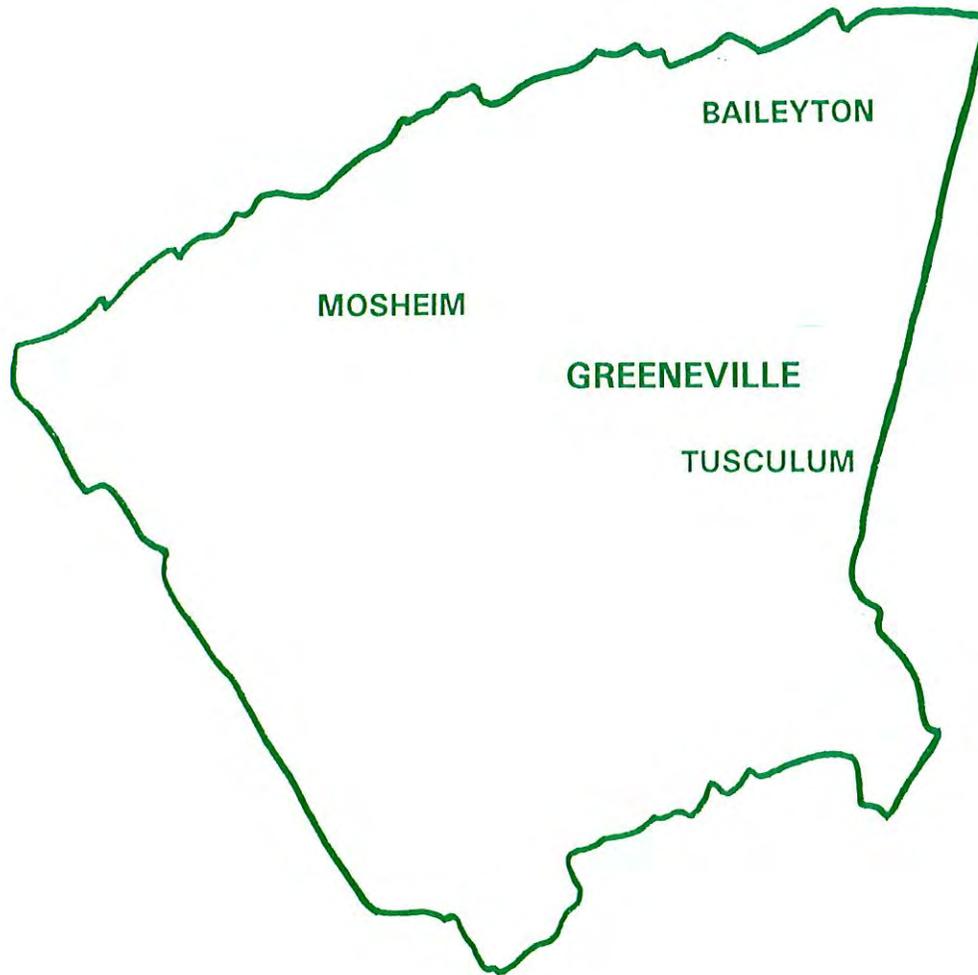


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GREENEVILLE GREENE COUNTY REGIONAL SOLID WASTE MANAGEMENT PLAN



Prepared by:
Greeneville/Greene County Solid Waste Planning Board
and
First Tennessee Development District

GREENE COUNTY REGIONAL SOLID WASTE MANAGEMENT PLAN

- CHAPTER 1 - Description of the Municipal Solid Waste Region**
- CHAPTER 2 - Analysis of the Current Solid Waste Management System for the Region**
- CHAPTER 3 - Growth Trends, Waste Projections, and Preliminary System Structures**
- CHAPTER 4 - Waste reduction**
- CHAPTER 5 - Waste Collection and Transportation**
- CHAPTER 6 - Recycling**
- CHAPTER 7 - Composting, Solid Waste Processing, Waste-to-Energy, and Incineration Capacity**
- CHAPTER 8 - Disposal Capacity**
- CHAPTER 9 - Public Information and Education**
- CHAPTER 10 - Problem Wastes**
- CHAPTER 11 - Implementation: Schedule, Staffing, and Funding**
- CHAPTER 12 - Allocation of Implementation Responsibilities: Plan Adoption and Submission**
- CHAPTER 13 - Flow Control and Permit Application review**

EXECUTIVE SUMMARY

Greene County Regional Solid Waste Plan

DESCRIPTION AND REGIONAL FORMATION

Greene County is located in the First Tennessee Development District and has utilized the Development District staff for solid waste planning assistance. The Region has four municipalities located within its boundaries. These municipalities include:

Baileyton	pop. 309
Greeneville	pop. 14,601
Mosheim	pop. 1,451
Tusculum	pop. 2,167

The County seat is Greeneville and the Region has a total estimated 1993 population of 56,099. Greene County covers 613 square miles and has a population density of 92 people/square mile. Greene County has elected to form a single county region because of unique situations only prevalent in this Region.

The County and the Town of Greeneville are successfully coordinating solid waste management and collection. The County/Town relationship has been very beneficial to all parties. The Region is operating a successful waste diversion program and will be able to meet the waste reduction requirements as a single county region.

CURRENT SOLID WASTE MANAGEMENT CONDITIONS

In 1994 the Region will dispose of nearly 87,638 tons of solid waste. Of this amount, approximately 33% is available for diversion to a Class IV landfill. Materials which are diverted to a Class IV facility are generally industrial sand, construction/demolition waste, and landscaping materials. In 1989 the Region was disposing of the total amount of solid waste in the Greeneville/Greene County Balefill.

Since 1989 the Greeneville/Greene County Balefill has been solely operated as a Class IV landfill to which the Region began diverting the Class IV waste. This diversion program has allowed the County to reduce its solid waste volume going to the Class I landfill by greater than 25%. This facility also is the site for the transfer station which processes waste for transportation to the Materials Recovery and Development Corporation in Rogersville, TN.

The Region is also operating a chipping/shredding operation at the current Greeneville/greene County Class IV landfill. Brush, wood pallets and other acceptable wood products are disposed of in the chipper/shredder and the mulch is either sold to the public at minimal cost or given to non-profit facilities for landscaping purposes.

Greeneville and Tusculum are currently the only two municipalities in the Region which provide door-to-door collection services to their residents. Other residents in the County are currently serviced by a green box system which currently has 67 locations. Greeneville and Greene County coordinate collection and transportation throughout the County.

All solid waste collected in the Region is transported to the transfer station for processing. Processed materials are currently being transported to Rogersville, TN until October 1994. After this time the Region will begin transporting wastes to either the BFI facility in Hawkins County or the Iris Glen Landfill in Johnson City, TN. Greene County will continue to operate a Class IV landfill for waste diversion. There are no waste-to-energy or incineration facilities in the region.

REGIONAL NEEDS

Collection

To meet the minimum level of service as required by the Solid Waste Management Act of 1991 Greene County is in the process of constructing a network of convenience centers throughout the Region. The County Commission has given approval to eventually construct twelve centers. The minimum number of centers required in Greene County is 3.

The County is set to open four of the centers, and will be in compliance with the requirements before the January 1996 deadline. County officials feel that a network of convenience centers will not only better serve the residents of the County, but will also help in reducing the amount of solid waste collected.

This is due to the fact that a great deal of out-of-county waste is currently being disposed of in the green boxes but will not be accepted at the manned convenience centers thus reducing the amount of waste collected in the County. Budgets on the construction and annual operation of the convenience centers are found in Chapter 5 of the Solid Waste Plan.

Composting

The Solid Waste Planning Board has not identified any immediate needs for composting strategies. Although the Region does not have a formal composting program, wood wastes are chipped for distribution to the public. This program eliminated 1,500 tons from the waste stream in 1992. The Planning Board has identified some alternatives in composting which the region may wish to consider in the future. These alternatives are centralized yard waste composting and to encourage back yard composting by homeowners.

Greene County is aware of the environmental benefits from composting yard and food wastes and encourages each household to participate in back yard composting, however at this time a composting program is not necessary for the Region to meet the 25% reduction goal but may be considered in the future.

Public Education

A Public Information and Education Task Force has been established by the Solid Waste Planning Board to "increase public awareness of our communities' responsibilities and choices, today and in the future, concerning solid waste". The Task Force established four goals:

- Encourage the participation of all Greene County residents in developing and implementing a solid waste plan.
- Sponsor solid waste program and projects.
- Support the efforts of the Solid Waste Planning Board as it designs and implements a comprehensive solid waste program for Greene County.
- Provide direction for the Planning Board in responding to media inquiries and in gaining media support in information dissemination.

