)	57%
		<u> </u>		<u> </u>			
Expenditures Solid Waste / Recycling Administration		0.40.050		004.000		004.450	500/
Personnel Purchased Services		649,259 3,959,150		364,800 2,100,887		284,459 1,858,263	56% 53%
Supplies	•	96,445		70,042		26,403	73%
Capital		32,000		-		32,000	0%
		4,736,854	_	2,535,729		2,201,125	<u>54%</u>
Solid Waste / Recycling Hilton Head							
Personnel		90,593		61,366		29,227	68%
Purchased Services		6,700		5,367		1,333	80%
Supplies		3,400		1,726		1,674	<u>51%</u>
		100,693		68,459		32,234	<u>68%</u>
Solid Waste / Recycling Bluffton							
Personnel		134,890		93,126		41,764	69%
Purchased Services		7,000		3,444		3,556	49%
Supplies		3,900		2,537		1,363	<u>65%</u>
		145,790		99,107		46,683	<u>68%</u>
Solid Waste / Recycling Unincorporated Port Royal							
Personnel		164,421		87,321		77,100	53%
Purchased Services Supplies		10,000 4,100		4,676 2,155		5,324 1,945	47% <u>53%</u>
Supplies		178,521		94,152		84,369	<u>53%</u> 53%
		110,021		54,102		04,000	0070
Solid Waste / Recycling Daufuskie							
Personnel		41,156		-		41,156	0%
Purchased Services Supplies		5,300 2,900		- 127		5,300 2,773	0% 4%
ouppies		49,356		127		49,229	0%
		.0,000				.0,220	0.70
Solid Waste / Recycling St. Helena							
Personnel Purchased Services		149,655		85,022		64,633	57%
Supplies		11,000 6,200		5,413 3,269		5,587 2,931	49% <u>53%</u>
ouppies		166,855		93,704		73,151	<u>56%</u>
		,				,	
Solid Waste / Recycling Sheldon Personnel		00 500		60 740		20.044	67%
Personnei Purchased Services		90,593 9.300		60,749 5.677		29,844 3.623	67% 61%
Supplies		9,300 5,300		2,128		3,023	40%
		105,193	_	68,554	_	36,639	65%
Total Expenditures		5,483,262		2,959,832		2,523,430	54%
•							<u> </u>
Net Expenditures	<u>\$ (</u>	<u>5,175,762)</u>	<u>\$</u>	(2,785,905)	<u>\$</u>	<u>(2,389,857)</u>	<u>54%</u>

## BEAUFORT COUNTY, SOUTH CAROLINA

COMBINING BALANCE SHEET

## NONMAJOR SPECIAL REVENUE FUNDS - SOLID WASTE AND RECYCLING

February 29, 2012

	Col	Oil lection Grant	V Re	Solid Vaste/ cycling Grant	 Energy Grant	Tire ecycling Grant	Mai R	Waste nagement ecycling Grant	Total
<u>ASSETS</u> Equity in Pooled Cash and Investments Receivables, Net Total Assets	\$	4,192 - 4,192	\$	7,569 - 7,569	\$ 92,479 92,479	\$ 11,943 - 11,943	\$	30,174 - 30,174	\$ 53,878 92,479 146,357
LIABILITIES AND FUND EQUITY Liabilities Accounts Payable Accrued Payroll Total Liabilities	\$	702 - 702	\$	1,201 - 1,201	\$ 91,913 566 92,479	\$ 8,689 - 8,689	\$	-	\$ 102,505 566 103,071
FUND BALANCE Reserved for Encumbrances Reserved for Special Revenue Funds		8,961 (5,471) 3,490		- 6,368 6,368	 35,248 (35,248) -	 6,498 (3,244) 3,254		- 30,174 30,174	50,707 (7,421) 43,286
Total Liabilities and Fund Balance	\$	4,192	\$	7,569	\$ 92,479	\$ 11,943	\$	30,174	<u>\$ 146,357</u>

		Oil Collection Grant					
	E	Budget	ŀ	Actual	F	′ariance Positive legative)	
Revenues							
Intergovernmental	\$	17,900	\$	4,506	\$	(13,394)	
Total Revenues		17,900		4,506		(13,394)	
Expenditures Purchased Services Supplies Capital Total Expenditures		6,700 2,000 9,200 17,900		1,016 - - 1,016		5,684 2,000 9,200 16,884	
Net Change in Fund Balance		-		3,490		3,490	
Fund Balance at Beginning of Year		-					
Fund Balance at End of Year	\$	-	\$	3,490	\$	3,490	

	Soli	d Waste/ Recycling	Grant
	Budget	Actual	Variance Positive (Negative)
Revenues	¢ 40.000	¢ 40.700	¢ 4.000
Intergovernmental	<u>\$ 10,900</u>	<u>\$ 12,732</u>	<u>\$ 1,832</u>
Total Revenues	10,900	12,732	1,832
Expenditures			
Purchased Services	4,600	4,547	53
Supplies	12,463	7,981	4,482
Total Expenditures	17,063	12,528	4,535
Net Change in Fund Balance	(6,163)	204	6,367
Fund Balance at Beginning of Year	6,164	6,164	
Fund Balance at End of Year	<u>\$1</u>	<u>\$6,368</u>	<u>\$ 6,367</u>

	Energy Grant					
					V	ariance
					F	Positive
		Budget		Actual	(N	egative)
Revenues						
Intergovernmental	\$	274,892	\$	223,471	\$	(51,421)
Total Revenues		274,892		223,471		(51,421)
Expenditures						
Personnel		39,392		26,211		13,181
Purchased Services		500		-		500
Supplies		10,600		2,392		8,208
Capital		224,400		194,868		29,532
Total Expenditures		274,892		223,471		51,421
Net Change in Fund Balance		-		-		-
Fund Balance at Beginning of Year						
Fund Balance at End of Year	\$	-	\$	-	\$	-

