



SCRAP TIRE MANAGEMENT REPORT

FY 1997 - 98

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES

DIVISION OF SOLID WASTE MANAGEMENT

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1) EXECUTIVE SUMMARY AND RECOMMENDATIONS

Executive Summary

This reports on the management of scrap tires during FY 1997-98 in North Carolina, based on information provided in waste management annual reports from counties and permitted tire processing facilities.

- The state's 100 counties reported managing approximately 96,000 tons of scrap tires. Counties estimated that 81 percent of the tonnage was passenger tires and the remainder were much larger truck and off-road tires. This means that the estimated number of tires received was about 8 million. (7.9 million car tires, 277,000 truck tires, and 14,000 off-road tires).
- Using the EPA standard of one scrap tire generated per person per year, the citizens of North Carolina produced an estimated 7.4 million scrap tires in FY 1997-98, equal to the state population.
- Most of the additional 600,000 tires are assumed to have originated out-of-state. Counties incurred an estimated \$670,000 in expenses for out-of-state tires inappropriately disposed of as North Carolina tires.
- An environmental specialist was hired in February 1998 to provide technical assistance to counties to develop and implement programs and practices designed to eliminate free disposal of out-of-state tires, and to coordinate the cleanup of nuisance tire sites. This position is supported wholly with funds from the Scrap Tire Disposal Account and has no impact on the general fund. The position is authorized only through June 30, 1999.
- To date, 28 counties have received technical assistance, with half already experiencing a decrease in the number of scrap tires disposed. It is anticipated that recently implemented changes to tire program procedures in several counties will result in a reduction of program costs and number of tires disposed.
- About 47 percent of the scrap tires disposed in North Carolina were diverted from landfills for various uses in FY 1997-98, which was about the same recycling rate as in FY 1996-97. Tires were primarily recycled as used tires or in civil engineering applications.

- The recycling rate did not increase substantially the past two years. One factor was that US Tire, which recycles about 2.2 million tires per year, preferentially recycled tires from Virginia because of incentives funded by the state of Virginia.
- North Carolina has surplus quantities of recycled tire material due to weak market demand. A state grant program initiated in 1998 is expected to encourage market demand for processed tire material.
- The average cost for scrap tire management reported by the counties was \$77 per ton, which is about 77 cents per passenger car tire and about \$3.85 per truck tire.
- The counties received \$6,433,923 in direct distribution of the tire advance disposal fee proceeds. This covered about 87 percent of the reported total expenses of \$7,397,962 for tires being generated in the normal course of business.
- Approximately \$1.2 million was paid from the Scrap Tire Disposal Account to county governments that incurred deficits in their tire programs.
- All high priority nuisance tire sites have been cleared. During the last five years, about 6 million tires have been removed from nuisance tire sites. The remaining sites are under investigation or clean up.
- Illegal dumping of tires has been drastically reduced by the availability of free disposal in all counties. There have been only a few reports of scrap tire dumping since free disposal was required by statute in 1994.
- Nuisance tire sites that were established prior to 1994 continue to be discovered at a rate of 10 - 15 sites per year with totals of 100,000 - 150,000 tires. In order to clean sites as they are discovered, the Scrap Tire Disposal Account will provide continued funding for cleanups for the next several years.

Recommendations

- **Efforts to encourage tire recycling should be continued by targeting specific markets for development.**

- **The time-limited position that provides technical assistance to counties on scrap tire management should be funded as long as free disposal is offered.**
- **Efforts should be increased at county tire collection sites to identify out-of-state tires by requiring scrap tire generators to document the origin of their tires.**
- **The state should continue efforts to find and clean up nuisance tire sites.**

2) INTRODUCTION

Scrap tires present unique disposal and environmental problems. Landfill disposal of whole scrap tires was banned in 1989 as part of the Scrap Tire Management Act. Whole tires cannot be landfilled satisfactorily because they use large amounts of space, cannot be compacted, and tend to "float" to the surface due to vibration and the presence of trapped gas.

Improper tire management poses serious threats to public health and the environment. A number of illegal dump sites were created due to the lack of readily available regulated disposal sites in some parts of the state and due to efforts to avoid the cost of appropriate disposal. The Scrap Tire Disposal Act requires all counties to provide at least one scrap tire collection site. This ensures that all tire disposers have a readily available site to properly dispose of scrap tires.

Illegal dumping of tires increased significantly in North Carolina after whole tires were banned from landfill disposal. This ban caused an increase in tire disposal costs due to the costs of tire shredding. Counties passed the increased costs on to tire haulers and disposers as higher disposal fees, creating an economic incentive for illegal dumping of tires.

By 1992, it was apparent that there had been a large increase in illegal tire dumping. Data provided by the counties documented that there was a strong correlation between tire disposal fees and tire stockpiling and illegal dumping, since counties with higher fees reported fewer tires disposed.

To address these problems associated with variable tipping fees and illegal dumping, major legislative changes were made in the scrap tire program in 1993. The scrap tire advance disposal fee on passenger tires was increased to

percent in October 1993, and landfill disposal fees were prohibited effective January 1, 1994. Also, the Scrap Tire Disposal Account was created, which receives 27 percent of the advance disposal fee proceeds. This account has been used to fund cleanup of illegal scrap tire sites and to reimburse counties that incur deficits when providing tire disposal services at no cost to disposers.

The higher disposal fee, prohibition on county tire disposal fees, and Scrap Tire Disposal Account had been scheduled to expire in June 1997. However, legislation in 1997 extended these parts of the program until June 30, 2002. Since most of the nuisance tire sites have been cleaned up, more funds will be available to reimburse counties that incur deficits. Additionally, the Scrap Tire Disposal Account was amended to provide for grants to encourage tire recycling.

The 1997 legislation created a time-limited position to assist counties in their efforts to avoid providing free disposal for out-of-state tires. This position was not filled until late February 1998. Visits to counties began in March, and to date, technical assistance has been provided to 28 counties. Half of these counties have already shown a decrease in the number of scrap tires disposed. These technical assistance county visits have resulted in the implementation of new procedures designed to eliminate free disposal of out-of-state tires and increase cost efficiency in county tire programs.

The position is scheduled to end in June 1999. Extending the position will provide counties a resource to help identify and correct problems with their scrap tire programs, develop and implement new procedures for accepting tires from disposers, and coordinate cleanup of nuisance tire sites. This assistance is particularly helpful after a change in county personnel responsible for scrap tire management.

Public Health Hazards Associated With Tire Dumps The Asian Tiger Mosquito was introduced to North Carolina in illegal tire dumps. The rapid proliferation of illegal tire dumps is believed to have played a major role in the spread of the mosquito across North Carolina. The Asian Tiger Mosquito (*Aedes albopictus*) is an aggressive exotic species that competes with native North Carolina species. It is a container-breeder and thrives in tire dumps across the state.

A study of mosquito species at illegal tire sites was conducted by N.C. State University in 1993.¹ The mosquito was identified in 29 of 38 nuisance tire sites

¹ 1994. Survey of Mosquitoes and Mosquito-Transmitted Viruses Associated with Tire Disposal Sites in North Carolina. NC State University, Department of Entomology.

sampled. In some areas of North Carolina, the mosquito is not just limited to tire sites, but is now permanently established and breeds in yards and woodlands.

Its potential range includes even the cooler mountainous regions of North Carolina, which have traditionally escaped nuisance problems with aggressive mosquito species.

Not only is the Asian Tiger Mosquito a nuisance for outdoor activity, it is capable of carrying the eastern equine encephalitis (EEE) virus.² This deadly disease is currently present in bird populations in eastern North Carolina and is transmitted among birds by mosquitoes. It is not known if the Asian Tiger Mosquito can transmit infectious doses of the EEE virus to humans.

One death occurred due to mosquito-transmitted eastern equine encephalitis in October 1996 in Harnett County. It is not known in this case if the mosquitoes were Asian Tiger Mosquitoes or if these mosquitoes were breeding at a tire site. Public health officials advised the public against camping trips to the coastal areas until cold weather reduced mosquito populations that year.

This introduction and establishment of an exotic pest into North Carolina at nuisance tire sites was an unexpected result of the ban on landfill disposal of whole tires. The ban resulted in much higher disposal costs and proliferation of tire dumping until 1994 when free disposal began. This experience shows that regulatory changes in tire management can have an unexpected adverse effect on the environment.

Fire Hazards Nuisance tire sites pose special fire risks because of the difficulty in cutting off the oxygen supply and extinguishing such fires. There is a substantial threat of tire fires at many sites, especially large sites. Tire fires produce hazardous air emissions and toxic liquid run-off. Recent Environmental Protection Agency (EPA) research on uncontrolled tire fires has identified cancer-causing agents in the smoke.

An EPA report³ states that large amounts of harmful organic compounds may be released at tire fires:

²1992. Isolation of eastern equine encephalitis virus from Aedes albopictus in Florida. Science 257:526.

³Mutagenicity of Emissions from the Simulated Open Burning of Scrap Rubber Tires. July 1992. EPA Air and Energy Research Laboratory and Health Effects Research Laboratory, RTP, NC.

"Considering (a) the relatively high mutagenic potency of the particulate organics, (b) the high mutagenic emission factors, and (c) the presence of many mutagens/carcinogens, especially PAHs, in the effluent from the open burning of tires, such burns pose **a genuine environmental and health hazard**. Because of the frequent occurrence of unwanted combustion at tire piles, and the potential environmental and health risks posed by such combustion, prudence would suggest that such piles be reduced or eliminated in size and number."

3) SCRAP TIRE GENERATION IN NORTH CAROLINA

The standard used by the EPA for estimating generation of scrap tires is one tire per person per year.⁴ Since the 1998 population of North Carolina was about 7.4 million, it is estimated that an equal number of tires were generated during FY 1997-98. This standard is representative of tire generation in North Carolina, based on comparisons with tire sales and advance disposal fee collections in the state.

Nearly all counties report tonnage of tires received but cannot provide precise counts of tires received. There are two ways to convert tonnage to estimates of tire numbers. Tonnage can be converted to passenger tire equivalents, which assumes that there are 100 tires per ton, since tires weigh an average of 20 pounds. This is not a precise count since only about 80 percent of the tires received by counties are passenger tires and the remainder are much larger truck and off-road tires.

Tire numbers can also be estimated by knowing the relative volume of each tire type. Each county reported an estimate of how their tonnage breaks down to each tire type. A more accurate estimate of numbers of tires can be calculated assuming that each passenger tire weighs 20 pounds, truck tires weigh 100 pounds each, and off-road tires weigh an average of 500 pounds each. This estimate is more precise assuming the estimates given by the county on tire type are accurate.