Keep Greene Clean is another non-profit organization that provides public education for adults and children in Greene County. This group is responsible for public education on solid waste and recycling issues. Keep Greene Clean operates

several drop-off recycling facilities for newspaper collection. Keep Greene Clean has organized a community education effort which addresses curriculum, community issues and services, adult education, and child education.

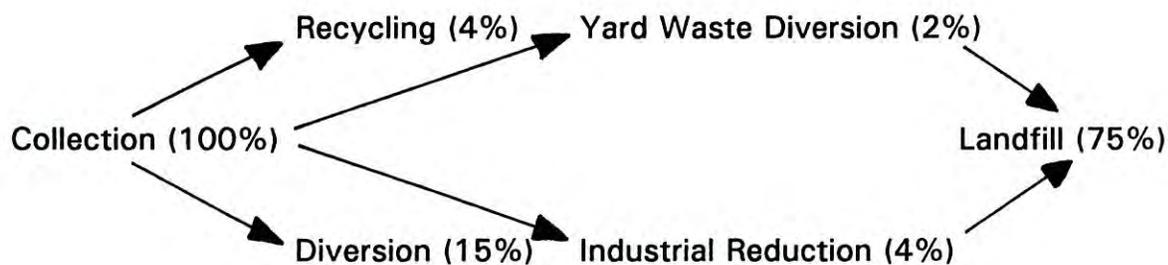
Recycling

The Solid Waste Planning Board has identified the need for Greene County to have a county-wide recycling program. Recycling has been ongoing in Greene County, Tusculum, and Greeneville for several years, however to provide the opportunity for more residents to recycle and reduce waste more drop-off locations throughout the County are necessary.

To address this need, Greene County is proposing to operate drop-off recycling centers at each of the proposed convenience centers. When the network of convenience centers is in full operation, this will mean twelve locations to drop-off recyclables.

The County recycling program will be enhanced by the private sector which will continue to offer buy-back programs for metals and cardboard. Businesses have the opportunity to subscribe to a cardboard recycling program operated by a private company.

SYSTEM ELEMENTS



IMPLEMENTATION SCHEDULE

Table ES-1

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Public Education Programs										
Initiate County-Wide Recycling Program										
Construct Convenience Centers										
Data Collection										
Begin Storing Batteries, Tires, and Auto Fluids at Approved Sites										
Begin Development of New Class IV Landfill										
Update to the Plan										
Consider Expanding Yard Waste Diversion Program										
Begin Transporting Waste to Carter Valley Landfill										

ALLOCATION OF RESPONSIBILITIES

The Greeneville/Greene County Solid Waste Planning board will be responsible for overseeing the County solid waste program. Since solid waste management in Greene County is a "partnership" between Greeneville and Greene County, each entity has equal interest in solid waste management in the County.

The landfill is managed by both the Town of Greeneville and Greene County and both play equal roles in budgeting and operation of the landfill and will continue to do so. Greene County will be responsible for the network of manned convenience centers and recycling facilities.

The Greeneville/Greene County Solid Waste Planning Board will review all permit applications and provide recommendations to Greeneville and Greene County. Public hearings will be held in accordance with Tennessee Code and final approval will be the responsibility of the Tennessee Department of Environment and Conservation.

Data collection and quarterly reporting of recyclables collected will be the responsibility of both the Town of Greeneville and Greene County. First Tennessee Development District will assist with reports if necessary.

Table ES-2

Expenditures

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Waste Collection	\$1,624,386	\$1,705,605	\$1,790,885	\$1,880,429	\$1,974,450	\$2,073,172	\$2,176,830	\$2,285,671	\$2,399,954	\$2,519,951
Landfill/Transfer Station	\$1,875,802	\$1,969,592	\$2,068,071	\$2,171,474	\$2,280,047	\$2,394,049	\$2,513,751	\$2,639,438	\$2,771,409	\$2,909,979
Costs for Disposal	\$224,000	\$825,870	\$876,163	\$919,521	\$965,497	\$1,013,771	\$1,064,459	\$1,117,681	\$1,173,565	\$1,232,243

A C.P.I. Index/Inflation rate of 5.0% was used

Table ES-3

Revenues

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Collection from Businesses	\$343,660	\$360,843	\$378,885	\$397,829	\$417,720	\$438,606	\$460,536	\$483,562	\$507,740	\$533,127
Tipping Fees	\$975,802	\$1,024,592	\$1,074,821	\$1,128,562	\$1,184,990	\$1,244,239	\$1,306,450	\$1,371,772	\$1,440,360	\$1,512,378

A C.P.I. Index/Inflation rate of 5.0% was used

CHAPTER 1

Description of the Municipal Solid Waste Region

GENERAL DESCRIPTION

Greene County has elected to form a single county municipal solid waste planning region. The County consists of four municipalities and has a population of 56,415. The municipalities are:

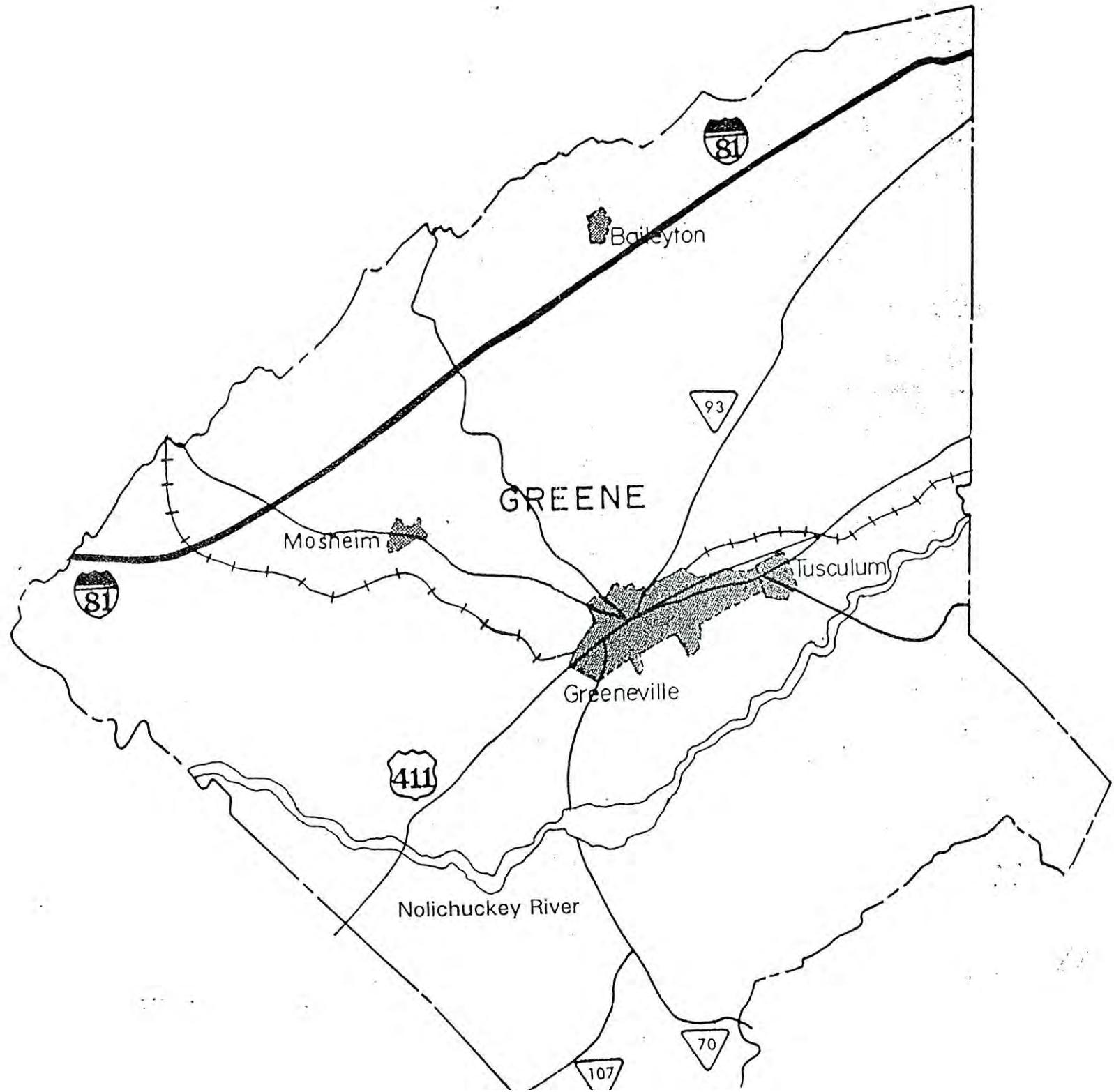
Baileyton	pop.309
Greeneville	pop.14,601
Mosheim	pop.1,451
Tusculum	pop.2,167

Greene County has an area of 613 square miles with a population density of 92 people/square mile. The Region is located within the First Tennessee Development District and has utilized the Development District in planning efforts

RATIONALE FOR REGIONAL FORMATION

Greene County is one of the largest counties in the State of Tennessee. The County has an active solid waste advisory committee/task force. Due to the size of the County, the Region has unique problems and solutions which are useful only to this region.