		Т	ire Rec	cycling Grant		
	Budget Actual			Po		ariance Positive legative)
Revenues						
Intergovernmental	\$	53,750	\$	31,605	\$	(22,145)
Total Revenues		53,750		31,605		(22,145)
Expenditures						
Purchased Services		53,750		28,351		25,399
Total Expenditures		53,750		28,351		25,399
Net Change in Fund Balance		-		3,254		3,254
Fund Balance at Beginning of Year				-		-
Fund Balance at End of Year	\$	-	\$	3,254	\$	3,254

	Waste Management Recycling Grant					
	E	Budget		Actual	F	ariance Positive egative)
Revenues						
Miscellaneous	\$	12,000	\$	12,000	\$	-
Total Revenues		12,000		12,000		-
Expenditures						
Purchased Services		5,000		-		5,000
Supplies		7,000		-		7,000
Total Expenditures		12,000				12,000
Net Change in Fund Balance		-		12,000		12,000
Fund Balance at Beginning of Year		18,174		18,174		
Fund Balance at End of Year	\$	18,174	\$	30,174	\$	12,000

			Total		
	Budget	Actual		F	′ariance Positive legative)
Revenues					
Intergovernmental	\$ 357,442	\$	272,314	\$	(85,128)
Miscellaneous	 12,000		12,000		-
Total Revenues	 369,442		284,314		(85,128)
Expenditures					
Personnel	39,392		26,211		13,181
Purchased Services	70,550		33,914		36,636
Supplies	32,063		10,373		21,690
Capital	 233,600		194,868		38,732
Total Expenditures	 375,605		265,366		110,239
Net Change in Fund Balance	(6,163)		18,948		25,111
Fund Balance at Beginning of Year	 24,338		24,338		
Fund Balance at End of Year	\$ 18,175	\$	43,286	<u>\$</u>	25,111

Solid Waste and Recycling Division Monthly Update
February Fiscal Year 2012
Distributed to the Solid Waste and Recycling Board of Beaufort County

Solid Waste Overall County Convenience Center Tonnage

	February FY11	February FY12
Household & Bulky	1,609.10	1,635.92
Yard Waste	336.24	299.28
Construction & Demolition (C&D)	121.36	195.12
TOTAL Convenience Center Tonnage	2,066.70	2,130.32
% of All Residential Disposal from CC	46.44%	47.53%

	February FY11	February FY12
Household & Bulky	2,054.80	2,056.70
Yard Waste	260.02	260.68
Construction & Demolition (C&D)	68.76	34.03
TOTAL Residential Route Tonnage	2,383.58	2,351.41
% of All Residential Disposal from Residential Route	53.56%	52.47%

Overall Solid Was	te Activity by Solid V	Vaste District		
Solid Waste District	MSW & Bulky	Yard Waste	C&D	Total District Tonnage
District 1 City of Beaufort	257.51	149.31	6.34	413.16
District 2 Town of Port Royal	110.91	90.27	0.00	201.18
District 3 Town of Hilton Head	910.40	63.00	2.11	975.51
District 4 Town of Bluffton	401.43	80.50	121.32	603.25
District 5 Sheldon Township	136.58	3.50	0.00	140.08
District 6 Unincorporated Port Royal Island	462.48	60.12	18.52	541.12
District 7 Unincorporated Lady's Island	155.20	14.79	12.31	182.30
District 8 St. Helena & Islands East	326.56	71.78	62.30	460.64
District 9 Unincorporated Bluffton Township	920.19	26.69	6.25	953.13
Daufuskie	11.36	0.00	0.00	11.36
MONTHLY OVERALL COUNTY TONNAGE	3,692.62	559.96	229.15	4,481.73
YTD OVERALL COUNTY TONNAGE	33,320.20	4,867.12	2,128.00	40,315.32

## Solid Waste and Recycling Division Monthly Update February Fiscal Year 2012 Distributed to the Solid Waste and Recycling Board of Beaufort County

## Solid Waste Hauling Costs

Month	FY11 Hauling	FY12 Hauling
July	\$74,597	\$51,417
August	\$71,381	\$58,591
September	\$68,031	\$46,871
October	\$71,756	\$50,401
November	\$65,528	\$45,298
December	\$63,596	\$47,224
January	\$60,428	\$46,642
February	\$58,775	\$43,161
March	\$71,798	
April	\$75,074	
May	\$77,195	
June	\$73,889	
TOTAL	\$832,048	\$389,605

## Solid Waste Disposal Costs

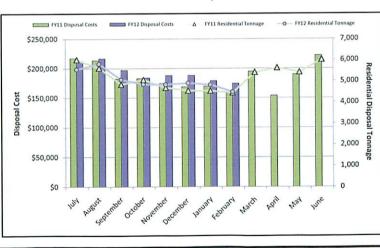
	Month	FY11 Disposal Costs	FY12 Disposal Costs		
1	July	\$217,172	\$212,706		
1	August	\$213,562	\$216,478		
1	September	\$182,197	\$196,899		
1	October	\$182,803	\$183,798 \$187,501		
	November	\$174,222			
	December	\$168,502	\$187,910		
	January	\$169,667	\$178,987		
	February	\$160,316	\$174,381		
	March	\$194,457			
1	April	\$153,708			
	May	\$189,496	_		
1	June	\$222,075			
	TOTAL	\$2,228,176	\$1,538,659		



## Number of Pulls

Month	FY11 Pulls	FY12 Pulls	
July	541	525	
August	514	552	
September	494	466	
October	520	515	
November	467	442	
December	452	464	
January	444	454	
February	435	420	
March	562		
April	592		
May	551		
June	546		
TOTAL	6,118	3,838	

