

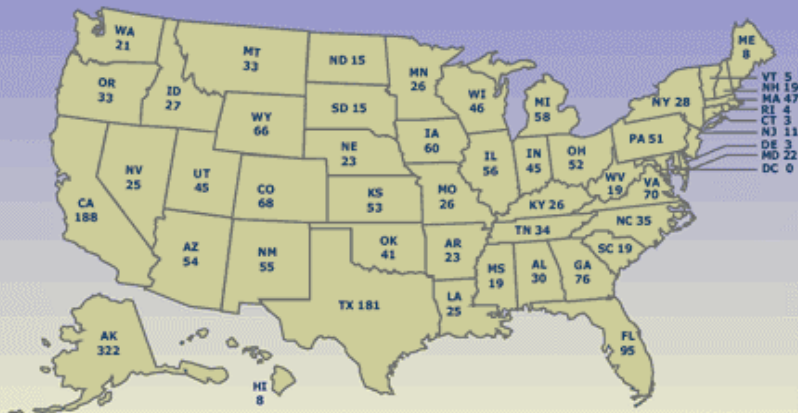
# NCDOT Zero Waste in the New Millennium

John Sharp NCDOT  
Waste Management Analyst

8/18/2005

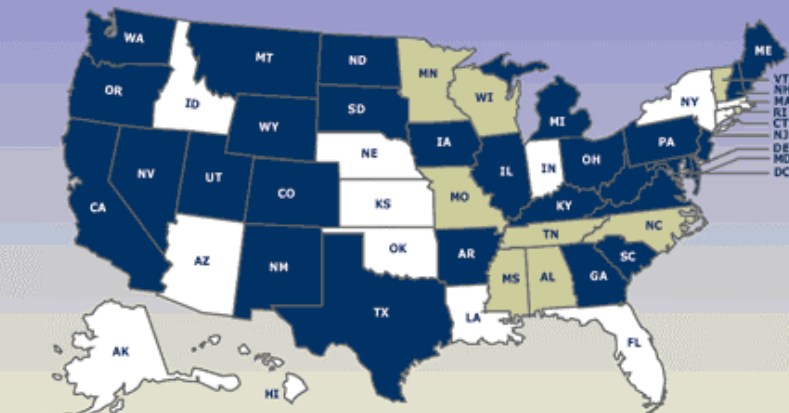
# Landfills

## Number of Landfills



Source: BioCycle Magazine, April 1999







## Years of Remaining Landfill Capacity



less than 5 years  
5 - 10 years  
more than 10 years  
unavailable

Source: BioCycle Magazine, April 1999

# What Supports NCDOT Waste Goals?

- ◆  N.C. Legislative G.S. 130A-309...
- ◆  N.C. Governor Executive Order #156
- ◆  NCDOT Strategic Plan
- ◆  NCDOT Environmental Stewardship Policy
- ◆  N.C. EPA Waste Wise Program
- ◆  NCDOT 3R Education Program (Reduce/ Reuse/ Recycle)

# NCDOT 3R Tree



# NCDOT Recycle

**NCDOT Department has embraced Recycling through out all 100 counties North Carolina.**

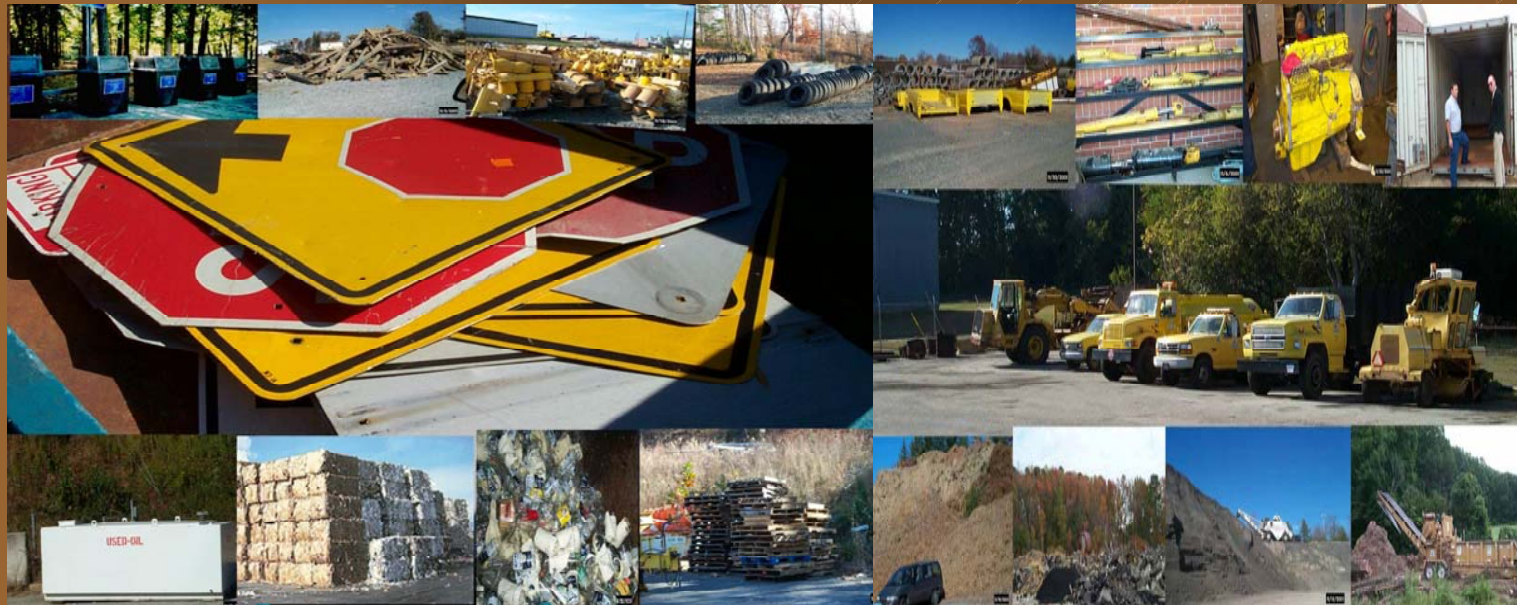
**The growth in Recycling Programs within the Department reflects the employees' commitment to conserve resources and save on operating cost. Recycling provides NCDOT and North Carolina with several major benefits:**