Greene County is financially capable of operating several types of waste reduction programs and is environmentally responsible and aware of the need for successful solid waste management. Greeneville, the largest city within the County, leads the way in solid waste management and many of the Counties programs are directed through the Greeneville/Greene County Solid Waste Planning Board.



INSTITUTIONAL STRUCTURE

Members of the Greeneville/Greene County Solid Waste Planning Board include:

<u>Name</u>	<u>Representing</u>	<u>Term</u>
Sarah Webster Chairperson	Greeneville	4 yr
Al Giles	Greeneville	2 yr
Bob Bird	Greeneville	6 yr
Robert Bird	Tusculum	6 yr
Delmar Teglas	Greene County	2 yr
Willie Good	Greene County	4 yr
Gary Rupert	Greene County	6 yr

The Greeneville/Greene County Solid Waste Planning Board is composed of members from county and city government, solid waste industry, and business. The matrix of the Board was chosen to expound on the knowledge of the citizens and other entities within the Region.

DEMOGRAPHICS

A study conducted by the University of Tennessee Department of Sociology showed that the projected 1993 population for Greene County is 56,099. This represents a population density of 92/square mile.

This study also shows that the population of the Region is expected to increase slightly until the year 2000. At this point the population is expected to begin declining. Although the population is expected to increase, it is not however expected to have a significant affect upon the waste generation rate of Greene County.

6. Distribution of the Total Regional Population by Sex and Age

Table I-3

Age	Total	Male	%	Female	%
0-4	3,203	1,615	50.4	1,588	49.6
5-17	9,594	4,959	51.7	4,635	48.3
18-44	22,355	11,056	49.5	11,299	50.5
45-64	12,966	6,313	48.7	6,653	51.3
65+	7,735	3,083	39.9	4,652	60.1
Regional Total	55,853	27,026	48.4	28,827	51.6

7. Distribution of Regional Population by Education (Age \geq 25)

Table I-4

	Number	%
Less than 9th Grade	8,984	24
Grades 9th -12th (no diploma)	6,753	18
High School Graduates	12,130	32
College (1-4) and Graduates	8,449	22
Post-Graduate/Professional (> 4)	1,272	3
Regional Total	37,588	99

8. Total Number of Households in Region 21,482

9. Distribution by Type of Housing and Occupancy

Table I-5

	Total Units	Occupied	Owner	Rented
Single Family 1, Detached	16,856	15,721	13,300	2,421
1, Attached	224	205	111	94
Multi-Family 2	452	398	67	331
3-4	478	441	26	415
5-9	501	446	19	427
10-19	427	343	0	343
20-49	-	0	0	0
50 or More	-	0	0	0
Institutional				
Mobile Home/Trailer	4,104	3,734	2,890	844
Other	228	194	135	59
Regional Total	23,270	21,482	16,548	4,934

10. Regional Population Projections 1994-2003

Table I-6

Regional Population 1990 56,415

County	1994	1995	1996	1997	1998
Greene	56,177	56,280	56,340	56,425	56,504
Regional Total	56,177	56,280	56,340	56,425	56,504

County	1999	2000	2001	2002	2003
Greene	56,587	56,664	56,612	56,547	56,497
Regional Total	56,587	56,664	56,612	56,547	56,497

ECONOMIC ACTIVITY

Greene County is a economically prospering county, however there are currently no plans for a major increase in economic development which would greatly affect solid waste generation in the Region.

The County is experiencing economic growth, but much of the growth is not expected to increase waste generation. It is also not anticipated that the generation rate will decline due to economic activity. Growth of major industry is always possible in the region and the Solid Waste Task Force will continue to monitor economic activity to determine if adjustments in the Plan need to be made as a result of economic growth.

1. Basic Economic Information, for each County, and the Region in 1991.

Table I-7

County	Population	MSA County yes/no	Total Employed	Total Earnings	Per Capita Income	% Pop. Below Poverty Line
Greene	56,415	No	25,126	\$500 million	12,195	14.9
Regional Total	56,415	No	25,126	\$500 million	12,195	14.9

2. Non-Agricultural Employment, by Sector, in 1993 20,221

Table I-8

% of Total Employment

County	Manufac- -turing	Const.	Trade	Finance	Service	Gov't.	Transp ort. Public Utilities
Greene	10,363	565	3,750	418	2,948	1,858	319
Regional Total	10,363	565	3,750	418	2,948	1,858	319
%	51.2	2.8	18.5	2.1	14.6	9.2	1.6

3. Total Agricultural Employment in 1990 4,905

Table I-9

Agricultural Employees

County	Employment
Greene	4,905
Regional Total	4,905

4. Prepare a regional summary of major generators of commercial and non-hazardous industrial waste in 1991. Use data from Table II-2 in County Economic Activity Profiles in District Needs Assessment, or data collected subsequently for the regional plan. state size criteria applied in each county (i.e., all generators > 100 employees, all generators > 50 employees, etc.)

Table I-10

County	Screening Criteria Applied	Number of Generators	Estimated Total Quantity of Waste
Greene	> 50 employees	32	*1,344 tons
Regional Total		32	*1,344 tons

* Generated from industrial survey responses.

5. Prepare a Regional Summary of Institutions Housing more than 100 persons.

Table I-11

County	Total Number of Institutions	Total Number of Students, Prisoners, or Residents	Estimated Quantity of Waste Generated
Greene	1 College	812	N/A
Regional Total	1 College	812	

6. Provide summary data on major health care facilities (larger than 50 beds), (hospitals, nursing homes) in the region.

Table I-12

Infectious Waste Mngt.

County	No. of Facilities	No. of Beds	OnSite/ OffSite	Type of Treatment	Est. Quantity of Solid Waste Generated
Greene	5	709	1 OnSite/ 4 OffSite	Incineration	* N/A
Regional Total	5	709			*N/A

* No consistent means of estimating quantity of waste generated.

7. Sources of local revenues utilized in the region. Check all relevant boxes.

Table I-13

County	Property Tax	Wheel Tax	Local Sales Tax	Local Waste Collection Fee	User Fee/ Tipping Fee	*Other
Greene	X	X	X		X	X
Regional Total						

* Severance tax imposed on mining operations.

8. Provide the following data for fiscal 1990.

Table I-14

County	Total Assessed Prop. Value	Total Prop. Tax Revenue	Total Sales Subject to Sales Tax	Total Local Sales Tax Revenue	Number of Registered Vehicles	Total Wheel Tax Revenue
Greene	\$ 350 million	\$9.84 million	\$258 million	\$6.46 million	48,028	\$960,560
Regional Total	\$350 million	\$9.94 million	\$258 million	\$6.46 million	48,028	\$960,560

1990 edition of the State and Local Government Survey.

CHAPTER II

Analysis of the Current Solid Waste Management System for the Region

WASTE STREAM CHARACTERIZATION

The information collected for this chapter is found in the District Needs Assessment. Table II-1 thru II-9 are a reaggregation of the data in the Needs Assessment.

1. Quantity of Solid Waste Received for Disposal/Incineration in Calendar year 1991.

Table II-1

County	Tons Disposed	Population (1991)	Waste Disposed per Capita
Greene	85,878	55,930	1.56 tons
Regional Total	85,878	55,930	1.56 tons

2. Origin of Regional Solid Waste in 1991

Table II-2

County	Residential	Institutional/ Commercial	Non-hazardous Industrial	Special	Other
Greene	33,427 T	6,552 T	31,348 T	1,359 T	13,192 T
Regional Total	33,427 T	6,552 T	31,348 T	1,359 T	13,192 T

3. Acceptance of Certain Categories of Solid Waste for Disposal or Incineration

Table II-3

County/ Facility	Yard Waste (Clippings, leaves, grass)		Sewage Sludge		Construction/ Demolition		Tires		White Goods	
	Y/N	Qty	Y/N	Qty	Y/N	Qty	Y/N	Qty	Y/N	Qty
Greene Co. Balefill	Y	2,885 T	Y	60 T	Y	13,000 T	Y	223 T	Y	N/A
Regional Total		2,885 T		60 T		13,000 T		223 T		

* White Goods - discarded major appliances, such as refrigerators, ranges, etc.