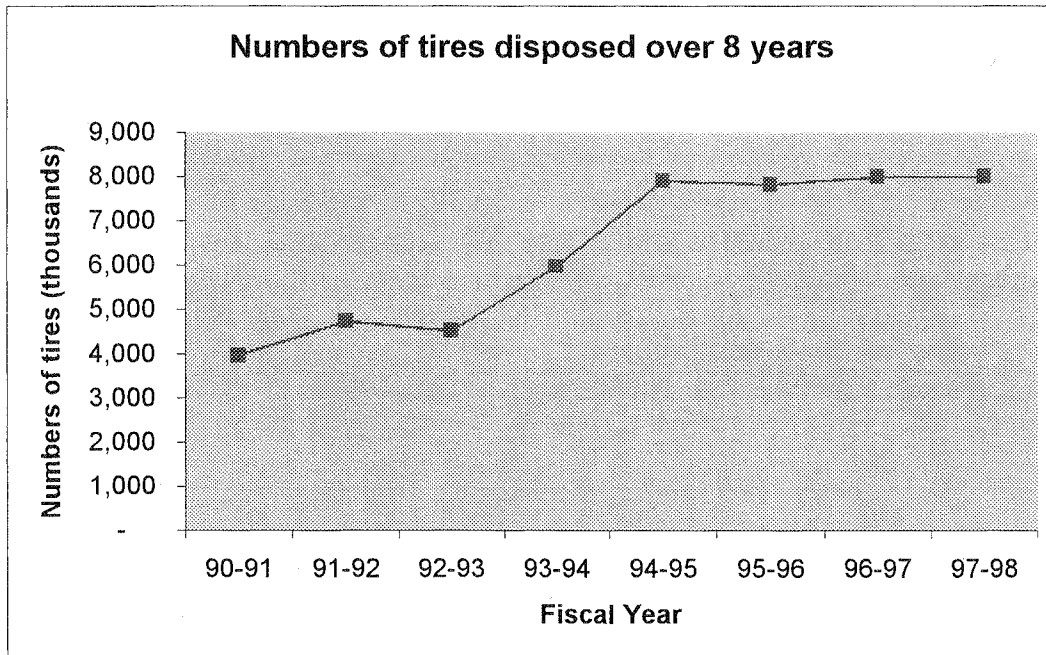
⁴Markets for Scrap Tires. 1991. US EPA, Office of Solid Waste. EPA/530-SW-90-074A. Washington, DC.

4) VOLUME OF TIRES DISPOSED IN NORTH CAROLINA

All counties are required to provide facilities for disposal of scrap tires and to report on scrap tire management programs. A summary of this data is presented in the Appendix, Table 1.

Approximately 113,000 tons of tires were presented for disposal and claimed to have been generated in the normal course of business in North Carolina in FY 1997-98. These tires were managed by county disposal facilities and private recycling facilities. This does not include tires removed from nuisance sites.

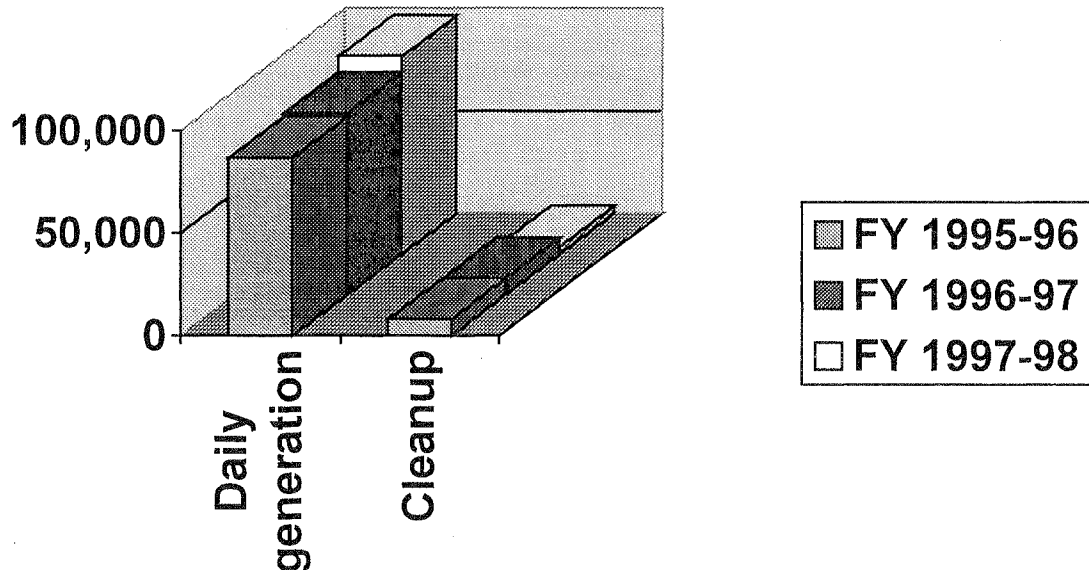
In comparison, approximately 95,000 tons of tires were disposed in FY 1996-97; 92,000 tons in FY 1995-96; 93,000 tons in FY 1994-95; and 76,000 tons in FY 1993-94.



The counties reported that they managed approximately 96,000 tons of which about 93,000 tons were shipped to six private recycling facilities, and about 3,000 tons were disposed in local landfills or shipped to out-of-state recyclers. The six private recycling facilities reported that in addition to receiving 93,000 tons from county tire programs, they received about 17,000 tons directly from disposers who chose not to participate in the county tire programs. These may be individuals involved in privately funded cleanups not on state records, tire dealers who choose not to participate in a county program, or those who are not aware of the tire program.

Other tires In addition to the above 113,000 tons, about 3,000 tons were disposed after they were removed from nuisance tire sites. Also, North Carolina recycling firms reported receiving about 40,000 tons from out-of-state disposers.

Tonnage of Tires Disposed



The total numbers of tires managed by North Carolina counties and recycling firms can be summarized as follows:

- 93,000 tons - Managed by counties and shipped to six recycling firms
- 3,000 tons - Managed by counties and landfilled locally or shipped out-of-state
- 17,000 tons - Tires taken directly to recycling firms (not managed by counties)
- 3,000 tons - Cleaned up from nuisance tire sites
- 40,000 tons - Tires shipped to NC recycling firms from out-of-state disposers
- 156,000 tons - Total tons managed

The increased number of disposed tires during the past eight years reflects the success of the tire program. Nearly all disposed tires are being handled at regulated disposal facilities. The program has been more firmly implemented as awareness of the regulations and cooperation of affected parties has increased.

However, the sudden increase in numbers of disposed tires after 1994 highlights

a problem with illegal disposal of out-of-state tires at county collection sites. The Solid Waste Section estimates that counties spend about \$600,000 per year to manage out-of-state tires that are inappropriately disposed as North Carolina tires.

This estimate is based on the cost of disposal in counties that receive volumes of tires greater than 120 percent of county population. It is assumed that some counties are regional retail centers or have other factors that would cause them to receive a volume of tires up to 120 percent of county population. However, volumes of tires in excess of 120 percent of expected volume are assumed to be out-of-state tires.

Counties that have reported receiving tires exceeding 120 percent of the population are:

Forsyth	197%	Burke	137%
Yancey	190%	Tyrell	137%
Mitchell	173%	Surry	136%
Catawba	172%	Scotland	135%
Wilson	158%	Jones	126%
New Hanover	154%	Macon	125%
Randolph	151%	Franklin	124%
Rutherford	149%	Iredell	123%
Mecklenburg	149%	Wilkes	123%
Pitt	147%		
Guilford	146%		
Washington	145%		

Haulers in Virginia have complained about competing with North Carolina haulers who transport tires from Virginia tire dealers to North Carolina county collection sites. Since the haulers fraudulently obtain free disposal, they can underbid Virginia tire haulers who must pay disposal costs at Virginia facilities.

Counties can avoid abuse by implementing policies such as:

- Improving screening of tire loads by requiring complete scrap tire certifications. These forms provide details on the origin of each load;
- Working with local tire dealers;
- Requiring proof of origin of scrap tires to document information claimed on the scrap tire certifications;
- Developing an inventory of all scrap tire disposers using county services;
- Visiting generators to discuss tire program requirements;

- Making spot checks of loads by calling to verify the origin and size of loads brought by haulers;
- Holding meetings with scrap tire disposers to discuss regulations and county requirements; and
- Providing details on county requirements through handouts.

The Solid Waste Section provides assistance to help counties avoid fraudulent disposal of out-of-state tires. **Efforts being made to avoid abuse is a factor in eligibility for grants** from the Scrap Tire Disposal Account to cover cost over-runs.

Scrap tire management legislation passed in 1997 provides a temporary time-limited position to assist counties in their effort to avoid providing free disposal for out-of-state tires.

This position provides detailed assistance to counties, including training county personnel involved with scrap tire management, helping to inform scrap tire generators and haulers about program requirements, and making and helping to implement recommendations to each county about changes in their scrap tire management program to detect and deter out-of-state and other ineligible tires being presented for free disposal. ***It is recommended that the position be funded as long as free tire disposal is offered by counties.***

5) TECHNICAL ASSISTANCE TO COUNTY SCRAP TIRE PROGRAMS

Legislation in 1997 created a time-limited technical assistance position in the Solid Waste Section. The primary purpose of this position is to help local governments develop programs to prevent scrap tires outside the state from being presented for free disposal in North Carolina and to complete the cleanup of nuisance tire collection sites. Funding for this position is wholly from the Scrap Tire Disposal Account and has no impact on the general fund. The more than 600,000 excess tires disposed of in FY 1997-98 cost the counties over \$670,000. Through the technical assistance offered by this position counties can better identify and eliminate the source, and thus the management and disposal costs, of these excess tires. Since the funding from the Scrap Tire Disposal Account for the position is far less than the management and disposal costs of over \$670,000 for the excess tires, continuation of this position is economically beneficial.

The position began on February 23, 1998, followed by three months of training. To date, 41 visits to 28 counties have been made. Five counties have been visited more than once: Alamance, Forsyth, Guilford, Pasquotank, and Wake. Most of the counties visited have a history of a higher than expected volume of

scrap tires and large cost deficits in their scrap tire programs. Several visits were to nuisance tire sites, with pertinent information gathered and cleanup plans developed. During the visits, procedures and policies of the scrap tire program in each county were reviewed. Suggested modifications to the programs included:

- Verification of eligibility of tires presented for free disposal;
- Detection and elimination of free disposal of out-of-state tires;
- Distribution of information to program participants;
- Revision of recordkeeping.