### Solid Waste Disposal Cost



	FY11	FY12
Month	Residential	Residential
	Tonnage	Tonnage
July	6,018	5,554
August	5,620	5,814
September	4,840	5,071
October	5,058	4,841
November	4,681	4,830
December	4,548	4,900
January	4,539	4,822
February	4,450	4,482
March	5,416	
April	5,626	
May	5,424	
June	6,022	
TOTAL	62,242	• 40,315

Tutol County Desidential Tennego Disposal

## Solid Waste Hauling and Disposal Budgets Status

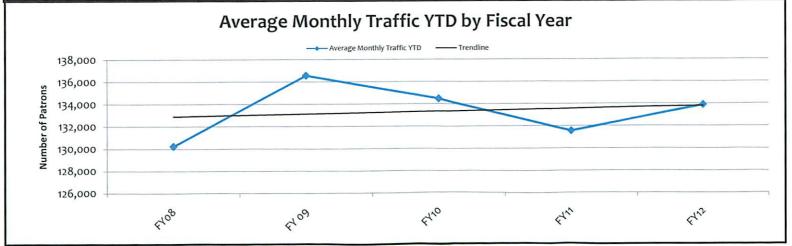
	FY11 Through February	FY12 Through February	FY11 % Expended	FY12 % Expended	
Hauling Costs	\$534,091	\$389,605	51%	43%	
Disposal Costs	\$1,468,439	\$1,538,659	49%	63%	

# Solid Waste and Recycling Division Monthly Update February Fiscal Year 2012 Distributed to the Solid Waste and Recycling Board of Beaufort County

Monthly convenience center rotal manie monnation						
	January FY 11	January FY 12				
Hilton Head	21,749	25,736				
* Bluffton	23,483	20,885				
Lobeco	7,260	6,958				
Sheldon	1,309	1,331				
Big Estate	1,079	1,048				
* Shanklin	10,632	11,652				
Gate	13,141	13,319				
St. Helena	23,286	24,399				
Coffin Point	1,247	1,198				
Cuffy	1,127	747				
* Pritchardville	8,673	10,127				
Total Traffic for ALL Convenience Centers	112,986	117,400				

Monthly Convenience Center Total Traffic Information

\* Pritchardville, Bluffton & Shanklin - Attendant's Numbers FY12



## Solid Waste and Recycling Division Monthly Update February Fiscal Year 2012 Distributed to the Solid Waste and Recycling Board of Beaufort County

Solid Waste District	Convenience Center Tonnage	Residential Route Tonnage	Overall County Tonnage by District	Commercial Tonnage
District 1 City of Beaufort		62.75	62.75	0.00
District 2 Town of Port Royal		0.00	0.00	0.00
District 3 Town of Hilton Head	86.91	105.41	192.32	16.70
District 4 Town of Bluffton	75.85	85.29	161.14	41.37
District 5 Sheldon Township	0.00	0.00	0.00	0.00
District 6 Unincorporated Port Royal Island	28.05	0.00	28.05	0.00
Solid Waste District 7 Unincorporated Lady's Island	0.00	0.00	0.00	0.00
Solid Waste District 8 St. Helena & Islands East	46.62	0.00	46.62	0.00
Solid Waste District 9 Unincorporated Bluffton Township	26.58	70.51	97.09	0.00
Daufuskie	0.00	0.00	0.00	0.00
OVERALL COUNTY TONNAGE	264.01	323.96	587.97	58.07
COUNTY TONNAGE PLUS NEWSPAPER	64.89	0.00	652.86	
	YTD Reside	ntial Recycling To	nnage	
		Convenience Center Tonnage	Residential Route Tonnage	YTD Residenti Tonnage

	Convenience Center Tonnage	Residential Route Tonnage	YTD Residentia Tonnage
YTD Residential Tonnage	2,491.93	2,877.30	5,369.23
YTD Residential Tonnage + Newspaper			5,863.11

## Fiscal Year Overall County Recycling Tonnage & Services Comparison

Month	FY 11 Recycling Tonnage	FY 12 Recycling Tonnage	FY 11 Recycling Services Cost	FY 12 Recycling Services Cost
July	606.24	645.93	\$21,321	\$25,039
August	612.70	758.02	\$19,450	\$24,346
September	621.04	701.63	\$27,998	\$17,867
October	586.96	703.22	\$29,044	\$13,697
November	647.34	770.72	\$24,536	\$24,023
December	702.36	855.43	\$25,496	\$30,022
January	618.16	775.30	\$22,634	\$17,608
February	591.84	652.86	\$27,574	\$19,239
March	691.03		\$14,381	
April	770.39		\$22,162	
May	651.59		\$30,136	
June	740.25		\$14,320	
TOTAL	7,840	5,863	\$279,052	\$171,840
Residential Tonnage + Newspaper Ton	nage NO Commercial Tonnage			
	Solid Waste	Recycling Budget	Status	
	FY11 Through February	FY12 Through February	FY11 % Expended YTD	FY12 % Expended YTD