4. Description of the Waste Stream by Materials

Table II-4

Waste Category	National %	Calculated Regional Tons
Paper & paperboard	40.0	21,812
Glass	7.0	3,777
Ferrous Metals	6.5	3,605
Aluminum	1.4	342
Non-Ferrous Metals	0.6	514
Plastics	8.0	4,292
Rubber & Leather	2.5	1,459
Textiles	2.1	1,115
Wood	3.6	5,323
Food Waste	7.4	4,550
Yard Waste	17.6	5,322
Misc. Inorganic Waste	1.5	771
Other	1.7	32,996
Total	100.0	85,878

5. Unmanaged Waste*

Table II-5

County	Potential Waste Generation 1991 TPY	Actual Waste Disposed 1991 TPY	Unmanaged Waste 1991 (potential/actual) TPY	Percent of Potential Total
Greene	61,743	85,878	0	100%
Regional Total	61,743	85,878	0	100%

* Wastes that are outside the collection system such as materials in roadside dumps, litter, etc.

WASTE COLLECTION AND TRANSPORTATION SYSTEMS

The location of all collection systems and transportation routes are found on the regional system map found later in this chapter.

1. The following is a list of collection system elements and the number of households each element serves.

	Number of Households
Convenience Centers	0
Green Boxes	15,392
House-to-House	5,300
Direct Commercial/ Contracted Service	790
No Service	0

2. The Towns of Tusculum and Greeneville provide house-to-house collection service for their residents. The following table indicates the number of households served by each town.

	Number of Households
Town of Greeneville	4,700
City of Tusculum	600

There are 167 green box locations that have 373 containers at them throughout the Region. Many of these green boxes are located at businesses and industries but are utilized by the citizens of Greene County.

SOURCE REDUCTION AND RECYCLING SYSTEMS

All of the source reduction and recycling systems are located on the system map located in this chapter. The following table contains a list of publicly operated non-profit recycling programs and the approximate service area of each.

Location	Service Area	Type
Keep Greene Clean/ Town of Greeneville	Greene County	Drop-Off
City of Tusculum	Tusculum	Door-to-Door

There are two for-profit recycling programs in the Region. These are:

Location	Service Area	Type
Greeneville Iron and Paper	Greene County	Buy-Back
West Main Street Pawn Shop	Greene County	Buy-Back

WASTE PROCESSING, COMPOSTING, AND WASTE-TO-ENERGY/INCINERATION SYSTEMS

1. Waste Processing Facilities

Facility	Life Remaining	Class
Greeneville/Greene County Demolition Landfill	1 yr	IV
	2-5	

From February 1983 to November 1992 the Greeneville/Greene County Landfill was operated as a Class I Balefill. In November of 1992, the Landfill was closed and the Region began transporting waste to Materials Recovery and Development Corporation in Rogersville, Tennessee.

When the Class I facility closed the Region began utilizing it as a construction/demolition landfill. The original permit for the Class I facility was for 56 acres. All Class I permits for the Balefill were transferred to the Materials Recovery and Development Corporation.

Table II-6

6. Operating and Planned Composting Facilities in the Region

Existing

County	Facility Location	Tons of Waste Processed/Yr	Yard Waste	Sewage Sludge	Solid Waste

Planned

County	Facility Location	Tons of Waste Processed/Yr	Yard Waste	Sewage Sludge	Solid Waste

7. Municipal Solid Waste Incinerators or Waste-to-Energy Facilities in the Region

Table II-7

Operating Facilities

County	Facility Location	Design Capacity tons/yr	Current Use tons/yr	Anticipated Operating Life of Facility

Planned Facilities

County	Facility Location	Design Capacity tons/yr	Current Use tons/yr	Anticipated Operating Life of Facility

8. Existing Municipal Solid Waste Landfills in the Region

Table II-8

County	Name of Landfill	Location	Permitted Capacity (Acres)	Current Rate of Waste Accepted (tons/day)	Remaining Capacity (tons)
Greene	*Greenville/ Greene County Class IV Landfill	Greenville	56 acres	165 tons/day	N/A
Regional Total			56 acres	165 tons/day	N/A

* The Greenville/Greene County Landfill was originally permitted as a Class I Balefill. The Balefill was closed in 1992 and remaining space is being used as a Class IV landfill.

9. Existing Landfills Expected to Close Before 2003

Table II-9

County	Location	Current Use (tons/Day)	Current Annual Use (tons/year)	Anticipated Date of Closure
Greene	Greeneville	165 tons/day	51,456 tons/year	1995
Regional Total		165 tons/day	51,456 tons/year	

10. Planned Expansions and Planned New Facilities Which Will Operate for Ten Years or More.

Table II-10

Facility

County	Expan.	New	Location	When Will Capacity be Available	Permitted Capacity Sought (acre)	Design Rate of Waste (tpd) Disposed	Potential Expansion yes/no
Regional Total							

11. Total Existing and Planned Capacity in the Region at the Close of the Next Ten Years

Table II-11

TONS

Year	Existing	Planned	Total
FY 1993			
FY 1994			
FY 1995			
FY 1996			
FY 1997			
FY 1998			
FY 1999			
FY 2000			
FY 2001			
FY 2002			
FY 2003			

The Greene County Solid Waste Planning Region does not have any existing or planned capacity to dispose of Class I solid waste.

DISPOSAL FACILITIES - LANDFILLS AND BALEFILLS

Greeneville/Greene County Landfill SNL-30-104-0190

Background

The Greeneville/Greene County Landfill is located on Old Stage Road off of highway 11E. The landfill is operated by Greeneville/Greene County. The landfill was originally permitted in 1983 as a Class I Balefill. It was permitted for 56 acres. The landfill is surrounded by pine trees to serve as a noise and sight buffer.

In 1992 the Balefill was closed and all municipal solid waste generated in Greene County was then transported to Materials Recovery and Development Corporation in Rogersville, Tennessee. All of the Class I permits issued to Greene County were transferred to Materials Recovery and Development Corporation.

When the Class I facility was closed the Region received a permit to operate the remaining life of the landfill as a Class IV facility. Since November 1992 the Greeneville/Greene County Balefill has been accepting construction/demolition waste only, and will now be referred to in this Plan as the Greeneville/Greene County Class IV Landfill.

Waste Description

Since the landfill became a Class IV facility, most of the waste being accepted is from industrial sources. 14% is from institutional sources, 17% is from commercial sources, 32% is from residential sources, and 37% is from industrial (non-hazardous) sources. The landfill is permitted to accepted brush and leaf debris from residential sources after the material has been shredded using the shredder purchased by the Region .

The industrial (non-hazardous) element of the waste is primarily industrial sand. In 1993 the landfill accepted 32,140 tons of industrial sand. Approximately 856 tons/year of Industrial sludges and 300 tons/year of waste tires are also accepted at the landfill. 5,300 tons/year of the waste accepted is yard debris and approximately 7,000 tons/year of the waste is from construction/demolition sources.

Current Conditions

The landfill is operated by Greeneville/Greene County and the person responsible for the site is Bob Bird. Operating hours for the site are from 7:00 a.m. - 3:00 p.m. Monday thru Friday and 7:00 a.m. - 11:00 a.m. on Saturday.

The landfill is used by Greene County, Greeneville, Mosheim, Tusculum, Baileyton, and major industries such as Minco Industries, Phillips Consumer Electronics, Cherokee Wood Products, and Doehler-Jarvis.