Working with counties to improve their scrap tire management programs has already produced the following results:

- One month after implementing new requirements for generators and haulers, and training scalehouse personnel to thoroughly screen tire certifications, Alamance County reduced its scrap tire volume 34 percent over the previous year. The two subsequent months yielded decreases of 29 percent and 14 percent in scrap tire volume;
- Discovery that one regional truck tire dealer in Jones County accounts for more than 60 percent of the county's total annual volume of scrap tires--many tires coming from customers in other counties but not out-of-state;
- A 26 percent annual reduction in scrap tire volume in Duplin County after requiring new and used tire dealers to document the eligibility of tires disposed;
- New screening procedures for scrap tire certifications in Forsyth County; new county personnel are working with the technical advisor to develop procedures to better document origin of tires disposed;
- Revision of tire collection and recordkeeping procedures in Pasquotank County to better document origin and eligibility of tires disposed;
- Implementation in Guilford County of requirements for scrap tire generators to submit documentation of eligibility of tires disposed; visiting generators to fully explain program compliance;
- Review of records of scrap tire generators by New Hanover to verify the eligibility of tires disposed; training scalehouse personnel to more thoroughly screen scrap tire certifications;

- Determined that Washington County is receiving a large volume of heavy truck tires from a Martin County timber products company because the tire dealer for the company is in Washington County, thus increasing their disposal costs;
- Scalehouse attendants in several counties trained to calculate the number of tires in a load based on weight to compare with certification information, providing an instant check for accuracy;
- During the past year, 18 new nuisance tire sites discovered containing more than 100,000 tires; to date, 15 of the sites containing 85,000 tires have been cleared, and additional sites expected to be discovered;
- Tire wholesalers and manufacturers informed that free disposal is not available for defective or off-specification tires since the disposal fee has not been paid;
- Instructions and information about the scrap tire certification sent to all current and new scrap tire haulers to help eliminate common mistakes.

Progress on eliminating free disposal of out of state tires has been made. Many county visits have resulted in new procedures being developed and implemented which will contribute to continued progress in the future. The identification and cleanup of nuisance sites continues in an efficient and timely manner. By extending the technical assistance position, counties will continue to have a resource to help identify and correct problems, develop and implement new procedures and coordinate cleanup of nuisance tire sites.

6) TIRE RECYCLING

The tonnage of tires the private tire recycling facilities received from North Carolina counties and from cleanup programs can be summarized as follows:

<u>Facility</u>	<u>Tires Received (tons)</u>
US Tire Recycling, LP (Cabarrus County)	36,265
Central Carolina Tire Recycling (Harnett County)	41,188
TIRES, Inc (Forsyth County)	22,094
Envirotire Recycling (Harnett County)	3,982
Envirotire Recycling (Gaston County)	1,000
Tire Disposal Service (Union County)	<u>9,969</u>
Total	114,499

North Carolina recycling firms diverted from landfills approximately 54,000 tons of scrap tires or about 47 percent of the total 114,000 tons of scrap tires they handled. This compares with previous years as follows:

Year	Tonnage recycled	Percentage of total tonnage
FY 1994-95	42,000	37%
FY 1995-96	48,000	45%
FY 1996-97	47,000	45%
FY 1997-98	54,000	47%

Recycled tire materials are readily available in North Carolina since there is a large number of tire recyclers in the state. However, markets for these materials have not been strong and have improved only slightly the past few years.

There was little increase in the recycling rates in FY 1996-97 and FY 1997-98 in comparison with FY 1995-96. Part of the increase in the recycling rate in FY 1995-96 was due to recycling of tires removed from nuisance tire sites. State contracts for removal of tires from nuisance sites required that the tires be recycled. Also, in the past two fiscal years US Tire recycled fewer North Carolina and preferentially recycled Virginia tires because of incentives funded by the state of Virginia. This indicates that improvements in tire recycling rates have been partially dependant on subsidies from state government.

Tire Reuse, Re-manufacturing, and Retreading - 4 percent of North Carolina Tires

- An estimated 4,475 tons of scrap tires were diverted from landfills by North Carolina recycling firms for reuse, retreading, or re-manufacturing. Many of these tires had high tread remaining and were sold on the used tire market. This figure does not include the large number of tires that were sold directly as used tires or casings, and were not discarded as scrap tires originally. Tire retreading is a large part of the North Carolina tire industry, and significant numbers of tires are imported into the state for retreading.

Tire-derived fuel (TDF) - 1 Percent of North Carolina Tires - More than 1,500 tons or approximately 1 percent of the scrap tires disposed in North Carolina were used as tire-derived fuel. These tires were shredded and shipped by TIRES, Inc. and US Tire,LP to out-of-state markets. There are currently no users of TDF in North Carolina.

Crumb Rubber - 4 Percent of North Carolina Tires - About 4,900 tires were processed into crumb rubber and related products by TIRES, Inc. in FY 1996-97. According to North Carolina tire recyclers, supply of crumb rubber exceeds demand nationally. Crumb rubber 40-mesh may become a commodity and may eventually have value as a substitute for plastics and other polymers in manufacturing products in the plastics industry.

Agricultural and Miscellaneous Products - 9 Percent of North Carolina Tires Central Carolina, Inc. sold about 4,100 tons for agricultural and other miscellaneous applications. Agricultural products include livestock bedding mats. Other items include mats, solid rubber wheels, barricades, and loading dock stops.

Civil Engineering Applications - 29 Percent of North Carolina Tires - TIRES, Inc., Tire Disposal Service and US Tire,LP shredded and sold 33,391 tons for civil engineering applications. This includes tire chips for construction of road beds and embankments. The tire chips used are 1 inch to 6 inches, and do not require the more expensive processing to produce 10-to-40 mesh crumb rubber. This also includes tire chips for construction of septic tank drainfields in South Carolina.

Landfill Disposal - 52 Percent of North Carolina Tires - Approximately 60,000 tons were landfilled or stockpiled. US Tire,LP and Central Carolina, Inc. operate tire monofills. Both facilities shred tires prior to landfilling and can recover or "mine" the landfilled tires for future recycling markets.

The tire monofills provide an essential service to the 100 counties by providing a low cost disposal option for tires that cannot be economically recycled. If landfilling of tires were banned, counties would incur significant cost increases. If counties were allowed to pass such costs on to tire haulers and disposers, it is assumed that tire dumping would again endanger the environment and public health.

7) COUNTY COSTS OF TIRE DISPOSAL

The counties reported spending a total of \$7,397,962 for scrap tire disposal. (Appendix, Table 1)

Costs per tire for disposal The reported costs for scrap tire disposal (Appendix, Table 2) varied greatly and ranged from a low of \$36 to a high of \$520 per ton.

Tire disposal costs charged by recyclers are very competitive in North Carolina. Recyclers in North Carolina report that their contracts with counties typically charge \$60 - \$70 per ton, which includes transportation and trailer rental costs. Counties that are not near recycling facilities may pay as much as \$70-\$90 per ton.

Some of the fluctuation among counties is probably due to errors in recordkeeping and reporting by the counties. Some counties are inefficient in their management of tires. For example, counties that allow citizens to dispose tires in "green boxes" incur subsequent labor costs for recovering the tires and loading into a trailer.

During the past five years, the reported costs per ton have fluctuated. The average reported costs were:

<u>Fiscal year</u>	<u>Average cost per ton</u>
1990-91	\$87.00
1991-92	\$88.00
1992-93	\$89.00
1993-94	\$78.00
1994-95	\$72.00
1995-96	\$81.00
1996-97	\$90.00
1997-98	\$77.00

The average tire disposal cost in FY 1997-98 was \$77 per ton. The number of county programs totaled 95 since there are three regional programs, which include Carteret, Craven, and Pamlico (CRSWMA), Chowan, Perquimans, and Gates, and Mitchell and Yancey counties.

Types of tires received at county tire collection sites In FY 1997-98, counties reported receiving tires in three size categories in the following percentages: 81 percent passenger car tires, 15 percent heavy truck tires, and 4 percent off-road tires (large tires from tractors and other large off-road equipment).

Some counties have expressed concern about the tax rate being lower on truck tires than on passenger car tires, since larger tires are more expensive to dispose. An analysis of revenue and costs of disposal was presented in the FY 1994-95 report. At an estimated weight of 20 pounds per auto tire, 100 pounds per truck tire and 500 pounds per off-road tire, the costs of disposal were 72 cents per passenger tire, \$3.85 per truck tire and \$19.25 per off-road tire.

Total disposal costs for passenger car tires are less than advance disposal fee revenues collected from the sale of new replacement tires. Total disposal costs for truck tires and off-road tires exceed advance disposal fee revenues collected from the sale of new replacement tires.

8) TIRE DISPOSAL FEE REVENUE DISTRIBUTION

The state's 2 percent tire disposal fee revenue (initiated October 1993) was distributed to the counties on a per capita basis. This subsidized the counties for tire disposal costs, but did not cover total expenses in many counties. The counties received \$6,433,923, which was about 4 percent more than in the previous year.

FISCAL YEAR	DISTRIBUTION OF PROCEEDS OF DISPOSAL FEE TO THE 100 COUNTIES
FY 1990-91	\$2,814,337
FY 1991-92	\$3,637,903
FY 1992-93	\$3,478,739
FY 1993-94	\$4,045,702
FY 1994-95	\$5,675,341
FY 1995-96	\$5,818,752
FY 1996-97	\$6,206,045
FY 1997-98	\$6,433,923

The total distributed to the counties represented 87 percent of the total reported disposal costs of \$7,397,962. (Appendix, Table 3) This provided an average of 77 cents for each of the 9.6 million scrap tires handled by the counties.

On January 1, 1994, counties discontinued charging tipping fees for disposal of tires that were certified as generated in North Carolina, in accordance with G.S. 130A-309.58. Counties may charge a fee for tires presented for disposal without an accompanying scrap tire certification form certifying that the tires were generated in North Carolina. The large increase in volume of tires being managed is the reason most counties reporting a deficit have insufficient funds.

8) SCRAP TIRE DISPOSAL ACCOUNT

The General Assembly created the Scrap Tire Disposal Account effective October 1, 1993. It consists of 27 percent of the net tax proceeds of advance disposal fee. As of July 1, 1997 up to 50 percent of the account can be used to fund grants to counties that incur losses in their tire management programs each six months (GS 130A-309.63). Forty percent can be used for grants to encourage increased recycling market demand for processed tire material, and the remainder may be used to clean up nuisance tire sites.

Total grant requests from the Scrap Tire Disposal Account the past four years has been \$3,388,561, and grant awards have totaled \$1,952,320.

Grant requests from the Scrap Tire Disposal Account for the two most recent six-month periods were as follows:

	<u>Oct 1997 - Mar 1998</u>	<u>April - Sept 1998</u>
Number of applicants -	41 counties	45 counties
Requested funds -	\$ 677,681	\$ 761,308
Total funds awarded -	\$ 602,778	\$ 644,335

The grants awarded by county for the two periods are presented in Tables 4 and 5 in the Appendix. The legislation establishing the grants for county reimbursement requires the department to take into consideration the following when making grant awards: "...financial ability of a unit of local government to provide for scrap tire disposal, the severity of a unit of local government's scrap tire disposal problem, the effort made by a unit of local government to ensure that only tires generated in the normal course of business in this State are provided free disposal, and the effort made by a unit of local government to provide for scrap tire disposal within the resources available to it".