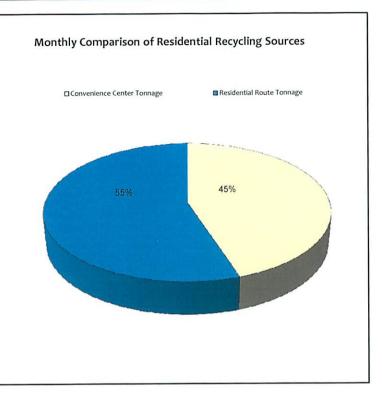
\$171,840

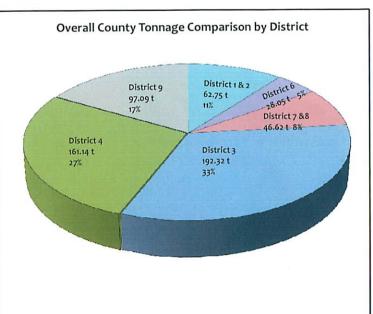
\$198,053

53%

49%

**Recycling Services** 

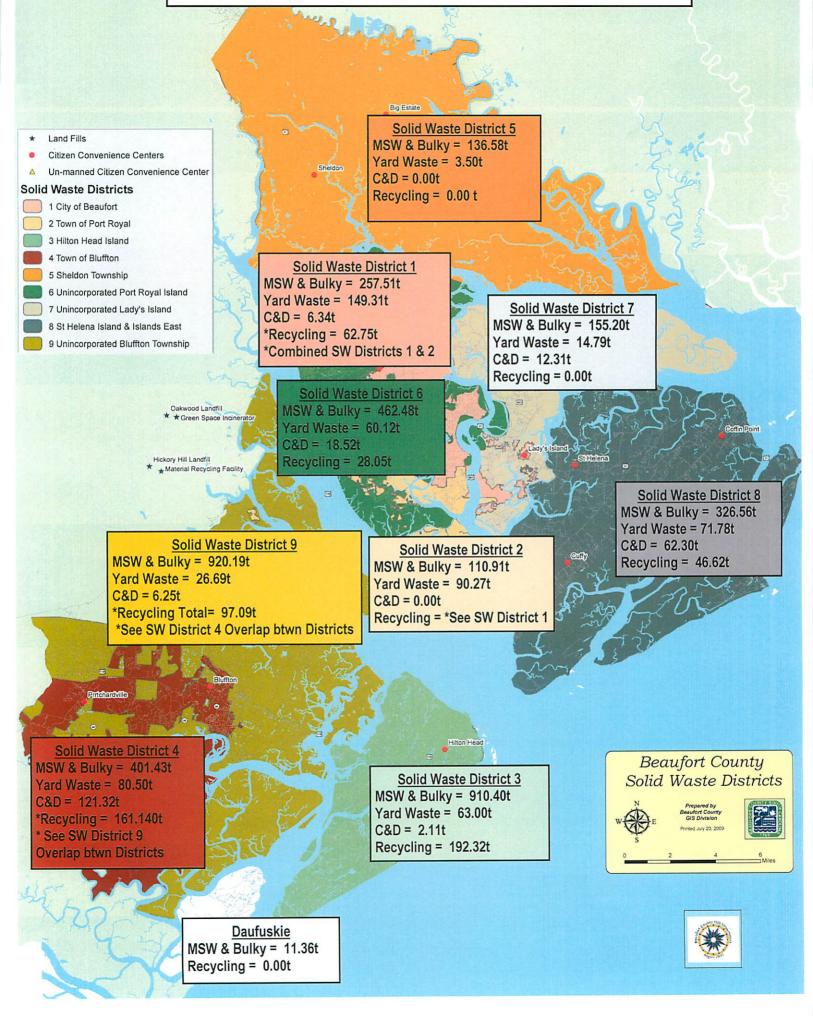




	Fiscal Year 1	2 Recycling Re	venue		Fis	cal Year 12 MRF Credit
Month/Year	Charleston Steel	SP Recycling	Santee Cooper	Interstate Batteries	Month/Year	Waste Management (MRF) *credit towards processing cost
Jul-11	Seattle Section	\$5,264		\$170	Jul-11	\$13,172
Aug-11		\$6,200	\$1,292		Aug-11	\$19,205
Sep-11	\$60,564	\$6,439	\$3,028	\$130	Sep-11	\$20,512
Oct-11		\$6,329	\$3,226	\$525	Oct-11	\$15,684
Nov-11	The Real Providence	\$5,436	\$1,674	\$208	Nov-11	\$10,451
Dec-11		\$3,781	\$2,310	\$236	Dec-11	\$12,937
Jan-12		\$3,168	\$1,215		Jan-12	\$21,305
Feb-12	\$56,109	\$3,413	\$3,124	\$217	Feb-12	\$7,721
Mar-12	GRAMMAR	The second second		A COLOR AND	Mar-12	
Apr-12					Apr-12	
May-12	S. A. R. Shadler I.		The set of the set	a trade and the	May-12	
Jun-12					Jun-12	
Sub Totals	\$116,673	\$40,029	\$15,869	\$1,486	Total	\$120,986

t = tons

# FEBRUARY FISCAL YEAR 12 SW&R BY DISTRICT



			Recyclii	ng Activity by S	Solid Waste	District					
Fiscal Year 12	DISTRICT 1 & 2	2 DISTRICT 3				DISTRICT 4			DISTRICT 5		
	Residential Route Recycling Tonnage	Convenience Center Recycling Tonnage	Residential Route Recycling Tonnage	Residential Total Tonnage (CC + RR)	Convenience Center Recycling Tonnage	Residential Route Recycling Tonnage	Residential Total Tonnage (CC + RR)	Convenience Center Recycling Tonnage	Residential Route Recycling Tonnage	Residential Total Tonnage (CC + RR)	
Recycling											
Jul-11	68.53	101.34	134.20	235.54	89.68	57.57	147.25	0.00	0.00	0.00	
Aug-11	73.93	107.92	174.37	282.29	85.30	77.39	162.69	0.00	0.00	0.00	
Sep-11	78.95	94.96	145.10	240.06	73.33	76.92	150.25	0.00	0.00	0.00	
Oct-11	66.24	112.99	123.59	236.58	100.61	74.76	175.37	0.00	0.00	0.00	
Nov-11	68.64	95.89	139.61	235.50	93.96	105.72	199.68	0.00	0.00	0.00	
Dec-11	87.11	123.85	122.28	246.13	120.71	107.97	228.68	0.00	1.93	1.93	
Jan-12	79.15	109.75	142.85	252.60	96.68	95.02	191.70	0.00	0.00	0.00	
Feb-12	62.75	86.91	105.41	192.32	75.85	85.29	161.14	0.00	0.00	0.00	
Mar-12				0.00			0.00				
Apr-12				0.00			0.00				
May-12				0.00			0.00				
Jun-12				0.00			0.00				
Fiscal Year 12 Total	585.30	833.61	1087.41	1921.02	736.12	680.64	1416.76	0.00	1.93	1.93	