The tipping fees at the landfill are:

\$10.85 - Skids, Pallets, and Yard Waste

\$15.85 - Industrial Sand

\$25.85 - Demolition Waste

\$29.50 - Commercial, Industrial, Domestic, and Residential Waste

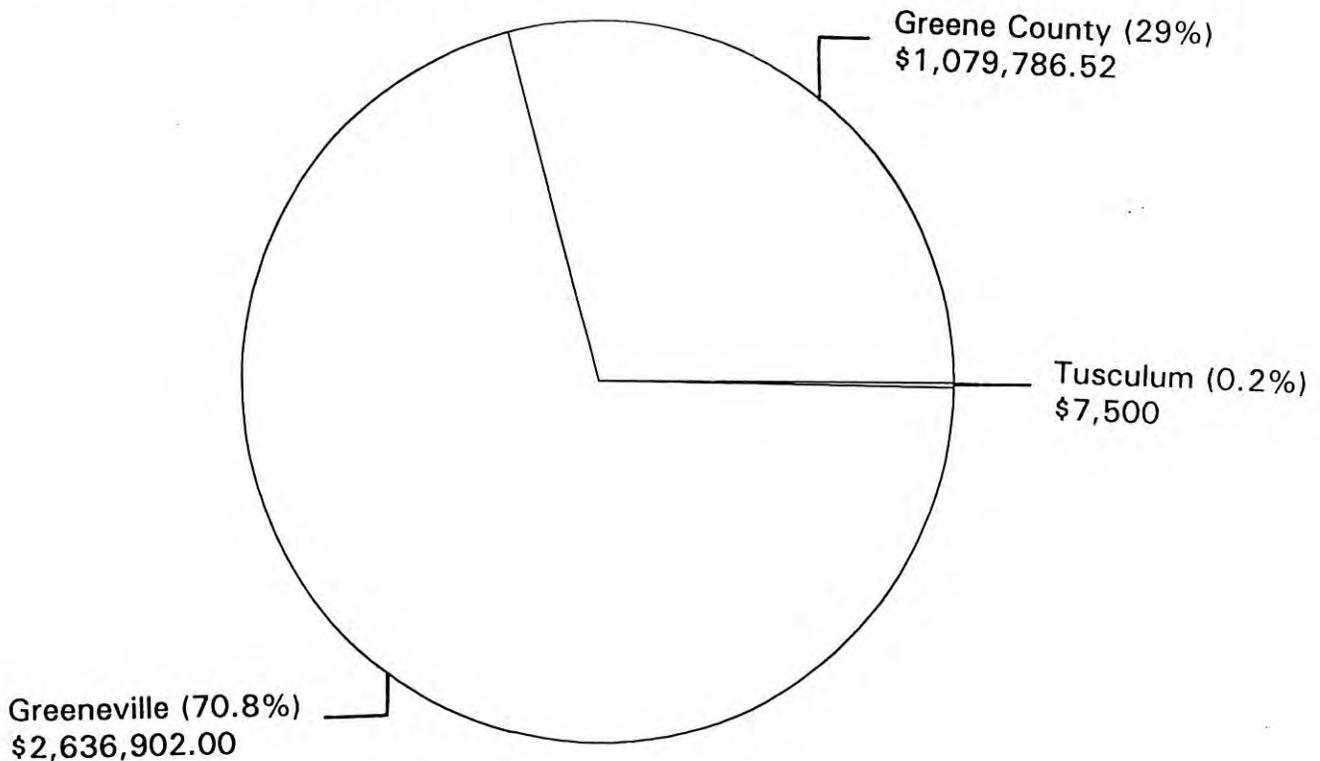
Future Plans

The Greeneville/Greene County Class IV Landfill is expected to close in 1995. At this the County is hopeful in having a new Class IV facility in operation or close to operation.

Other Disposal Facilities

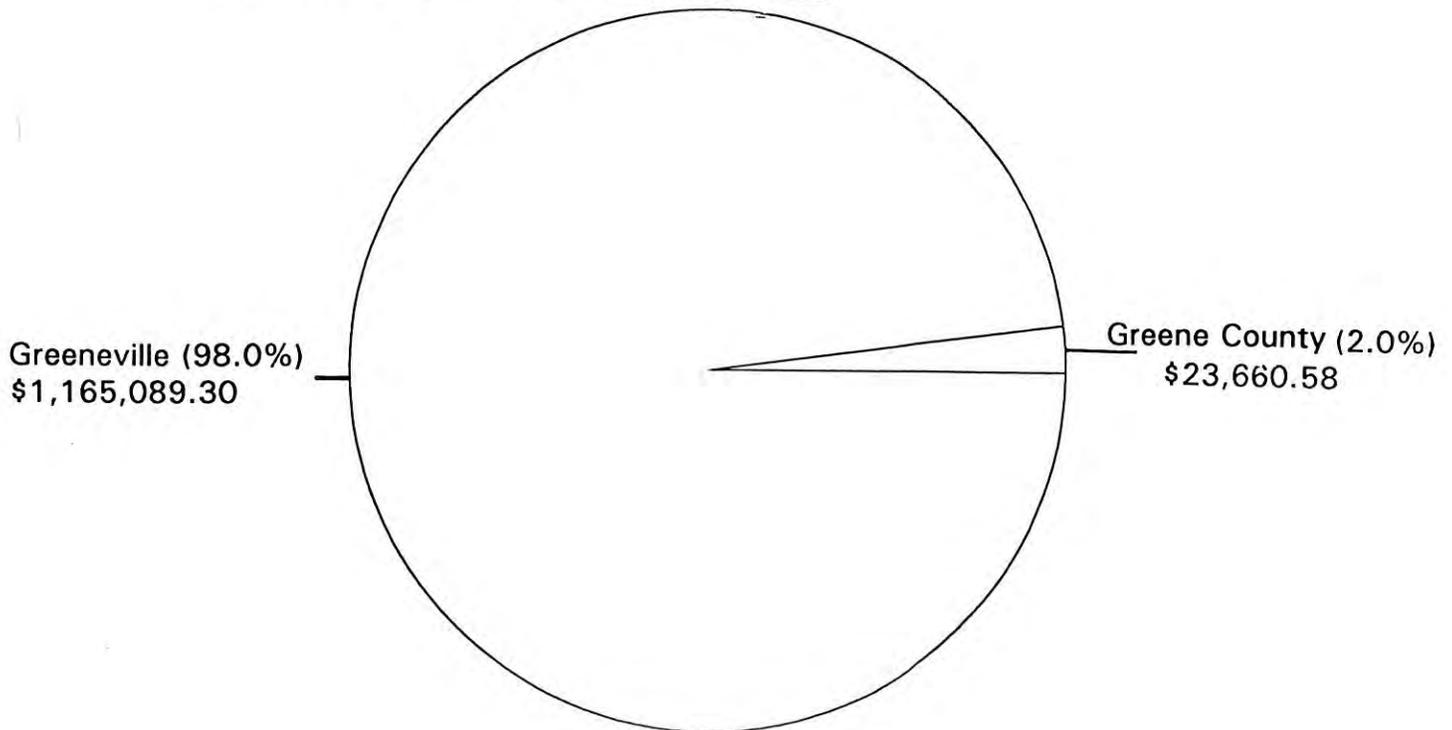
The Greeneville/Greene County Class IV landfill is the only disposal facility located in the region at this time.

COSTS OF THE CURRENT SYSTEM



Costs of the current system include transportation, disposal, and collection.

REVENUES FROM THE CURRENT SYSTEM



Revenues from current system include business collection in Greeneville and tipping fees and collection in Greene County.

The Greeneville/Greene County Regional Solid Waste Planning Board established a Public Information and Education Task Force Committee to begin a public information campaign concerning solid waste issues. The mission statement of the Public Information and Education Task Force (PI&E) is "to increase public awareness of our communities' responsibilities and choices, today and in the future, concerning solid waste."

The general goals of the PI&E Committee are:

- To understand solid waste in our community.
- To collect information on the solid waste issues facing our community.
- To disseminate that information to everyone in the community.

The PI&E Committee has prepared press releases on the activities of the Solid Waste Planning Board as well as launch a series of bimonthly meetings designed to inform the community on solid waste issues.

Keep Greene Clean is another public information and education program operating within Greene County. Keep Greene Clean is affiliated with Keep America Beautiful and has been responsible for public education efforts with adults and children. Greene County is fortunate to have several non-profit organizations that have been identified by the Solid Waste Planning Board as being potentially involved with solid waste management. These groups include: 4-H clubs, Toastmasters, Chamber of Commerce, PTA/GSIA, Ruritans, Civitans, Extension Home Economist, and Home Makers Club.

PROBLEM WASTES

Specific management techniques for each of the special wastes will be discussed in detail in Chapter X. Greene County does not dispose of whole waste tires, lead acid batteries or waste oil at the Greeneville/Greene County Landfill.

The Region recognizes the need to have storage sites for each of these special wastes by January 1, 1995 and will be in full compliance with these regulations by this date.

SYSTEM MAP FOR BASE YEAR (1993)

A complete system map which shows each element of the existing solid waste management system is included in this chapter.