10) NUISANCE TIRE SITE CLEANUPS

The Nuisance Tire Site Cleanup Program is funded from the Scrap Tire Disposal Account. Since the initial allocation of funds in was made in 1994 approximately 6 million tires have been cleared from 260 sites.

Between 1994 and 1998, the Solid Waste Section contracted to clean up the eight largest sites. About 2.8 million tires were cleaned up at a cost of approximately \$2.7 million. These eight sites contained about 50 percent of the

known nuisance tires in the. The contracts required these tires to be either recycled into reusable products like crumb rubber, civil engineering materials, tire-derived fuel or reused as used tires.

The effort to clean up smaller nuisance tire sites has been very successful. Since 1994, 206 smaller nuisance sites, less than 10,000 each, have been cleared. Of these, 135 were cleaned up by the property owner and 12 were cleaned up using inmate labor.

There have been 18 new nuisance tire sites discovered in the last 12 months. These sites collectively contained more than 100,000 nuisance tires. Already, 15 of these newly discovered sites have been cleared of more than 85,000 tires.

11) PROCESSED SCRAP TIRE MATERIAL MARKET DEVELOPMENT GRANTS

A processed tire materials recycling program is authorized by changes made to the Scrap Tire Management Act in 1997. These changes to GS 130A-309.63 establish a tire recycling market development program by the addition of a new allowed use of the funds in the Scrap Tire Disposal Account with inclusion of the following: "The Department may use up to forty percent of the revenue in the Account to make grants to encourage the use of processed scrap tire materials. These grants may be made to encourage the use of tire derived fuel, crumb rubber, carbon black, or other components of tires for use in products such as fuel, tires, mats, auto parts, gaskets, flooring material, or other applications of processed tire materials."

In FY 1997-98, the division awarded grants to three North Carolina companies to increase their use of North Carolina recycled processed scrap tire material. The grants will enable these businesses to make equipment modifications and other changes as required to increase the use of processed scrap tire material in recycled tire products. Grant proposals are reviewed by an interagency task force representing the NC Division of Waste Management, the Division of Pollution Prevention and Environmental Assistance, and the Department of Commerce. The proposals are then evaluated by a technical review committee of experts for possible recommendation for a grant award.

These three grants are as follows:

Roll-Tech Inc., Hickory, NC

\$102,420

Construction of 32 additional molds to increased hard rubber tire manufacturing

International Paper, Riegelwood, NC

\$500,000

Conversion of combustion units to use tire derived fuel (TDF).

Continental General Tire Co.,Charlotte, NC

\$380,002.00

Development of "tire to tire" technology with 25% scrap tire recycled content.

TABLE 1. COUNTY REPORTS OF TIRE DISPOSAL ACTIVITIES IN FY 1997-98.					
COUNTY	2% TAX REVENUE	TONS TIRES DISPOSED	TOTAL EXPENSES	NET SURPLUS OR (NET LOSS)	MEANS OF TIRE DISPOSAL
ALAMANCE	\$103,517.06	1,958.45	\$146,883.75	(\$43,366.69)	CENTRAL CAROLINA
ALEXANDER	\$26,870.51	336.15	\$21,298.89	\$5,571.62	TIRES INC
ALLEGHANY	\$8,443.17	99.81	\$10,738.20	(\$2,295.03)	US TIRE
ANSON	\$20,902.34	404.35	\$26,283.40	(\$5,381.06)	TIRE DISPOSAL
ASHE	\$20,631.73	320.62	\$32,333.51	(\$11,701.78)	TIRES INC/US TIRES
AVERY	\$13,379.92	185.98	\$17,296.00	(\$3,916.08)	US TIRE
BEAUFORT	\$37,963.49	554.78	\$69,624.48	(\$31,660.99)	CENTRAL CAROLINA
BERTIE	\$18,039.04	187.92	\$13,906.08	\$4,132.96	CENTRAL CAROLINA
BLADEN	\$26,436.47	379.64	\$25,359.96	\$1,076.51	CENTRAL CAROLINA
BRUNSWICK	\$55,224.10	877.37	\$79,489.94	(\$24,265.84)	CENTRAL CAROLINA
BUNCOMBE	\$167,678.91	1,807.38	\$140,687.09	\$26,991.82	US TIRE
BURKE	\$72,470.61	1,229.00	\$73,111.00	(\$640.39)	US TIRE/TIRES INC
CABARRUS	\$99,805.01	803.60	\$52,234.00	\$47,571.01	US TIRE
CALDWELL	\$65,247.83	895.34	\$69,071.39	(\$3,823.56)	US TIRE
CAMDEN	\$5,584.26	10.26	\$61.50	\$5,522.76	PASQUOTANK COUNTY
CASWELL	\$18,846.44	124.33	\$12,526.20	\$6,320.24	C. CAROLINA/TIRES INC
CATAWBA	\$112,506.67	2,402.51	\$157,647.38	(\$45,140.71)	US TIRE
CHATHAM	\$38,991.45	470.00	\$57,765.00	(\$18,773.55)	CENTRAL CAROLINA
CHEROKEE	\$19,390.30	242.00	\$15,000.00	\$4,390.30	US TIRE
CLAY	\$6,888.10	93.85	\$10,000.00	(\$3,111.90)	US TIRE
CLEVELAND	\$79,341.15	1,370.42	\$131,563.94	(\$52,222.79)	US TIRE
COLUMBUS	\$45,556.17	600.69	\$25,343.00	\$20,213.17	CENTRAL CAROLINA
CRSWMA*	\$138,398.46	1,844.78	\$148,137.64	(\$9,739.18)	CENTRAL CAROLINA
CUMBERLAND	\$258,474.11	2,740.42	\$285,996.12	(\$27,522.01)	CENTRAL CAROLINA
CURRITUCK	\$14,384.13	33.18	\$17,265.00	(\$2,880.87)	CENTRAL CAROLINA
DARE	\$23,319.30	248.76	\$9,000.00	\$14,319.30	SPSA
DAVIDSON	\$121,874.97	1,634.94	\$89,921.70	\$31,953.27	US TIRE/TIRES INC
DAVIE	\$26,875.78	296.00	\$18,594.00	\$8,281.78	US TIRE
DUPLIN	\$38,249.02	518.45	\$44,975.37	(\$6,726.35)	CENTRAL CAROLINA
DURHAM	\$171,284.62	2,018.61	\$169,943.49	\$1,341.13	TIRES INC
EDGECOMBE	\$49,247.95	455.12	\$35,688.00	\$13,559.95	CENTRAL CAROLINA
FORSYTH	\$249,682.15	7,129.03	\$459,810.96	(\$210,128.81)	TIRES INC
FRANKLIN	\$37,548.75	585.21	\$45,076.36	(\$7,527.61)	CENTRAL CAROLINA
GASTON	\$157,427.68	1,749.68	\$146,446.23	\$10,981.45	US TIRE
GRAHAM	\$6,622.76	46.60	\$6,890.00	(\$267.24)	ATLANTA SALVAGE
GRANVILLE	\$36,830.99	342.16	\$33,574.00	\$3,256.99	CENTRAL CAROLINA
GREENE	\$15,094.06	148.81	\$9,248.00	\$5,846.06	CENTRAL CAROLINA
GUILFORD	\$331,859.37	6,321.77	\$405,724.20	(\$73,864.83)	TIRES INC
HALIFAX	\$49,660.04	354.00	\$54,165.00	(\$4,504.96)	US TIRE
HARNETT	\$69,836.63	946.84	\$64,289.02	\$5,547.61	CENTRAL CAROLINA
HAYWOOD	\$44,490.45	545.02	\$73,577.70	(\$29,087.25)	WASTE RECOVERY
HENDERSON	\$68,140.97	908.42	\$106,036.52	(\$37,895.55)	TIRES INC/US TIRE
HERTFORD	\$19,516.79	211.67	\$35,241.14	(\$15,724.35)	CENTRAL CAROLINA
HOKE	\$24,726.79	235.00	\$16,012.82	\$8,713.97	CENTRAL CAROLINA
HYDE	\$4,560.69	49.52	\$2,463.63	\$2,097.06	EJE
IREDELL	\$93,334.28	1,670.00	\$114,516.61	(\$21,182.33)	US TIRE
JACKSON	\$25,687.95	206.76	\$27,810.05	(\$2,122.10)	WASTE RECOVERY
JOHNSTON	\$87,168.39	1,506.46	\$107,338.00	(\$20,169.61)	CENTRAL CAROLINA/US TIRE
JONES	\$8,190.13	243.36	\$16,061.76	(\$7,871.63)	CENTRAL CAROLINA
LEE	\$41,646.53	551.38	\$30,462.63	\$11,183.90	CENTRAL CAROLINA
LENOIR	\$52,066.45	960.18	\$63,520.50	(\$11,454.05)	CENTRAL CAROLINA
LINCOLN	\$49,910.44	858.00	\$75,000.00	(\$25,089.56)	ENVIROTIRE, KINGS MTN
MACON	\$23,765.63	437.00	\$43,700.00	(\$19,934.37)	US TIRE
MADISON	\$15,984.89	149.04	\$19,096.21	(\$3,111.32)	US TIRE
MARTIN	\$22,634.03	337.22	\$24,954.28	(\$2,320.25)	CENTRAL CAROLINA
MCDOWELL	\$33,664.61	521.66	\$37,559.52	(\$3,894.91)	US TIRE
MECKLENBURG	\$521,450.09	9,666.74	\$605,126.49	(\$83,676.40)	US TIRE
MITCHELL	\$12,872.99	255.24	\$26,137.50	(\$13,264.51)	TIRES INC
MONTGOMERY	\$21,421.56	410.35	\$26,262.40	(\$4,840.84)	CENTRAL CAROLINA
MOORE	\$59,854.21	606.10	\$39,776.90	\$20,077.31	CENTRAL CAROLINA
NASH	\$75,580.78	1,011.85	\$101,327.00	(\$25,746.22)	TIRES INC
NEW HANOVER	\$126,014.88	2,680.00	\$217,065.72	(\$91,050.84)	ENVIROTIRE