Fiscal Year 12	DISTRICT 6			DISTRICT 7		DISTRICT 8			DISTRICT 9		DAUFUSKIE (9A)
	Convenience Center Recycling Tonnage	Residential Route Recycling Tonnage	Residential Total Tonnage (CC + RR)	Residential Route Recycling Tonnage	Convenience Center Recycling Tonnage	Residential Route Recycling Tonnage	Residential Total Tonnage (CC + RR)	Convenience Center Recycling Tonnage	Residential Route Recycling Tonnage	Residential Total Tonnage (CC + RR)	Residential Route Recycling Tonnage
Recycling											
Jul-11	25.21	0.00	25.21	2.79	47.37	0.00	47.37	32.05	35.18	67.23	0.00
Aug-11	30.82	0.00	30.82	0.00	53.56	0.00	53.56	29.69	66.04	95.73	0.00
Sep-11	25.49	0.00	25.49	0.00	52.16	0.00	52.16	28.98	68.56	97.54	0.00
Oct-11	20.34	0.00	20.34	0.00	46.80	0.00	46.80	31.83	69.85	101.68	0.00
Nov-11	27.78	0.00	27.78	1.78	65.18	0.00	65.18	29.15	70.52	99.67	0.00
Dec-11	38.50	0.00	38.50	0.00	72.26	0.00	72.26	39.74	69.21	108.95	0.00
Jan-12	27.89	0.00	27.89	0.00	62.03	0.00	62.03	34.12	67.58	101.70	0.00
Feb-12	28.05	0.00	28.05	0.00	46.62	0.00	46.62	26.58	70.51	97.09	0.00
Mar-12			0.00				0.00			0.00	
Apr-12			0.00	1			0.00			0.00	
May-12			0.00				0.00			0.00	
Jun-12			0.00	_			0.00			0.00	
Fiscal Year 12 Total	224.08	0.00	224.08	4.57	445.98	0.00	445.98	252.14	517.45	769.59	0.00
	All and the second second	Fiscal Year 12	2 YTD Total fo	or ALL Solid Waste	Districts * Doe	s not include	Newspaper *				5,369.23

In general, there are three classifications for landfills in South Carolina:

- Class 1 landfills accept landclearing debris;
- Class 2 landfills accept construction and demolition debris; and
- Class 3 landfills accept household garbage – or MSW.

Source: South Carolina Solid Waste Management Annual Report FY 2010

# **5.1 Waste Stream Projections**

5.1.1 Class One Waste (Land Clearing Debris and Yard Trash) – Yard trimmings are defined as less than four feet in length and less than six inches in diameter. The county currently sends yard trimmings to a facility where it is ground into mulch and sold as boiler fuel. This practice is classified as recycling according to the state of South Carolina. The County recycled 6,627 tons of Yard Trimmings in this manner in FY2010.

5.1.2 Class Two Waste (Construction, Demolition, and Land Clearing and Industrial) - According to the 2010 South Carolina Solid Waste Annual Report, the amount of Class Two Waste generated within Beaufort County for disposal in Class Two landfills was 20,201 tons.

Beaufort County's average Class Two waste generation rate of 3.21 pounds per person per day (p/p/d) was calculated based upon the five year period between FY06 - FY10. There is a general trend to divert demolition debris from disposal toward production of a recycled product. Beaufort County plans to explore these options.

5.1.3 Class Three Waste (Municipal, Industrial, Sludge, Incinerator Ash) - According to the 2010 South Carolina Solid Waste Management Annual Report, the amount of Class Three waste generated within Beaufort County for disposal at Hickory Hill landfill was 148,470 tons. This total includes both residential and commercial tonnage. Beaufort County's average municipal solid waste generation rate of 5.94 p/p/d was calculated based upon the five year period between FY06 - FY10.

Table 5 illustrates the Class Two and Class Three waste generation projections for the coming years (based on the average generation rate from FY06 - FY10, and the projected population).

Table 1 – Beaufort County Waste Generation Projections (2015-2035)	
(tons per total population per year)	

Year	Population	Waste Generation (tons)	
		Class Three	Class Two
2015	170,640	184,982	99,965
2020	185,220	200,788	108,507
2025	199,780	216,572	117,036
2030	215,270	233,363	126,111
2035	230,240	249,592	134,880

Source: Population Projections - SC Budget & Control Board, Office of Research & Statistics

## 5.2 Collection, Temporary Storage, and Transportation of Solid Waste

All solid waste facilities and equipment in Beaufort County are planned, designed, and operated as an integral function of this Plan. All facilities and equipment must be selected to ensure maximum efficiency for operations, proper locations for use by citizens and transportation cost, safety, and the lowest possible purchase price.

Beaufort County will strive to improve solid waste management and recycling technologies to minimize the amount of waste disposed of in landfills. Beaufort County will continue to utilize its convenience/recycling drop-off centers for the collection of Class Two (as previously described) and Class Three waste and recyclables. The municipalities utilize curbside pick-up. In Beaufort County the garbage trucks transport the waste to Hickory Hill Landfill. Most garbage trucks are designed for operation on paved roads. When full, they must either dump the solid waste at a landfill or a local transfer station. Due to the lack of a transfer station in Beaufort County, they must transit the dirt road at the landfill site to the top of the hill where garbage is dumped and then compacted into the landfill. Transiting the roads to the top is rough on chassis and truck tires. In wet weather the road is often so muddy and slick that each truck must be winched to the top of the landfill to dump. All of these conditions result in increased maintenance costs for hauling companies and also increased hauling time. In comparison, a transfer station has a concrete tipping floor where trucks can drive in and dump in just a few minutes in all weather conditions. Haulers are generally willing to pay a premium of several dollars per ton to tip at a transfer station.