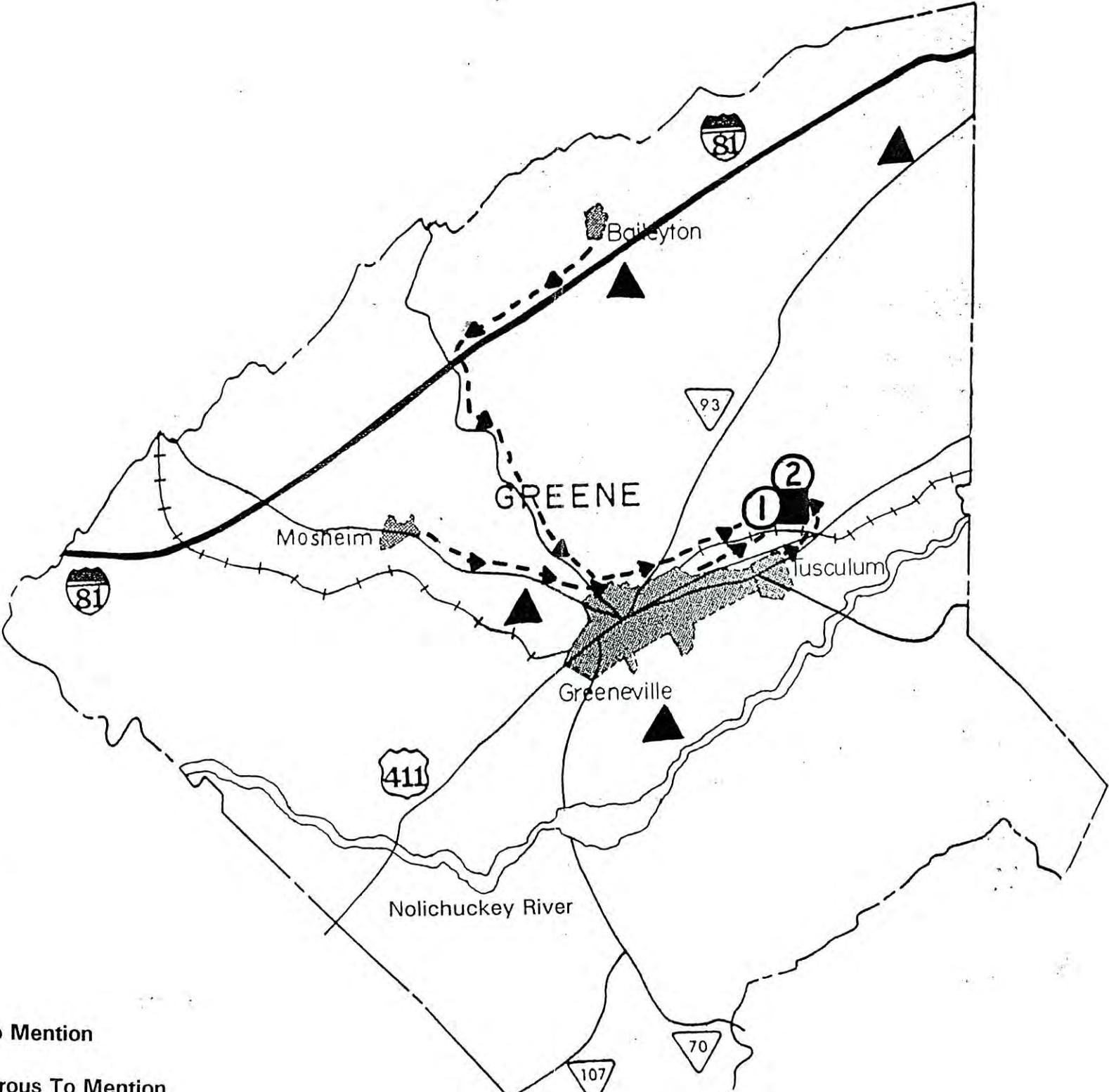
STRENGTHS AND WEAKNESSES OF THE EXISTING SYSTEM

Strengths

- Construction/Demolition Landfill in place to allow the Region to adequately reduce the amount of waste going to a Class I facility.
- Active Solid Waste Planning Board and Public Information and Education Task Force.
- The Region is in close proximity to several Class I landfills which encourages competition to allow the Region to get the lowest tipping fee.

Weaknesses

- The Region currently does not have adequate collection services for all of the residents.
- Life span of the construction/demolition landfill is expected to end in 1995.
- A county-wide recycling program is necessary to enable the County to maintain the 25% waste reduction goal.



■ Greeneville/Greene County Landfill

① Transfer Station

② Chipping/Shredding Operation

▲ Existing Convenience Center Sites

--- Transportation Routes

▲ Recycling Locations

27 Public Schools Too Numerous To Mention

87 Greene Box Locations Too Numerous To Mention

CHAPTER III

Growth Trends, Waste Projections, and Preliminary System Structures

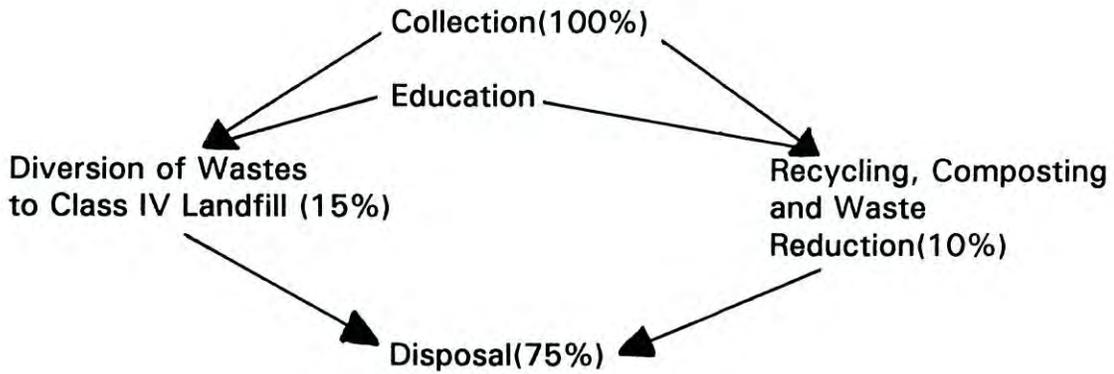
A. Projections of the solid waste quantities through 2003 are found in tables III-1 through III-8.

Preliminary System Design

The Greene County Regional Solid Waste Management Plan will include five major components. The five components will provide the Region with a truly integrated waste management system. The components of the plan are similar to those outlined in the Solid Waste Management Act of 1991. The five components of the system are:

1. Collection and Transportation
2. Public Education
3. Recycling, Composting and Waste Reduction
4. Management of Special wastes
5. Disposal

Greene County will reach the 25% waste reduction goal, as mandated by the State of Tennessee, through a variety of strategies. The following flow diagram illustrates how the region will manage each component of the system. The target goals for each component are the waste reduction goals established by the region. After waste reduction is completed, 75% of the solid waste stream will be landfilled.



The waste stream in the Region has a large percentage of special wastes as defined by the Solid Waste Management Act of 1991. Industrial sand, industrial and municipal wastewater treatment plant sludges, and Shredded tires are a few of the special wastes currently accepted at the Greeneville/Greene County Class IV Landfill.

Special wastes makeup approximately 40% of the 1991 solid waste stream. a majority of the special wastes will be diverted to a Class IV landfill and will thus reduce the volume of solid waste going to the Class I landfill. Also included in the special waste category is Household Hazardous Waste. Greene County will participate in an annual Household Hazardous Waste collection event sponsored by the Solid Waste Task Force. Although Household Hazardous Wastes comprise only about 1% of the total waste stream, Greene County officials realize the need to prevent these potentially hazardous materials from entering landfills.

Approximately 12% of the waste stream is composed of yard wastes and construction/demolition wastes. Wood, brush, leaves, etc. will be ground and shredded to be disposed of in a construction demolition landfill. To reach the 25% reduction goal the region will use five strategies. These strategies are:

1. Recycling
2. Diversion
3. Composting
4. Special Waste Management
5. Industrial Waste Reduction

Recycling will be an important component in the integrated solid waste management system. Currently the region is fortunate to have several private entities offering buy-back programs for the residents. The County also has programs sponsored by Keep Greene Clean in conjunction with area businesses and service groups. Although the County's recycling program is still in its infancy, it has gained support as public recognition of the need to recycle has increased.

Evaluation Criteria

Specific strategies of the solid waste system will be evaluated in later chapters. To determine the success of the integrated system the following criteria will be used:

1. Public Acceptance of the Plan
2. Implementation of the Proposed Plan
3. Environmental Impacts
4. Calculations of Waste Reduction Volumes
5. Compliance with Current and Proposed State Regulations

CHAPTER III: FORMS

1. Complete the following table, summarizing calculations of annual per capita solid waste generation rates for each county in the region.