TABLE 1. COUNTY REPORTS OF TIRE DISPOSAL ACTIVITIES IN FY 1997-98.					
COUNTY	2% TAX REVENUE	TONS TIRES DISPOSED	TOTAL EXPENSES	NET SURPLUS OR (NET LOSS)	MEANS OF TIRE DISPOSAL
NORTHAMPTON	\$18,325.42	286.00	\$24,748.00	(\$6,422.58)	US TIRE
ONSLOW	\$131,976.94	1,511.88	\$131,815.47	\$161.47	CENTRAL CAROLINA
ORANGE	\$93,169.14	1,098.00	\$88,962.04	\$4,207.10	US TIRE
PASQUOTANK	\$40,561.87	517.05	\$62,706.13	(\$22,144.26)	RESOURCE PRODUCT, INC
PENDER	\$31,609.61	281.79	\$50,080.00	(\$18,470.39)	CENTRAL CAROLINA
PE/CH/GA**	\$19,726.38	214.74	\$36,302.25	(\$16,575.87)	CENTRAL CAR/ATL WASTE
PERSON	\$28,566.17	356.94	\$35,470.00	(\$6,903.83)	CENTRAL CAROLINA
PITT	\$104,758.48	1,978.31	\$140,407.92	(\$35,649.44)	CENTRAL CAROLINA
POLK	\$14,228.63	149.78	\$22,274.00	(\$8,045.37)	US TIRE
RANDOLPH	\$104,306.90	2,094.00	\$128,871.00	(\$24,564.10)	CENTRAL CAROLINA
RICHMOND	\$40,274.17	735.58	\$32,529.25	\$7,744.92	CENTRAL CAROLINA
ROCKINGHAM	\$98,405.44	1,068.98	\$100,617.09	(\$2,211.65)	CENTRAL CAROLINA
ROBESON	\$78,413.36	625.00	\$81,807.00	(\$3,393.64)	ROBESON CO LANDFILL
ROWAN	\$106,310.94	966.37	\$131,506.29	(\$25,195.35)	TIRES INC/US TIRE
RUTHERFORD	\$52,129.70	887.68	\$80,363.64	(\$28,233.94)	US TIRE
SAMPSON	\$45,245.14	452.00	\$37,492.24	\$7,752.90	CENTRAL CAROLINA
SCOTLAND	\$30,776.68	506.96	\$31,938.48	(\$1,161.80)	CENTRAL CAROLINA
STANLY	\$47,960.01	858.99	\$79,984.85	(\$32,024.84)	US TIRE
STOKES	\$37,095.42	415.24	\$29,523.14	\$7,572.28	TIRES INC
SURRY	\$57,868.63	911.57	\$54,280.50	\$3,588.13	SURRY CO LANDFILL
SWAIN	\$10,408.54	129.61	\$16,000.00	(\$5,591.46)	WASTE RECOVERY
TRANSYLVANIA	\$24,211.94	289.57	\$22,876.00	\$1,335.94	US TIRE
TYRRELL	\$3,225.26	53.94	\$4,429.80	(\$1,204.54)	ATLANTIC OPERATIONS/LF
UNION	\$89,688.18	1,248.66	\$84,422.28	\$5,265.90	US TIRE
VANCE	\$35,688.83	436.78	\$42,612.70	(\$6,923.87)	CENTRAL CAROLINA
WAKE	\$473,719.50	6,458.93	\$393,533.12	\$80,186.38	CENTRAL CAROLINA
WARREN	\$15,975.23	236.54	\$17,503.96	(\$1,528.73)	CENTRAL CAROLINA
WASHINGTON	\$11,864.35	320.66	\$11,773.10	\$91.25	CENTRAL CAROLINA
WATAUGA	\$35,539.44	423.97	\$37,368.80	(\$1,829.36)	US TIRE
WAYNE	\$98,740.19	1,146.02	\$103,440.00	(\$4,699.81)	CENTRAL CAROLINA
WILKES	\$55,141.48	1,008.87	\$93,446.00	(\$38,304.52)	US TIRE
WILSON	\$60,147.66	1,371.57	\$87,646.38	(\$27,498.72)	CENTRAL CAROLINA
YADKIN	\$30,519.25	336.35	\$28,408.09	\$2,111.16	TIRES INC
YANCEY	\$14,275.20	351.09	\$30,804.86	(\$16,529.66)	US TIRE
TOTALS	\$6,433,923.11	96,519.20	7,397,962	(964,038)	
AVERAGES		1,005.41	77,062	(10,042)	

Note: Parenthesis indicates negative number and net loss

* Coastal Regional Solid Waste Management Authority includes Cartaret, Craven, and Pamlico counties.