- **Recycling conserves Natural Resources and Landfill Space.**
- **Recycling conserves Energy and Water.**
- **Recycling reduces Pollution.**
- **Recycling creates jobs and reduces costs in manufacturing sectors that are an important part of our economy. (Approximately 14,000 jobs in N.C.)**

# Results



## NCDOT Recycles



	1 <sup>st</sup> Quarter Pounds	2 <sup>nd</sup> Quarter Pounds	3 <sup>rd</sup> Quarter Pounds	4 <sup>th</sup> Quarter Pounds	Pounds
<b>PAPER:</b>			<b>TOTAL FOR CATEGORY --&gt;</b>		<b>1,444,919</b>
Newsprint	6,097	6,168	5,802	6,327	24,394
Corrugated Cardboard	47,850	47,214	47,111	40,229	182,404
Magazines	5,920	5,942	5,965	6,060	23,887
Mix Office paper	280,116	284,116	278,129	279,041	1,121,402
Telephone books	2,420	977	974	81,402	85,773
Books	1,746	1,766	1,781	1,766	7,059
Other paper _____	-				-

- **Paper-** 40% of all U.S. municipal solid waste consists of paper and paperboard product paper.

<b>Table 1. Recycling 1 ton of paper Saves</b>	<b>NCDOT Annually Saves</b>
17 Trees	11,050 Trees
6953 Gallons of water	4,519,450 Gallons of Water
463 Gallons of oil	300,950 Gallons of Oil
587 Pounds of air pollution	381,550 Pounds of Air Pollution
3.06 Cubic yards of landfill space	1,989 Cubic Yards of Landfill Space
4077 Kilowatt hours of Energy	2,650,050 Kilowatt Hours of Energy
74% Less air pollution is generated	
35% Less water pollution is generated	
58% Less water is required	
64% Less Energy is required	

<b>Organic</b>					
Wooden pallets	4,970	4,370	7,190	18,875	35,405
Other wood (not yard waste)	200,330	50,245	425,410	250,400	926,385
Yard waste	1,910	18,715	18,550	56,650	95,825
Other organics _____	-	-	-	-	-
<b>OTHER MATERIALS:</b>			<b>TOTAL FOR CATEGORY --&gt;</b>		<b>16,891,178</b>
Commingled materials	-				-
Lead-acid batteries	18,047	14,597	14,688	23,002	70,334
Used motor oil	83,165	112,114	36,770	103,762	335,811
Tires	136,808	107,687	127,538	116,976	489,009
Asphalt	3,471,545	3,470,245	3,469,045	3,470,545	13,881,380
Other _____	-	118,800	598,752	1,397,092	2,114,644
<b>GRAND TOTALS</b>	<b>4,534,772</b>	<b>4,482,407</b>	<b>5,325,047</b>	<b>6,363,994</b>	<b>20,706,220</b>

<b>METAL:</b>			<b>TOTAL FOR CATEGORY --&gt;</b>		<b>1,273,649</b>
Aluminum cans	6,999	6,745	6,595	6,774	27,113
Steel cans	345	377	251	453	1,426
Scrap metal/White goods	238,840	205,138	264,488	488,416	1,196,882
Other metal _____	17,932	17,932	6,182	6,182	48,228
<b>GLASS:</b>			<b>TOTAL FOR CATEGORY --&gt;</b>		<b>25,693</b>
Mixed glass	6,301	6,304	6,773	6,315	25,693
<b>PLASTIC:</b>			<b>TOTAL FOR CATEGORY --&gt;</b>		<b>13,166</b>
PETE #1	2,477	2,386	2,477	2,383	9,723
HDPE #2	354	98	110	601	1,163
Other plastic _____	600	471	466	743	2,280

# Conclusion

NCDOT IS ON THE RIGHT ROAD  
TO ZERO WASTE  
IN THE NEW Millennium