Table III-1

County	Total Class I Waste Disposed in FY 1993	Projected Population 1993	Annual Per Capita Generation Rate Tons/Person/Yr
Greene	38,441 tons	56,099	0.68
Regional Total	38,441 tons	56,099	0.68

2. Summarize the projected quantity of solid waste requiring disposal in the region in each projected year, adjusted for population changes.

Table III-2

Quantity of Solid Waste Requiring Disposal (tons)

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Greene	87,636	87,796	87,890	88,023	88,146	88,275	88,395	88,314	88,213	88,135
Total	87,636	87,796	87,890	88,023	88,146	88,275	88,395	88,314	88,213	88,315

3. Summarize the projected quantity of solid waste requiring disposal in the region for each projection year, adjusted for population growth and economic growth.

Table III-3

Quantity of Solid Waste Requiring Disposal (in tons) Adjusted for Population and Economic Growth

County	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Greene	90,128	90,350	90,563	90,816	91,007	91,240	91,466	91,701	91,931	91,963
Total	90,128	90,350	90,563	90,816	91,007	91,240	91,466	91,701	91,931	91,963

4. Summarize the projected quantities of solid waste requiring disposal (= generation) for each projection year, adjusted for population growth, economic growth, and source reduction, recycling, and industrial process change.

Table III-4

Quantity of Waste Requiring Disposal (in tons) Adjusted for Population Changes, Economic Growth, and Waste Reduction and Recycling

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Greene	74,262	68,112	68,256	68,430	68,600	68,776	68,949	68,973	68,984	69,016
Total	74,262	68,112	68,256	68,430	68,600	68,776	68,949	68,973	68,984	69,016

8. Prepare a Summary Table indicating projected quantities of solid waste which will require collection and disposal in each projection year, after adjustment for all applicable factors.

Table III-8

Annual Projections of Solid Waste Requiring Disposal Adjusted for All Applicable Factors (in tons/year)

County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Greene	74,262	68,112	68,256	68,430	68,600	68,776	68,949	68,973	68,984	69,016
Total	74,262	68,112	68,256	68,430	68,600	68,776	68,949	68,973	68,984	69,016

CHAPTER IV

Waste Reduction

ESTABLISHING A BASE YEAR QUANTITY

Table IV-1

County	1989 Population	1989 Total Waste Disposed (tons)	Waste Generation Rate Per Capita
Greene	56,250	31,200	0.55
Regional Total	56,250	31,200	0.55

Results of the University of Tennessee study entitled "Solid Waste Planning for Tennessee", showed that Greene County disposed of 31,200 tons of solid waste in 1989. This volume resulted in a calculation of 0.55 tons/person/year. Greene County has applied for a variance to adjust the base year quantity as reported by the UT Study. Greene County sought to adjust the base year disposal volume to 62,548 tons.

Table IV-2
Adjusted Base Disposal Rate

County	1989 Population	1989 Total Waste Disposed (tons)	Waste Generation Rate Per Capita
Greene	56,250	62,548	1.11
Regional Total	56,250	62,548	1.11

Supporting documentation and approval letters for the Region are found in Appendix B.

1995 TARGET PER CAPITA WASTE GENERATION RATE

This calculation will be done using the adjusted base year figure.

$$1.11 \times .25 = 0.28 \text{ (target 1995 per capita reduction)}$$

$$0.28 \text{ tons/person/year} \times 56,280 \text{ (1995 population)} = 15,758 \text{ tons} \\ \text{(1995 target reduction)}$$

STRATEGIES FOR REACHING THE WASTE REDUCTION GOAL

Regional Goals

The goals of the Greene County Solid Waste Planning Region are to successfully reach the 25% waste reduction goal through recycling, industrial reduction, diversion, and yard waste diversion. To continue to comply with State mandates regulating waste reduction through the next ten years, the Region will continue to expand existing waste reduction programs and operate a Class IV landfill.

Table IV-1
Projected Waste Reduction by Materials

Material	Regional Tons	Tons Reduced
Paper and Paperboard	21,812	6,303
Glass	3,777	1,103
Ferrous Metals	3,605	1,024
Aluminum	342	220
Non-Ferrous Metals	514	94
Plastics	4,292	1,260
Rubber and Leather	1,459	394
Textiles	1,115	331
Wood	5,323	567
Food Wastes	4,550	1,166
Yard Wastes	5,322	2,773
Misc. Inorganic Wastes	771	236
Other	32,996	267
Regional Total	85,878	15,738

**Table IV-2
Projected Waste Reduction by Economic Sector (tons)**

County	Residential	Commercial	Institutional	Industrial	Total
Greene	1,575	1,575	790	11,818	15,758
Regional Total	1,575	1,575	790	11,818	15,758

**Table IV-3
Projected Waste Reduction by Year**

County	1994	1995	1996	1997	1998
Greene	21,909	21,949	21,972	22,005	22,036
Regional Total	21,909	21,949	21,972	22,005	22,036

County	1999	2000	2001	2002	2003
Greene	22,068	22,098	22,078	22,053	22,033
Regional Total	22,068	22,098	22,078	22,053	22,033

Recycling

One of the strategies identified by the Planning Board to reduce solid waste is county-wide recycling. The Region currently has several for-profit and non-profit organizations that operate drop-off recycling programs. From 1991 to 1993 Greenville Iron and Paper was collecting recyclables from three drop-off locations in the County. The drop-off locations were operated by the Town of Greenville, but Greenville Iron and Paper provided the collection.

Greenville Iron and Paper discontinued the service in 1993 due to increasing costs and contaminated loads. Since this time the Region has operated drop-off facilities through the Keep Greene Clean organization. Paper products and aluminum cans are among the items collected at these locations.

The City of Tusculum also offers door-to-door collection of recyclables to all of the residents. The recycling program is still in its infancy but is gaining momentum as public education has helped to inform the public of the need to recycle. The Planning Board recommends that the Region study the possibilities of expanding the amount of drop-off facilities through recycling grants from the Division of Solid Waste Assistance. Along with composting and waste reduction, these strategies will account for a 10% reduction in the amount of waste going to the Class I Landfill.

Yard Waste Diversion

Greene County is fortunate to own a chipper/shredder which is located at the Greeneville/Greene County Landfill. All wood waste and yard wastes are shredded at the facility and either disposed of in the Class IV landfill or sold to the public at minimal cost.

Although this strategy is not true "composting" it does eliminate the material from the waste stream and provides composting material for individuals that wish to purchase the product. Approximately 1,500 tons of wood and yard waste were shredded during 1992, the first year of operation.

Diversion

Diversion is the main strategy that will allow Greene County to meet the waste reduction goal of 25%. The Greeneville/Greene County Landfill is a Class IV facility which is the disposal option for nearly all of the construction/demolition and special non-hazardous wastes generated in Greene County.

Special non-hazardous wastes and construction/demolition materials represent approximately 45,000 tons of waste annually. With the close of the current Class IV facility coming in 1995, Greene County officials plan to construct a new Class IV facility in the Region and have already began the permitting process.

**Table IV-4
Amount of Reduction by Strategy**

Diversion	15%
Yard Waste Diversion	2%
Recycling	4%
Industrial Reduction	4%
	<hr/>
	25%

Regulatory Bans and Economic Incentives or Disincentives

There are no regulatory bans in place in the Region however the County does monitor the contents of all material that is disposed in the landfill. Although this is not a regulatory ban it does succeed in ensuring that only non-hazardous materials or those not regulated by the State, enter the landfill.

Although there are no economic incentives or disincentives in place, the Planning Board identified several options of placing incentives on solid waste collection. These include:

Disposal bans - Do not accept any recyclable materials at the landfill such as paper, aluminum, and glass.

Adjusted disposal fees at the landfill - Charge a higher tipping fee to those who do not recycle.

Establish a pay-per-container system - This method encourages source reduction to limit the amount being paid for collection services.

Implementation Schedule

Table IV-5

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Initiate Class IV Landfill Construction										
Public Education										
Data Collection										
Recycling Reports										
Plan Updates										

Plan Updates and Data Collection

Data collection for upkeep of recycling reports and records will be the responsibility of Greeneville personnel. The Town of Greeneville will coordinate all data collection activities and report submittal. All data will be filed at the Greeneville Town Hall.

Information needed for annual progress reports will be compiled by the Regional Solid Waste Planning Board with the assistance of the First Tennessee Development District. The Development District will assist the County in submitting these progress reports to the State.