**Pe/Ch/Ga = Perquimans, Chowan, Gates regional scrap tire management

COUNTY	FY 1993-94			FY 1994-95			FY 1995-96			FY 1996-97			FY 1997-98		
	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	TOTAL COSTS	COST PER TIRE	
ALAMANCE	\$123,599.00	\$0.96	\$145,500.00	\$0.95	\$96,534.13	\$0.66	\$117,946.09	\$0.75	\$146,883.75	\$0.75	\$146,883.75	\$0.75	\$146,883.75	\$0.75	
ALEXANDER	\$18,646.47	\$0.95	\$19,761.01	\$0.93	\$25,393.55	\$1.02	\$24,457.75	\$0.74	\$21,298.89	\$0.63	\$21,298.89	\$0.63	\$21,298.89	\$0.63	
ALLEGHANY	\$7,041.80	\$0.81	\$7,910.00	\$0.90	\$7,500.00	\$1.20	\$12,974.93	\$1.23	\$10,738.20	\$1.08	\$10,738.20	\$1.08	\$10,738.20	\$1.08	
ANSON	\$26,490.85	\$1.08	\$24,197.94	\$1.96	No data	No data	\$19,845.15	\$0.65	\$26,283.40	\$0.65	\$26,283.40	\$0.65	\$26,283.40	\$0.65	
ASHE	\$15,611.50	\$0.60	\$21,558.97	\$0.71	\$29,399.70	\$0.98	\$47,549.51	\$1.60	\$32,333.51	\$1.01	\$32,333.51	\$1.01	\$32,333.51	\$1.01	
AVERY	No data	\$1.00	\$12,165.00	\$0.83	\$13,000.00	No data	\$9,073.66	\$0.79	\$17,296.00	\$0.93	\$17,296.00	\$0.93	\$17,296.00	\$0.93	
BEAUFORT	\$64,933.00	\$0.56	\$65,000.00	\$0.30	\$75,054.00	\$1.01	\$51,207.31	\$1.07	\$69,624.48	\$1.25	\$69,624.48	\$1.25	\$69,624.48	\$1.25	
BERTIE	\$11,838.00	No data	\$0.00	\$0.00	No data	No data	\$17,803.16	\$0.89	\$13,906.08	\$0.74	\$13,906.08	\$0.74	\$13,906.08	\$0.74	
BLADEN	\$30,028.25	\$0.57	\$11,844.30	\$0.30	\$38,790.20	\$1.24	\$21,862.80	\$0.68	\$25,359.96	\$0.67	\$25,359.96	\$0.67	\$25,359.96	\$0.67	
BRUNSWICK	\$57,202.90	\$0.97	\$59,716.35	\$0.83	\$65,606.14	\$0.72	\$86,663.80	\$0.71	\$79,489.94	\$0.91	\$79,489.94	\$0.91	\$79,489.94	\$0.91	
BUNCOMBE	\$121,330.00	\$0.49	\$170,768.42	\$0.71	\$196,708.42	\$0.93	\$127,200.16	\$0.80	\$140,687.09	\$0.78	\$140,687.09	\$0.78	\$140,687.09	\$0.78	
BURKE	\$65,000.00	\$0.98	\$63,944.00	\$0.84	\$89,838.96	\$0.67	\$78,096.16	\$0.72	\$73,111.00	\$0.59	\$73,111.00	\$0.59	\$73,111.00	\$0.59	
CABARRUS	\$63,658.57	\$9.76	\$70,591.36	\$0.42	\$51,851.95	\$0.56	\$46,357.59	\$0.39	\$52,234.00	\$0.65	\$52,234.00	\$0.65	\$52,234.00	\$0.65	
CALDWELL	\$54,676.06	\$0.71	\$56,055.74	\$0.76	\$59,205.50	\$0.81	\$62,208.50	\$0.88	\$69,071.39	\$0.77	\$69,071.39	\$0.77	\$69,071.39	\$0.77	
CAMDEN	\$2,978.25	\$0.88	\$4,144.00	\$1.27	\$183.70	\$0.05	\$38.50	\$0.01	\$61.50	\$0.06	\$61.50	\$0.06	\$61.50	\$0.06	
CARTERET	\$37,820.00	\$1.61	\$11,900.00	\$0.32	\$45,429.94	\$1.15	\$174,526.14	\$1.19	-----	-----	-----	-----	-----	-----	
CASWELL	\$18,878.34	\$0.99	\$17,752.00	\$1.30	\$23,186.00	\$2.50	\$18,392.20	\$2.38	\$12,526.20	\$1.01	\$12,526.20	\$1.01	\$12,526.20	\$1.01	
CATAWBA	\$164,683.00	\$0.72	\$144,022.00	\$0.74	\$170,305.83	\$0.68	\$150,519.74	\$0.66	\$157,647.38	\$0.66	\$157,647.38	\$0.66	\$157,647.38	\$0.66	
CHATHAM	\$28,067.43	\$0.78	\$31,827.83	\$0.91	\$35,236.00	\$0.82	\$30,972.00	\$0.70	\$57,765.00	\$1.23	\$57,765.00	\$1.23	\$57,765.00	\$1.23	
CHEROKEE	\$16,725.00	\$1.05	\$10,375.00	\$1.30	\$14,000.00	\$1.06	\$14,000.00	\$1.05	\$15,000.00	\$0.62	\$15,000.00	\$0.62	\$15,000.00	\$0.62	
CLAY	\$5,279.00	\$1.31	\$6,663.25	\$1.33	\$7,330.00	\$1.15	\$10,030.00	\$1.15	\$10,000.00	\$1.07	\$10,000.00	\$1.07	\$10,000.00	\$1.07	
CLEVELAND	\$101,972.38	\$0.98	\$100,099.29	\$0.85	\$105,795.82	\$0.99	\$128,940.94	\$0.96	\$131,563.94	\$0.96	\$131,563.94	\$0.96	\$131,563.94	\$0.96	
COLUMBUS	\$26,885.00	\$6.72	\$52,728.00	\$0.82	\$49,273.00	\$0.71	\$37,401.76	\$0.72	\$25,343.00	\$0.42	\$25,343.00	\$0.42	\$25,343.00	\$0.42	
CRAVEN	\$60,350.00	\$1.71	\$90,950.00	\$1.17	\$82,600.00	\$1.15	\$174,526.14	\$1.19	-----	-----	-----	-----	-----	-----	
CRSWAMA*	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
CUMBERLAND	\$150,188.00	\$0.74	\$221,981.00	\$0.81	\$164,510.00	\$0.71	\$281,242.93	\$0.82	\$285,996.12	\$1.04	\$285,996.12	\$1.04	\$285,996.12	\$1.04	
CURRITUCK	\$14,750.82	\$1.61	\$12,210.78	\$0.18	\$12,327.42	\$1.12	\$17,311.00	\$1.18	\$17,265.00	\$5.20	\$17,265.00	\$5.20	\$17,265.00	\$5.20	
DARE	\$21,940.00	\$1.07	\$15,725.00	\$0.74	\$17,297.50	\$0.72	\$18,162.37	\$0.69	\$9,000.00	\$0.36	\$9,000.00	\$0.36	\$9,000.00	\$0.36	
DAVIDSON	\$73,000.00	\$0.60	\$114,607.45	\$0.69	\$129,629.11	\$0.78	\$98,278.21	\$0.60	\$89,921.70	\$0.55	\$89,921.70	\$0.55	\$89,921.70	\$0.55	
DAVIE	\$11,947.37	\$0.47	\$38,969.71	\$2.40	\$16,739.01	\$0.64	\$22,908.00	\$0.76	\$18,594.00	\$0.63	\$18,594.00	\$0.63	\$18,594.00	\$0.63	
DUPLIN	\$63,413.96	\$0.75	\$48,100.23	\$0.88	\$41,804.89	\$0.87	\$45,297.85	\$0.91	\$44,975.37	\$0.87	\$44,975.37	\$0.87	\$44,975.37	\$0.87	
DURHAM	\$114,663.37	\$0.74	\$110,969.84	\$0.84	\$158,888.00	\$0.90	\$157,870.70	\$0.89	\$169,943.49	\$0.84	\$169,943.49	\$0.84	\$169,943.49	\$0.84	
EDGEcombe	\$44,773.00	\$0.55	\$51,500.00	\$1.01	\$50,000.56	\$1.03	\$68,459.85	\$0.93	\$35,688.00	\$0.78	\$35,688.00	\$0.78	\$35,688.00	\$0.78	
FORSYTH	\$219,890.76	No data	\$337,574.00	\$0.53	\$387,000.00	\$0.65	\$352,917.47	\$0.60	\$459,810.96	\$0.64	\$459,810.96	\$0.64	\$459,810.96	\$0.64	
FRANKLIN	\$38,027.05	\$0.90	\$34,293.08	\$0.79	\$36,275.00	\$1.20	\$43,787.38	\$1.21	\$45,076.36	\$0.77	\$45,076.36	\$0.77	\$45,076.36	\$0.77	
GASTON	\$134,478.60	\$0.78	\$153,777.30	\$0.80	\$127,149.80	\$1.17	\$169,043.60	\$0.77	\$146,446.23	\$0.84	\$146,446.23	\$0.84	\$146,446.23	\$0.84	
GRAHAM	\$9,832.00	\$1.52	\$19,100.00	\$2.71	\$6,187.50	\$1.27	\$4,200.00	\$0.78	\$6,890.00	\$1.48	\$6,890.00	\$1.48	\$6,890.00	\$1.48	
GRANVILLE	\$45,950.98	\$1.51	\$24,002.64	\$0.72	\$28,544.02	\$0.74	\$26,714.94	\$0.74	\$33,574.00	\$0.98	\$33,574.00	\$0.98	\$33,574.00	\$0.98	
GREENE	\$14,249.40	\$0.94	\$11,711.40	\$0.57	\$17,129.60	\$0.69	\$11,438.22	\$0.80	\$9,248.00	\$0.62	\$9,248.00	\$0.62	\$9,248.00	\$0.62	
GUILFORD	\$273,294.95	No data	\$359,011.36	\$0.65	\$366,384.45	\$0.68	\$407,831.66	\$0.65	\$405,724.20	\$0.64	\$405,724.20	\$0.64	\$405,724.20	\$0.64	
HALFAX	\$44,760.00	\$0.93	\$43,152.35	\$3.50	\$39,524.00	\$1.25	\$50,650.00	\$2.01	\$54,165.00	\$1.53	\$54,165.00	\$1.53	\$54,165.00	\$1.53	
HARNETT	\$46,060.76	\$0.92	\$58,318.82	\$0.69	\$56,445.47	\$0.69	\$62,489.51	\$0.69	\$64,289.02	\$0.68	\$64,289.02	\$0.68	\$64,289.02	\$0.68	
HAYWOOD	\$58,039.25	\$1.23	\$61,170.00	\$1.25	\$38,029.00	\$1.28	\$61,750.15	\$1.32	\$73,577.70	\$1.35	\$73,577.70	\$1.35	\$73,577.70	\$1.35	
HENDERSON	\$70,109.37	\$1.03	\$87,220.00	\$1.03	\$86,854.00	\$1.08	\$101,484.23	\$1.32	\$106,036.52	\$1.17	\$106,036.52	\$1.17	\$106,036.52	\$1.17	
HERTFORD	\$21,175.00	\$1.25	\$26,250.00	\$1.55	\$30,625.00	\$1.65	\$29,750.00	\$1.53	\$35,241.14	\$1.66	\$35,241.14	\$1.66	\$35,241.14	\$1.66	
HOKE	\$0.00	No data	\$11,637.00	\$0.70	\$0.00	\$0.00	\$19,552.00	\$0.73	\$16,012.82	\$0.68	\$16,012.82	\$0.68	\$16,012.82	\$0.68	
HYDE	\$4,335.08	\$1.45	\$7,980.86	\$0.95	\$4,966.68	\$0.98	\$12,773.17	\$0.97	\$2,463.63	\$0.50	\$2,463.63	\$0.50	\$2,463.63	\$0.50	
IREDELL	\$95,345.00	\$0.77	\$98,774.91	\$0.71	\$94,698.95	\$0.71	\$154,583.00	\$0.97	\$114,516.61	\$0.69	\$114,516.61	\$0.69	\$114,516.61	\$0.69	
JACKSON	\$22,137.00	\$1.33	\$14,530.75	\$1.31	\$21,986.75	\$1.12	\$26,053.65	\$1.35	\$27,810.05	\$1.35	\$27,810.05	\$1.35	\$27,810.05	\$1.35	
JOHNSTON	\$78,847.74	\$0.75	\$80,868.00	\$0.68	\$95,110.00	\$0.82	No data	No data	\$107,338.00	\$0.71	\$107,338.00	\$0.71	\$107,338.00	\$0.71	
JONES	\$12,539.00	\$0.57	\$20,899.00	\$0.63	\$19,859.40	\$0.66	\$18,920.76	\$0.66	\$16,061.76	\$0.66	\$16,061.76	\$0.66	\$16,061.76	\$0.66	
LEE	\$23,774.00	\$0.94	\$29,000.00	\$0.55	\$39,424.26	\$0.94	\$34,732.09	\$0.74	\$30,462.63	\$0.55	\$30,462.63	\$0.55	\$30,462.63	\$0.55	
LENOIR	\$49,260.00	\$0.59	\$25,715.40	\$0.60	\$49,375.62	\$0.60	\$54,878.76	\$0.68	\$63,520.50	\$0.66	\$63,520.50	\$0.66	\$63,520.50	\$0.66	
LINCOLN	\$60,000.00	\$0.88	\$55,000.00	\$0.97	\$55,000.00	\$0.57	\$57,965.15	\$0.74	\$75,000.00	\$0.87	\$75,000.00	\$0.87	\$75,000.00	\$0.87	
MACON	\$36,409.00	\$1.57	\$39,539.00	\$1.34	\$36,275.00	\$1.20	\$39,900.00	\$1.11	\$43,700.00	\$1.00	\$43,700.00	\$1.00	\$43,700.00	\$1.00	

TABLE 2. EXPENSES INCURRED BY NORTH CAROLINA COUNTIES FOR TIRE DISPOSAL IN 1993 - 1998.