## **5.3 Solid Waste Transfer Stations**

A transfer station, as defined by the S.C. Solid Waste Policy and Management Act of 1991 (Act), is a combination of structures, machinery or devices at a facility where solid waste is taken from collection vehicles and placed in other transportation units, with or without reduction in volume, for movement to another solid waste facility. A transfer station can be designed to transfer or process recyclables as well as collect and properly manage materials that may be better managed outside the solid waste stream such as household hazardous waste, tires, used oil, and electronics. Beaufort County does not have access to a transfer station.

Currently, the County can only access a single landfill in an economically feasible way given

the distance to all other disposal facilities and that landfill, Hickory Hill, has a limited capacity based on both permitted disposal rate (5.3 years) and estimated remaining life of facility (8.3 years) (SCSWM Annual Report FY2010). Without a transfer station to consolidate waste for longer distance transport, the only option for Beaufort County solid waste disposal is the Hickory Hill Landfill. Beaufort County has authorized several investigations into solutions for this issue. In 2005 R. W. Beck evaluated disposal options for the County including a cost analysis for transferring, hauling, and disposing of waste under each option. In 2010, the same firm performed an update of these activities:

## Identify and interview potential facilities

Nine of fourteen landfills contacted expressed an interest in accepting solid waste from Beaufort County. One of the nine is Three Rivers Solid Waste Authority located near Aiken, SC. The Three Rivers Solid Waste Authority currently provides solid waste management services to local governments in Aiken, Allendale, Bamberg, Barnwell, Calhoun, Edgefield, Orangeburg, and Saluda counties (SCSWM Annual Report FY2010).

**Estimate range of capital costs associated with a 500 ton per day transfer station (182,500 T/yr)** *Estimated total capital cost: High \$6,025,000; Low \$4,896,700 If financed over 20 years at 4 % interest, the annual cost of debt retirement at the high capital cost estimate would be \$443,330, or \$2.84/ton. The annual cost of debt retirement at the low capital cost estimate of \$4,896,700 at the same terms would be \$360,308 or \$2.31/ton.* 

# Estimate range of cost per ton for a transfer, haul, and disposal scenario, including financing costs of capital.

Projected costs associated with development and operation of a single 500 ton/day facility, including transportation to and disposal at the Three Rivers Solid Waste Authority landfill and payback on the loan for capital costs. High estimate is \$53.09/ton and the low estimate results in a cost of \$46.24/ton.

Full-cost disclosure is defined as the local government's total cost for operating a solid waste program. Costs reported include expenditures for all activities related to collecting, disposing of and recycling solid waste. Utilization of Beck's transfer station cost estimates and Beaufort County's FY10 Full Cost Disclosure shows that the addition of a transfer station would increase the total cost per capita by approximately \$3.76. Total cost per capita was \$28.59 in FY10.

The addition of a transfer station would give Beaufort County flexibility regarding disposal of solid waste and offer haulers a more efficient way to dump their loads in inclement weather.

This would result in a 13% increase in cost per capita for solid waste disposal, but solve some serious environmental problems that will be coming within a twenty year time frame. Beaufort County's only option for disposal without the addition of a transfer station is Hickory Hill Landfill, which has a limited capacity based on both permitted disposal rate (5.3 years) and estimated remaining life of facility (8.3 years) (SCSWM Annual Report FY2010). Beaufort County plans to site, permit and construct a transfer station of suitable capacity to handle waste streams for the next 20 years.

## **5.4 Solid Waste Processing Facilities**

According to SCDHEC, a "solid waste processing facility", means a combination of structures, machinery, or devices utilized to reduce or alter the volume, chemical, or physical characteristics of solid waste through processes, such as baling or shredding, prior to delivery of such waste to a recycling or resource recovery facility or to a solid waste treatment, storage, or disposal facility and excludes collection vehicles. Beaufort County does not have any existing facilities or plans to install one within the next 20 years.

## 5.5 Class One Landfills (Land-Clearing Debris and Yard Trash)

As described in Section 4.6, there are no Class One Landfills (Land-Clearing Debris and Yard Waste) operating in Beaufort County. Land-clearing debris and yard waste generated within the County either goes to existing Class Two landfills or is ground and sold as boiler fuel or mulch. Beaufort County's preference is to recycle these materials and will continue to explore opportunities to do so. Beaufort County does not foresee the need or plan to construct a class one landfill within the next 20 years.

# 5.6 Class Two Landfills (Construction, Demolition, and Land-Clearing Debris and Industrial Waste)

As described in section 4.7, Beaufort County hosts one privately owned Class Two Landfill. That landfill, Barnwell Resources, has an estimated 50 years of additional operational life. The County also disposes of Class 2 waste at the Oakwood Landfill located in Jasper County. There is a general trend to divert Class Two waste containing construction/demolition debris (C & D) from disposal toward production of a recycled product. Beaufort County plans to explore opportunities and the facilities needed to recycle C & D for this 20 year master plan.

## 5.7 Class Three Landfills (Municipal, Industrial, Sludge, Incinerator Ash)

Currently Beaufort County's Class 3 waste is disposed of at the Hickory Hill Landfill located in Jasper County. According to the 2010 SCDHEC Solid Waste Management Annual Report, the estimated remaining life of the Hickory Hill Landfill based on permitted and current disposal rate is 5.3 to 8.3 years. Because of this, Beaufort County needs to secure another outlet for waste disposal within a short timeframe (2 to 3 years).