COUNTY	FY 1993-94			FY 1994-95			FY 1995-96			FY 1996-97			FY 1997-98		
	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	COST PER TIRE	TOTAL COSTS	COST PER TIRE	
MADISON	\$22,849.72	\$1.70	\$24,556.70	\$1.20	\$24,400.00	\$1.60	\$23,615.85	\$1.30	\$19,096.21	\$1.28	\$19,096.21	\$1.28	\$19,096.21	\$1.28	
MARTIN	\$18,656.14	\$0.74	\$26,952.00	\$0.74	\$46,328.25	\$0.74	\$20,101.00	\$0.74	\$24,954.28	\$0.74	\$24,954.28	\$0.74	\$24,954.28	\$0.74	
MCDOWELL	\$23,511.14	\$0.75	\$36,574.00	\$0.08	\$37,851.50	\$0.91	\$42,064.88	\$0.89	\$37,559.52	\$0.72	\$37,559.52	\$0.72	\$37,559.52	\$0.72	
MECKLENBURG	\$309,095.00	\$0.72	\$427,442.00	\$0.78	\$594,745.00	\$0.80	\$498,675.00	\$0.64	\$605,126.49	\$0.63	\$605,126.49	\$0.63	\$605,126.49	\$0.63	
MITCHELL	\$17,550.00	\$0.81	\$19,595.11	\$0.87	\$22,023.75	\$0.92	\$23,190.00	\$0.94	\$26,137.50	\$1.02	\$26,137.50	\$1.02	\$26,137.50	\$1.02	
MONTGOMERY	\$18,283.52	\$0.64	\$20,773.76	\$0.64	\$22,056.32	\$0.64	\$23,592.96	\$0.60	\$26,262.40	\$0.64	\$26,262.40	\$0.64	\$26,262.40	\$0.64	
MOORE	\$32,608.58	\$4.08	\$24,366.23	\$0.63	\$46,045.47	\$1.08	\$60,321.58	\$1.16	\$39,776.90	\$0.66	\$39,776.90	\$0.66	\$39,776.90	\$0.66	
NASH	\$52,857.00	\$0.79	\$66,236.25	\$0.86	\$87,750.00	\$0.93	\$85,109.50	\$0.86	\$101,327.00	\$1.00	\$101,327.00	\$1.00	\$101,327.00	\$1.00	
NEW HANOVER	\$194,510.25	\$0.83	\$172,000.00	\$0.82	\$196,799.00	\$0.83	\$194,084.00	\$0.80	\$217,065.72	\$0.81	\$217,065.72	\$0.81	\$217,065.72	\$0.81	
NORTHAMPTON	\$16,050.00	\$1.57	\$12,550.00	\$1.37	\$11,250.00	\$0.94	\$27,705.00	\$0.92	\$24,748.00	\$0.87	\$24,748.00	\$0.87	\$24,748.00	\$0.87	
ONSLAW	\$114,504.00	\$0.90	\$97,040.66	\$0.60	\$111,523.62	\$0.71	\$109,807.48	\$0.81	\$131,815.47	\$0.87	\$131,815.47	\$0.87	\$131,815.47	\$0.87	
ORANGE	\$69,815.00	\$0.92	\$117,183.00	\$0.77	\$106,166.00	\$1.16	\$91,918.00	\$0.87	\$88,962.04	\$0.81	\$88,962.04	\$0.81	\$88,962.04	\$0.81	
PAMLICO	\$8,607.60	\$1.44	\$6,000.00	\$0.74	\$9,637.00	\$1.18	No data	No data	No data	No data	No data	No data	No data	No data	
PASQUOTANK	\$52,515.00	\$1.42	\$37,342.50	\$1.19	\$47,571.10	\$0.81	\$62,304.66	\$1.12	\$62,706.13	\$1.21	\$62,706.13	\$1.21	\$62,706.13	\$1.21	
PENDER	\$25,265.00	\$1.15	\$41,084.60	\$1.12	\$44,170.00	\$1.36	\$49,115.00	\$1.32	\$50,080.00	\$1.78	\$50,080.00	\$1.78	\$50,080.00	\$1.78	
PE/CH/GA**	\$33,314.00	No data	\$48,792.00	\$3.35	\$31,061.38	\$0.79	\$41,424.35	\$1.73	\$36,302.25	\$1.69	\$36,302.25	\$1.69	\$36,302.25	\$1.69	
PERSON	\$21,805.00	\$0.70	\$26,743.88	\$0.84	\$24,149.00	\$0.73	\$27,902.00	\$0.73	\$35,470.00	\$0.99	\$35,470.00	\$0.99	\$35,470.00	\$0.99	
PITT	\$70,000.00	\$0.41	\$136,901.00	\$0.87	\$113,662.68	\$0.68	\$113,887.00	\$0.66	\$140,407.92	\$0.71	\$140,407.92	\$0.71	\$140,407.92	\$0.71	
POLK	\$9,804.38	\$1.14	\$0.00	\$0.00	\$17,258.00	\$0.96	\$0.00	\$0.00	\$22,274.00	\$1.49	\$22,274.00	\$1.49	\$22,274.00	\$1.49	
RANDOLPH	\$79,327.12	No data	\$100,755.22	\$0.68	\$102,351.17	\$0.65	\$98,262.91	\$0.64	\$128,871.00	\$0.62	\$128,871.00	\$0.62	\$128,871.00	\$0.62	
RICHMOND	\$54,436.88	No data	\$69,431.00	\$0.76	\$36,238.00	\$2.85	\$27,618.00	\$0.44	\$32,529.25	\$0.44	\$32,529.25	\$0.44	\$32,529.25	\$0.44	
ROCKINGHAM	\$107,249.47	\$0.89	\$246,492.00	\$0.97	\$227,494.17	\$2.62	\$96,737.25	\$0.90	\$100,617.09	\$0.94	\$100,617.09	\$0.94	\$100,617.09	\$0.94	
ROBESON	\$93,517.60	\$2.12	\$91,270.00	\$1.17	\$74,000.00	\$0.41	\$78,800.00	\$1.11	\$81,807.00	\$1.31	\$81,807.00	\$1.31	\$81,807.00	\$1.31	
ROWAN	\$104,143.03	\$0.82	\$88,009.00	\$0.85	\$150,108.00	\$1.21	\$114,762.50	\$1.16	\$131,506.29	\$1.36	\$131,506.29	\$1.36	\$131,506.29	\$1.36	
RUTHERFORD	\$51,151.00	\$0.95	\$45,568.00	\$1.41	\$65,586.28	\$1.47	\$83,684.54	\$0.80	\$80,363.64	\$0.91	\$80,363.64	\$0.91	\$80,363.64	\$0.91	
SAMPSON	\$25,210.25	\$0.99	\$75,458.17	\$0.97	\$40,986.95	\$0.42	\$30,706.39	\$0.86	\$37,492.24	\$0.83	\$37,492.24	\$0.83	\$37,492.24	\$0.83	
SCOTLAND	\$12,752.46	No data	\$31,576.00	\$0.54	\$31,077.00	\$0.63	\$31,484.88	\$0.64	\$31,938.48	\$0.63	\$31,938.48	\$0.63	\$31,938.48	\$0.63	
STANLY	\$41,037.90	\$0.47	\$41,640.00	\$0.51	\$62,382.50	\$0.76	\$77,947.22	\$0.93	\$79,984.85	\$0.93	\$79,984.85	\$0.93	\$79,984.85	\$0.93	
STOKES	\$27,664.42	\$0.67	\$77,449.58	\$2.04	\$37,031.83	\$0.71	\$26,734.32	\$0.71	\$29,523.14	\$0.71	\$29,523.14	\$0.71	\$29,523.14	\$0.71	
SURRY	\$31,328.80	\$0.44	\$38,798.55	\$0.34	\$72,684.00	\$0.74	\$39,552.30	\$0.34	\$54,280.50	\$0.60	\$54,280.50	\$0.60	\$54,280.50	\$0.60	
SWAIN	\$13,345.00	\$1.25	\$18,000.00	\$1.35	\$17,226.00	\$1.52	\$15,000.00	\$1.22	\$16,090.00	\$1.23	\$16,090.00	\$1.23	\$16,090.00	\$1.23	
TRANSYLVANIA	\$14,433.90	\$0.62	\$17,885.00	\$0.86	\$20,043.16	\$0.78	\$21,948.00	\$0.79	\$22,876.00	\$0.79	\$22,876.00	\$0.79	\$22,876.00	\$0.79	
TYRRELL	No data	\$0.00	\$2,254.50	\$1.33	\$5,317.60	\$0.85	\$4,538.85	\$0.78	\$4,429.80	\$0.82	\$4,429.80	\$0.82	\$4,429.80	\$0.82	
UNION	\$60,903.99	\$0.94	\$97,761.40	\$0.96	\$105,213.60	\$0.80	\$96,611.20	\$0.80	\$84,422.28	\$0.68	\$84,422.28	\$0.68	\$84,422.28	\$0.68	
VANCE	No data	\$0.00	\$32,612.45	\$0.76	\$33,533.50	\$0.65	\$35,483.50	\$0.83	\$42,612.70	\$0.98	\$42,612.70	\$0.98	\$42,612.70	\$0.98	
WAKE	\$370,619.00	\$0.81	\$497,874.00	\$1.02	\$478,320.00	\$0.81	\$530,833.54	\$1.14	\$393,533.12	\$0.61	\$393,533.12	\$0.61	\$393,533.12	\$0.61	
WARREN	No data	\$0.00	\$16,181.00	\$0.94	\$21,592.46	\$0.74	\$15,210.00	\$0.96	\$17,503.96	\$0.74	\$17,503.96	\$0.74	\$17,503.96	\$0.74	
WASHINGTON	\$18,500.00	\$0.90	\$20,312.00	\$0.51	No data	No data	\$10,000.00	\$0.43	\$11,773.10	\$0.37	\$11,773.10	\$0.37	\$11,773.10	\$0.37	
WATAUGA	\$34,691.11	\$1.14	\$31,723.49	\$0.94	\$19,930.20	\$0.61	\$34,441.24	\$0.94	\$37,368.80	\$0.88	\$37,368.80	\$0.88	\$37,368.80	\$0.88	
WAYNE	\$83,592.00	\$0.82	\$88,752.00	\$0.54	\$87,750.00	\$0.83	\$98,250.00	\$0.85	\$103,440.00	\$0.90	\$103,440.00	\$0.90	\$103,440.00	\$0.90	
WILKES	\$46,092.00	\$1.36	\$67,368.80	\$1.26	\$77,081.00	\$0.83	\$78,368.62	\$0.94	\$93,446.00	\$0.93	\$93,446.00	\$0.93	\$93,446.00	\$0.93	
WILSON	\$44,101.80	\$0.60	\$73,106.60	\$0.26	\$97,533.00	\$1.50	\$89,457.00	\$0.65	\$87,646.38	\$0.64	\$87,646.38	\$0.64	\$87,646.38	\$0.64	
YADKIN	\$19,179.91	\$1.49	\$31,925.20	\$1.81	\$20,677.46	\$0.88	\$26,747.54	\$1.00	\$28,408.09	\$0.84	\$28,408.09	\$0.84	\$28,408.09	\$0.84	
YANCEY	\$18,256.25	\$0.68	\$10,503.84	\$0.59	\$20,866.95	\$1.04	\$27,327.22	\$1.06	\$30,804.86	\$0.88	\$30,804.86	\$0.88	\$30,804.86	\$0.88	
TOTALS	\$5,440,021.48		\$6,667,905.83		\$7,029,756.73		\$7,198,865.92		\$7,397,961.56		\$7,397,961.56		\$7,397,961.56		
AVERAGES	\$55,510.42	\$0.78	\$68,039.86	\$0.72	\$73,997.44	\$0.81	\$74,988.19	\$0.90	\$77,062.10	\$0.77	\$77,062.10	\$0.77	\$77,062.10	\$0.77	

* Coastal Regional Solid Waste Management Authority includes Curritow, Craven, and Pamlico counties
 **Pe/Ch/Ga = Perquimans, Chowan, Gates regional scrap tire management

TABLE 3. PERCENTAGE OF COUNTY TIRE PROGRAM EXPENSES MET BY THE 2% STATE TIRE DISPOSAL FEE REVENUE RECEIVED JULY 1997 - JUNE 1998.

COUNTY	SHARE OF 2% FEE RECEIVED	COST OF THE PROGRAM	PERCENTAGE OF COSTS COVERED
ALAMANCE	\$103,517.06	\$146,883.75	70%
ALEXANDER	\$26,870.51	\$21,298.89	126%
ALLEGHANY	\$8,443.17	\$10,738.20	79%
ANSON	\$20,902.34	\$26,283.40	80%
ASHE	\$20,631.73	\$32,333.51	64%
AVERY	\$13,379.92	\$17,296.00	77%
BEAUFORT	\$37,963.49	\$69,624.48	55%
BERTIE	\$18,039.04	\$13,906.08	130%
BLADEN	\$26,436.47	\$25,359.96	104%
BRUNSWICK	\$55,224.10	\$79,489.94	69%
BUNCOMBE	\$167,678.91	\$140,687.09	119%
BURKE	\$72,470.61	\$73,111.00	99%
CABARRUS	\$99,805.01	\$52,234.00	191%
CALDWELL	\$65,247.83	\$69,071.39	94%
CAMDEN	\$5,584.26	\$61.50	100%
CASWELL	\$18,846.44	\$12,526.20	150%
CATAWBA	\$112,506.67	\$157,647.38	71%
CHATHAM	\$38,991.45	\$57,765.00	68%
CHEROKEE	\$19,390.30	\$15,000.00	129%
CLAY	\$6,888.10	\$10,000.00	69%
CLEVELAND	\$79,341.15	\$131,563.94	60%
COLUMBUS	\$45,556.17	\$25,343.00	180%
CRSWMA*	\$138,398.46	\$148,137.64	93%
CUMBERLAND	\$258,474.11	\$285,996.12	90%
CURRITUCK	\$14,384.13	\$17,265.00	83%
DARE	\$23,319.30	\$9,000.00	259%
DAVIDSON	\$121,874.97	\$89,921.70	136%
DAVIE	\$26,875.78	\$18,594.00	145%
DUPLIN	\$38,249.02	\$44,975.37	85%
DURHAM	\$171,284.62	\$169,943.49	101%
EDGECOMBE	\$49,247.95	\$35,688.00	138%
FORSYTH	\$249,682.15	\$459,810.96	54%
FRANKLIN	\$37,548.75	\$45,076.36	83%
GASTON	\$157,427.68	\$146,446.23	107%
GRAHAM	\$6,622.76	\$6,890.00	96%
GRANVILLE	\$36,830.99	\$33,574.00	110%
GREENE	\$15,094.06	\$9,248.00	163%
GUILFORD	\$331,859.37	\$405,724.20	82%
HALIFAX	\$49,660.04	\$54,165.00	92%
HARNETT	\$69,836.63	\$64,289.02	109%
HAYWOOD	\$44,490.45	\$73,577.70	60%
HENDERSON	\$68,140.97	\$106,036.52	64%
HERTFORD	\$19,516.79	\$35,241.14	55%
HOKE	\$24,726.79	\$16,012.82	154%
HYDE	\$4,560.69	\$2,463.63	185%
IREDELL	\$93,334.28	\$114,516.61	82%
JACKSON	\$25,687.95	\$27,810.05	92%
JOHNSTON	\$87,168.39	\$107,338.00	100%
JONES	\$8,190.13	\$16,061.76	51%

LEE	\$41,646.53	\$30,462.63	137%
LENOIR	\$52,066.45	\$63,520.50	82%
LINCOLN	\$49,910.44	\$75,000.00	67%
MACON	\$23,765.63	\$43,700.00	54%
MADISON	\$15,984.89	\$19,096.21	84%
MARTIN	\$22,634.03	\$24,954.28	91%
MCDOWELL	\$33,664.61	\$37,559.52	90%
MECKLENBURG	\$521,450.09	\$605,126.49	86%
MITCHELL	\$12,872.99	\$26,137.50	49%
MONTGOMERY	\$21,421.56	\$26,262.40	82%
MOORE	\$59,854.21	\$39,776.90	150%
NASH	\$75,580.78	\$101,327.00	75%
NEW HANOVER	\$126,014.88	\$217,065.72	58%
NORTHAMPTON	\$18,325.42	\$24,748.00	74%
ONSLOW	\$131,976.94	\$131,815.47	100%
ORANGE	\$93,169.14	\$88,962.04	105%
PASQUOTANK	\$40,561.87	\$62,706.13	65%
PENDER	\$31,609.61	\$50,080.00	63%
PE/CH/GA**	\$19,726.38	\$36,302.25	54%
PERSON	\$28,566.17	\$35,470.00	81%
PITT	\$104,758.48	\$140,407.92	75%
POLK	\$14,228.63	\$22,274.00	100%
RANDOLPH	\$104,306.90	\$128,871.00	81%
RICHMOND	\$40,274.17	\$32,529.25	124%
ROCKINGHAM	\$98,405.44	\$100,617.09	98%
ROBESON	\$78,413.36	\$81,807.00	96%
ROWAN	\$106,310.94	\$131,506.29	81%
RUTHERFORD	\$52,129.70	\$80,363.64	65%
SAMPSON	\$45,245.14	\$37,492.24	121%
SCOTLAND	\$30,776.68	\$31,938.48	96%
STANLY	\$47,960.01	\$79,984.85	60%
STOKES	\$37,095.42	\$29,523.14	126%
SURRY	\$57,868.63	\$54,280.50	107%
SWAIN	\$10,408.54	\$16,000.00	65%
TRANSYLVANIA	\$24,211.94	\$22,876.00	106%
TYRRELL	\$3,225.26	\$4,429.80	73%
UNION	\$89,688.18	\$84,422.28	106%
VANCE	\$35,688.83	\$42,612.70	84%
WAKE	\$473,719.50	\$393,533.12	120%
WARREN	\$15,975.23	\$17,503.96	91%
WASHINGTON	\$11,864.35	\$11,773.10	101%
WATAUGA	\$35,539.44	\$37,368.80	95%
WAYNE	\$98,740.19	\$103,440.00	95%
WILKES	\$55,141.48	\$93,446.00	59%
WILSON	\$60,147.66	\$87,646.38	69%
YADKIN	\$30,519.25	\$28,408.09	107%
YANCEY	\$14,275.20	\$30,804.86	46%
TOTALS	\$6,433,923.11	\$7,397,961.56	
AVERAGES	\$67,020.03	\$77,062.10	95%
* Coastal Regional Solid Waste Management Authority includes Cartaret, Craven, and Pamlico counties.			
**Pe/Ch/Ga = Perquimans, Chowan, Gates regional scrap tire management			

TABLE 4. GRANT REQUESTS AND AWARDS FROM THE SCRAP TIRE DISPOSAL ACCOUNT TO REIMBURSE COUNTIES FOR LOSSES INCURRED IN OCT 1997 - MARCH 1998.

COUNTY	PERCENT OF REQUEST AWARDED	ACTUAL AWARD	REQUEST
ALAMANCE	100%	\$12,503.70	\$12,503.70
ALLEGHANY	100%	\$3,749.94	\$3,749.94
ASHE	100%	\$2,055.92	\$2,055.92
AVERY	95%	\$3,271.14	\$3,432.49
BEAUFORT	94%	\$12,599.78	\$13,437.76
BRUNSWICK	100%	\$8,362.74	\$8,362.74
BURKE	100%	\$6,457.79	\$6,457.81
CATAWBA	100%	\$30,711.27	\$30,711.27
CLEVELAND	96%	\$34,596.89	\$36,078.16
COLUMBUS	100%	\$3,749.46	\$3,749.46
CURRITUCK	100%	\$18,667.69	\$18,667.69
DUPLIN	100%	\$5,938.05	\$5,938.05
FORSYTH	77%	\$63,459.41	\$82,428.86
GASTON	90%	\$4,423.73	\$4,894.90
GUILFORD	70%	\$41,999.69	\$59,999.55
HALIFAX	100%	\$4,200.00	\$4,201.00
HAYWOOD	100%	\$10,299.94	\$10,299.94
HERTFORD	100%	\$8,698.62	\$8,698.62
IREDELL	100%	\$23,697.00	\$23,697.00
JONES	100%	\$4,874.25	\$4,874.25
MACON	91%	\$9,831.72	\$10,761.72
MCDOWELL	90%	\$7,580.28	\$8,422.53
MADISON	100%	\$5,973.12	\$5,973.12
MECKLENBURG	90%	\$84,454.54	\$93,602.84
MITCHELL	86%	\$5,186.61	\$6,035.35
NEW HANOVER	93%	\$46,035.63	\$49,767.18
NORTHAMPTON	100%	\$5,868.02	\$5,868.02
PENDER	100%	\$1,318.57	\$1,318.57
PERSON	100%	\$845.90	\$845.90
PITT	63%	\$15,770.41	\$24,909.52
RANDOLPH	81%	\$12,856.05	\$15,792.83
ROCKINGHAM	100%	\$20,000.68	\$20,000.68
ROWAN	100%	\$13,968.49	\$13,968.49
RUTHERFORD	74%	\$13,598.91	\$18,269.24
SWAIN	100%	\$1,837.10	\$1,837.10
UNION	100%	\$10,471.92	\$10,471.92
WATAUGA	100%	\$4,522.32	\$4,522.32
WILKES	94%	\$21,137.19	\$22,514.47
WILSON	100%	\$7,481.19	\$7,481.19
YADKIN	100%	\$1,092.42	\$1,092.42
YANCEY	86%	\$8,630.20	\$9,987.09
TOTALS	89%	\$602,778.28	\$677,681.61

TABLE 5. GRANT REQUESTS AND AWARDS FROM THE SCRAP TIRE DISPOSAL ACCOUNT TO REIMBURSE COUNTIES FOR LOSSES INCURRED IN APRIL - SEPTEMBER 1998.

COUNTY	PERCENT OF REQUEST AWARDED	ACTUAL AWARD	REQUEST
ALAMANCE	100%	\$15,021.59	\$15,021.59
ALLEGHANY	65%	\$4,559.96	\$6,991.56
ASHE	100%	\$29,369.67	\$29,369.67
BLADEN	68%	\$2,016.12	\$2,959.39
BURKE	100%	\$7,622.95	\$7,622.95
CATAWBA	100%	\$18,478.26	\$18,478.26
CHATHAM	88%	\$3,396.49	\$3,881.54
CLEVELAND	100%	\$29,949.90	\$29,949.90
CURRITUCK	100%	\$5,566.33	\$5,566.33
DUPLIN	100%	\$5,752.63	\$5,752.63
FORSYTH	45%	\$73,214.94	\$162,699.92
FRANKLIN	65%	\$2,294.04	\$3,529.29
GASTON	100%	\$2,542.10	\$2,542.10
GUILFORD	90%	\$49,360.63	\$54,845.14
HALIFAX	84%	\$8,296.05	\$9,912.71
HAYWOOD	100%	\$17,143.68	\$17,143.68
HERTFORD	100%	\$8,861.81	\$8,861.81
HYDE	100%	\$627.04	\$627.04
IREDELL	100%	\$53,957.84	\$53,957.84
JACKSON	100%	\$4,984.51	\$4,984.51
JONES	100%	\$3,803.20	\$3,803.20
MACDOWELL	100%	\$7,378.25	\$7,378.25
MACON	86%	\$10,197.36	\$11,797.04
MADISON	100%	\$3,126.63	\$3,126.63
MECKLENBURG	100%	\$58,427.44	\$58,427.44
MITCHELL	79%	\$8,329.20	\$10,532.80
NEW HANOVER	89%	\$31,212.28	\$35,265.24
NORTHAMPTON	100%	\$864.38	\$864.38
PASQUOTANK	94%	\$8,586.93	\$9,139.25
PE/CH/GA*	100%	\$8,882.98	\$8,882.98
PENDER	100%	\$9,033.01	\$9,033.01
PERSON	100%	\$2,362.00	\$2,362.00
ROCKINGHAM	100%	\$13,646.92	\$13,646.92
ROWAN	100%	\$24,858.92	\$24,858.92
RUTHERFORD	72%	\$5,130.00	\$7,107.61
SWAIN	100%	\$1,261.05	\$1,261.05
TRANSYLVANIA	100%	\$1,956.42	\$1,956.42
TYRRELL	100%	\$298.11	\$298.11
UNION	100%	\$2,807.89	\$2,807.89
WAKE	92%	\$42,274.23	\$45,934.82
WASHINGTON	100%	\$13,734.21	\$13,734.21
WAYNE	100%	\$10,397.71	\$10,397.71
WILKES	100%	\$16,361.59	\$16,361.59
WILSON	100%	\$8,627.65	\$8,627.65
YANCEY	86%	\$7,759.77	\$9,005.00
Totals		\$644,334.67	\$761,307.98

*Pe/Ch/Ga=Perquimans,Chowan, and Gates regional scrap tire management