As mentioned previously in Section 5.3, Solid Waste Transfer Station, Beaufort County can only access a single landfill in an economically feasible way given the distance to all other disposal facilities. Without a transfer station to consolidate waste for longer distance transport, the only option for Beaufort County solid waste disposal is the Hickory Hill Landfill. The Act states that a county has "the responsibility and authority to provide for the operation of solid waste management facilities to meet the needs of all incorporated or unincorporated areas of the county." The stated purpose of the Act is to provide for solid waste management in the "most environmentally safe, economically feasible and cost-effective manner." To this end the County has concluded that the most prudent long range plan is to site a transfer station either in Beaufort County, if possible, or a neighboring county. A transfer station is safe environmentally, because garbage trucks will be able to dump their loads in all types of weather, allow for year round collection of household hazardous wastes, and add flexibility to utilize more than one landfill that has a limited remaining life. The cost analysis will require a cost increase of approximately 10-15% per capita which is reasonable when the alternative is no disposal options. In order to address the potential lack of Class Three Landfill space, Beaufort County's best option is to create access to a transfer station. Once the transfer station is operable, Beaufort County plans to pursue Class 3 waste disposal at landfills providing the lowest cost alternatives over the 20 year planning period.

## **5.8 Solid Waste Incinerators**

Beaufort County currently has no operating solid waste incinerators. There are two air curtain incinerators operating to incinerate land clearing debris. They are privately owned facilities one located on Daufuskie Island and one in Bluffton currently not under permit. Because of both environmental and cost concerns relating to solid waste incinerators, the County has concluded that a better solution to our limited disposal capacity at the Hickory Hill Landfill, is to create access to a transfer station. Therefore, no new solid waste incinerators will be

necessary to fulfill the capacity requirements of the County.

## 5.9 Composting and Wood Chipping/Shredding Facilities

Four (4) permitted and privately owned wood grinding facilities are located in Beaufort County. In FY10 the facilities accepted approximately 78,490 tons. These facilities provide sufficient capacity to the County for the planning period and beyond. Therefore, current wood chipping and composting facilities are sufficient to fulfill the capacity requirements of the County. New composting and chipping facilities will be considered that increase current recycling options for this waste stream on a case by case basis.

## 5.10 Used Oil Collection and Processing Facilities

Used oil, oil filters, and oil bottles generated by residents of Beaufort County are collected at each of the County's convenience/recycling drop-off centers. The used oil collected at these sites is collected in tanks for Santee Cooper's Give Oil for Energy Recovery (GOFER) program. Santee Cooper collects the used oil when the tanks reach capacity and transports it to Santee Cooper's Jefferies Generating Station where the recycled oil is used for fuel to generate electricity. A private contractor collects the used oil filters from the collection facilities. The County intends to manage this waste in the same or a similar manner in the future. No new permitted Used Oil Collection and Processing Facilities will be necessary to fulfill the capacity requirements of the County.

## 5.11 Waste Tire Haulers, Collectors, Processing Facilities, and Disposal Facilities

Waste tires generated in Beaufort County are accepted at County Convenience Centers. The waste tires are collected at the centers and transported to a permitted central collection site, the Beaufort County Tire/Baler Building. The waste tires are then transported for recycling by SCDHEC registered haulers. The county intends to continue to manage waste tires in this manner. Waste tires from commercial retailers are currently not received at the site. No permitted waste tire processing facilities or disposal facilities are currently located in Beaufort County. With sufficient management capacity, no new Waste Tire Collectors, Waste Tire Processing Facilities, or Waste Tire Disposal Facilities will be necessary to fulfill the capacity requirements of the County for the planning period.

## 5.12 Research, Development, and Demonstration (RD&D) Permits

RD&D projects will be unnecessary to meet the county's solid waste management requirements during the planning period.

## 5.13 Land Application of Solid Waste Permits

Beaufort County currently has no operating Land Application from Solid Waste Facilities. None will be needed to fulfill the solid waste management requirements of the County during the planning period.

## 5.14 Recycling Programs

Beaufort County plans to continue its recycling programs through the use of its convenience/recycling drop-off centers. A curbside recycling program exists in the City of Beaufort, Town of Port Royal, Town of Bluffton, and The Town of Hilton Head offers a franchised hauler as a curbside recycling option. Because curbside pick-up is the most convenient method of recycling, and the public is more likely to recycle based on convenience, in areas where the population density is high enough, the County will pursue initiation of mandatory curbside recycling. Beaufort County will continue to educate its residents on the importance of recycling.

For FY10, citizens of the County disposed of 4.1 p/p/d of defined MSW compared to the statewide average of 3.7p/p/d. Additional recycling would be desirable since the current disposal rate must be decreased by 0.6 p/p/d in order to meet the state goal of 3.5 p/p/d.

The County has recently implemented an in-house recycling program that includes 38 stops and yielded 4 tons of material in November of 2011. Beaufort County will seek to expand its public education programs to make citizens, commercial businesses, retailers, etc. more aware of the need to reduce waste and about the opportunities that exist for recycling. Access to a transfer station will not only allow for more flexibility in waste handling and disposal options, but will also enable workers to screen incoming wastes to separate out readily recyclable materials. The option of including a Materials Recycling Facility or a recyclable processing area will be considered for inclusion with the construction of a transfer station. This would enable the County to market it's recyclables according to the most economical practices available.

## **5.15 Special Wastes**

As mentioned in Chapter 4, Special Waste is defined as commercial or nonresidential solid waste, other than regulated hazardous wastes, that are either difficult or dangerous to handle and require unusual management at MSW landfills. Special Waste includes but is not limited to pesticide wastes, liquid wastes, sludge, industrial process wastes, wastes from pollution control processes, residue or debris from chemical cleanups, contaminated soil from a chemical cleanup, containers and drums, and animal carcasses. Beaufort County does not accept special waste. Special waste is not currently accepted at the County's convenience/recycling drop-off centers.

## 5.16 Household Hazardous Materials (HHM)

Beaufort County's Public Works department currently works with local citizens' groups to hold one-day events each year to collect HHM from residents. In addition to the yearly one-day events, approximately 800 gallons of paint/week are collected at the convenience centers. The option of including HHM collection facilities will be considered for inclusion with the construction of a transfer station, allowing for year round collection of materials such as paint, pesticides, cleaning supplies, and batteries.

## **5.17 Import and Export of Waste**

Per the Beaufort County Code (ARTICLE III, Section 62-28), the County does not accept waste generated outside of Beaufort County at County operated facilities.

## 5.18 Storm Debris Management

Beaufort County has a Debris Management Plan to guide the County during major storm events. Due to the size of the document it is not included in this Plan.

## 6.1 Reduction

In June 2000, the solid waste management goals outlined in the Solid Waste Policy and Management Act of 1991 were revised as follows:

"It is the goal of this State to reduce, on a statewide per capita basis, the amount of MSW being received at municipal solid waste landfills to 3.5 pounds per day not later than June 30, 2005."

In addition, the following definition was amended stating:

"MSW includes, but is not limited to, wastes that are durable goods, nondurable goods, containers and packaging, food scraps, yard trimmings, and miscellaneous inorganic wastes from residential, commercial, institutional, and industrial sources including, but not limited to, appliances, automobile tires, old newspapers, clothing, disposable tableware, office and classroom paper, wood pallets, and cafeteria wastes. MSW does not include solid wastes from other sources including, but not limited to, construction and demolition debris, auto bodies, municipal sludges, combustion ash, and industrial process wastes that also might be disposed of in municipal waste landfills or incinerators."

For FY10, citizens of the County disposed of 4.1 p/p/d of defined MSW compared to the statewide average of 3.7 pounds per day. In order for Beaufort County to meet the 3.5 p/p/d reduction goal, County residents in conjunction with businesses and organizations must reduce the amount of defined MSW generated within the County for disposal. Methods that will be used to promote source reduction include speaking engagements, tours of solid waste and recycling facilities, newspaper articles, radio and TV commercials, and displays. A continued educational effort in source reduction is anticipated to decrease the amount of waste transported for disposal in landfills. The public must become better informed of the benefits of recycling and the various ways in which residents can help in this endeavor. By separating out a greater percentage of recyclable aluminum, paper, cardboard, plastic, and E-Waste, Beaufort County's waste stream can be greatly reduced.

## 6.2 Recycling

The South Carolina Solid Waste Policy and Management Act of 1991 mandated a 25% recycling goal, calculated by weight, based on a per capita waste generation rate. In June 2000, the solid waste management goals were revised as follows:

"It is the goal of this State to recycle, on a statewide basis, at least thirty-five percent (35%), calculated by weight, of the MSW stream generated in this State no later than June 30, 2005."

For Fiscal Year 2010 the County recycled 20.8% of the defined Class Three waste generated in the County compared to the statewide average of 25.5%. Markets drive recycling efforts and too often adversely impact those efforts. To meet the 35% goal, public education will be utilized to inform residents of recycling programs being implemented within Beaufort County and the best way for each resident to participate. An informed public is more likely to recycle than an uneducated public. Beaufort County will place a larger emphasis on recycling with commercial businesses, retailers, etc. in an effort to increase the County's overall recycling rate. Beaufort County will continue to develop and distribute literature that focuses on recycling and its importance to the environment.

## **6.3 Educational Programs**

A public education program is to inform the public, students, key decision makers and community representatives about current solid waste management practices, the need for waste reduction and recycling activities and future solid waste management plans in order to institute positive changes as needed. The program should modify and change habits regarding solid waste with a continuous ongoing campaign.

All educational efforts will target the residents of Beaufort County with an emphasis on the collection service area residents and drop-off/recycling center customers. The method of educational delivery will be through local media, radio and newspaper, small group presentations, exhibits, displays, and demonstrations. Educational leaflets will be distributed where applicable (such as convenience stations, public buildings, and through curbside collection companies). In addition, information regarding Beaufort County's solid waste recycling program can be obtained from the County's website:

# http://www.bcgov.net/about-beaufort-county/public-service/solid-waste-andrecycle/index.php

All educational programs will be evaluated and revised according to the change in residents' behavior as indicated by the Class Three waste stream reduction and increase in the collection of recyclable material. Recycling and source reduction for businesses and industries will be conducted and promoted through the overall education program.

The South Carolina Office of Solid Waste Reduction and Recycling was created by the Solid Waste Policy and Management Act of 1991 and is part of the Division of Mining and Solid Waste Management. The Office of Solid Waste Reduction and Recycling, in accordance with the Act, provides educational, technical, and grant assistance to local governments, schools, colleges, and universities and the public regarding solid waste management issues. Beaufort County has and will continue to work with the Office of Solid Waste Reduction and Recycling to obtain assistance with their public education campaign and grant program.

# 6.4 Technical Assistance

Contacts for information concerning solid waste management, recycling, and source reduction in Beaufort County are as follows:

## Mr. Jim Minor, Solid Waste Manager Beaufort County Public Works North 140 Shanklin Rd.

Beaufort, SC Phone: (843) 255-2735 E-mail: jminor@bcgov.net

# Ms. Carol Murphy, Recycling Coordinator

Beaufort County Public Works North 140 Shanklin Rd. Beaufort, SC Telephone: (843) 255-2734 E-mail: cmurphy@bcgov.net