Table IV-6
Estimated Quantities of Waste Removed or Diverted From the Waste Stream (tons)

Year	Previous Reduction	Recovered & Recycled	Diverted to Alternative Disposal	Economic Incentives	Other	Total
1985 to 1989						
1990						
1991						
1992			31,340			31,340
1993			31,340			31,340
1994		165	14,898			18,568
1995		3,511	14,925		3,511	21,947
Subtotal		3,676	92,503		3,676	103,195
1996		3,515	14,941		3,515	21,971
1997		3,520	14,963		3,520	22,003
1998		3,525	14,984		3,525	22,034
1999		3,531	15,006		3,531	22,068
2000		3,535	15,027		3,535	22,097
2001		3,532	15,013		3,532	22,077
2002		3,528	14,996		3,528	22,062
2003		3,525	14,983		3,525	22,033
Total		31,887	212,416		35,227	279,540

CHAPTER V

Waste Collection and Transportation

EXISTING CONDITIONS

The Solid Waste Management Act of 1991 requires that each county shall provide a minimum level of service consisting of a network of convenience centers located throughout the county. Two formulas are available to determine the minimum number of convenience centers required in each county. The minimum number of convenience centers required in Greene County is based on the formula:

$$\frac{613.1 \text{ square miles (area of the County)}}{180 \text{ (constant)}} = 3.40 = 3.00$$

Currently the Region is not operating convenience centers for collection of solid waste. Collection needs are currently being met through a system of green boxes located throughout the Region. There are approximately 167 green box locations in the Region for public use. The Regional Solid Waste Planning Board recognizes that the green box system does not meet the minimum requirements of the Solid Waste Management Act of 1991.

The current county-wide green box collection system consists of six, 31 cubic yard front-loading collection trucks. This service is provided to the residents at no extra costs. It is funded from general county revenues. Commercial collection is provided by Greeneville and Greene County. Greeneville serves 600 business-owned containers in and out of the Town. Users are billed according to the size of the container and frequency of collection. The County provides commercial service the 68 businesses using the same billing process as the Town. The County does have regulations as to what can be collected in the business owned boxes. Table V-1 shows the commercial collection rate schedule for the Town and County.

Table V-1

Commercial Garbage Collection Rate Schedule - Monthly Charges

Schedule	SWACAR	8 yd.	6 yd.	4 yd.	3 yd.	2 yd.	Totes or Bags
1 per week	\$131.00	\$45.50	\$34.00	\$23.00	\$17.00	\$12.00	\$7.50
2 per week	\$262.00	\$91.00	\$68.00	\$46.00	\$34.00	\$24.00	\$15.00
3 per week	\$393.00	\$136.50	\$102.00	\$69.00	\$51.00	\$36.00	\$22.50
4 per week	\$524.00	\$182.00	\$136.00	\$92.00	\$68.00	\$48.00	\$30.00
5 per week	\$655.00	\$227.50	\$170.00	\$115.00	\$85.00	\$60.00	\$37.50

SWACAR - Based on 24 cubic yard capacity
Emergency Service - not a scheduled pick-up = \$25.00

A network of staffed convenience centers is being proposed by the Planning Board and the County Commission to bring the Region into compliance with the Solid Waste Management Act of 1991. The proposal is calling for a number of convenience centers which exceeds the minimum number required for Greene County. Due to the rural setting of the County, the Planning Board feels that the minimum number required would not adequately provide service to all of the County residents.

The Town of Greeneville and the City of Tusculum offer curbside collection of solid waste to each of the Town residents. The Town of Greeneville offers roll-off type containers to the residents on a voluntary basis. The Town has trucks designed to mechanically pick-up the container and empty it without much manpower. The costs of these containers is \$50 each. Approximately 70% of the community utilizes the containers. Neither Tusculum nor Greeneville directly charge residents for collection, it is funded from general tax revenue.

**Households Served
by Door-to-Door Collection**

Town of Greeneville	4,700
City of Tusculum	600
	<u>5,300</u>

Approximately 25% of the total number of households in the Region are served by door-to-door collection operated by municipalities.

The Region has one transfer station located at the Greeneville/Greene County Landfill. All of the solid waste collected in the County is brought to the transfer station for transportation to the Materials Recovery and Development Corporation in Rogersville, Tennessee.

REGIONAL NEEDS

The Regional Solid Waste Planning Board has identified several needs related to solid waste collection and transportation. These needs include:

- A network of staffed convenience centers throughout the County to eliminate the green box system. Increase in number of equipment to operate the centers. The centers will help control the mess and cluttering that has been a problem in the past because the centers will be fenced and manned.
- Enhance existing regulations related to illegal dumping, especially white goods and construction debris.
- Consider all households utilize the roll-out residential containers. This would increase productivity of collection within the Town.

MEETING REGIONAL NEEDS

- With the increase in tipping fees and collection fees, incidences of illegal dumping could become more prevalent in Greene County. The Planning Board will continue to pursue options related to decreasing illegal dumping. However it is a possibility that illegal dumping will decrease when the network of convenience centers is established.

- The Planning Board has also recognized the fact that if each resident utilized the roll-out container, collection crews could spend less time at each collection stop. The Town Council of Greeneville will need to address the possibility of passing an ordinance requiring each resident in the Town to purchase the roll-out container.

- The greatest need facing Greene County in the next two years is to establish a network of staffed convenience centers providing adequate collection services for each resident in the County. The system of centers will ultimately consist of twelve manned convenience centers. The County is currently permitted to operate four convenience centers. The system will be utilizing the same dumpsters and trucks currently used by the County. The dumpsters currently used at the green box sites will serve as collection boxes at the new centers. Roll-off containers will be provided at each center by Greeneville Iron and Paper to collect recyclable metals. Greene County is using a grant from the State of Tennessee for the purchase of 36 reconditioned containers.

County officials feel that these centers will help the County in maintaining the 25% waste reduction goal. The manned centers will stop out of county waste from entering the waste stream and adding to the total volume. Green Thumb will provide manpower to 6 of the centers for 90 days at no charge. This will save the County approximately \$12,000.

STAFFING AND TRAINING

Greene County will operate staffed convenience centers throughout the Region. Staffing requirements will be dependent upon the number of convenience centers which the County chooses to operate. All of the staffing responsibilities will be with Greeneville or Greene County.

Any training which is necessary to ensure that each convenience center is operated in a proper manner will be the responsibility of either Greeneville or Greene County. It is not anticipated that any extraordinary training will be necessary to operate the centers.

10 YEAR BUDGET

Table V-2
Costs for Construction of One Center

Site Acquisition	\$1,000
Site Clearing, Grading, and Roadbed Const.	\$6,100
Labor (150 man-hours at \$6.00/Hr)	\$ 900
Fencing and Gates	\$5,100
Utility Building	\$1,500
Signs	\$ 900
Landscaping Materials	\$1,000
Service Connections (water, telephone, power, etc.)	\$ 825
Miscellaneous Equipment (fire protection, heater, air cond., locks, etc.)	\$ 300
Collection and Recycling Equipment	
35 reconditioned containers	\$ 900
One open-top roll-off container	\$ 3,900
One closed-top roll-off container	\$ 5,500
Two recycling trailers	\$10,000
	\$20,300
Cost per Center	<u>\$37,925</u>

**Table V-3
Annual Operating Costs For One Center**

Site Attendant			
Hours/Week	40		
Hourly Wage	\$4.40		
			\$9,152
Services/Month			
Electricity	\$540		
Water	\$180		
Telephone	\$220		
Septic Service	\$360		
			\$1,300
Center Maintenance			
Roadbase Repair	\$200		
Cleaning Supplies	\$ 50		
Landscaping Upkeep	\$100		
			\$350
Annual Operating Costs for One Center			<u>\$10,802</u>

BUDGET FOR COLLECTION AND TRANSPORTATION

**Table V-4
Regional Waste Collection and Transportation Budget**

	1994	1995	1996	1997	1998
Transfer Station/Landfill	\$1,875,802	\$1,969,592	\$2,068,071	\$2,171,474	\$2,280,047
Collection	\$1,848,386	\$1,940,805	\$2,037,845	\$2,139,737	\$2,246,723

	1999	2000	2001	2002	2003
Transfer Station/Landfill	\$2,394,049	\$2,513,751	\$2,639,438	\$2,771,409	\$2,909,979
Collection	\$2,359,059	\$2,477,011	\$2,600,861	\$2,730,904	\$2,867,449

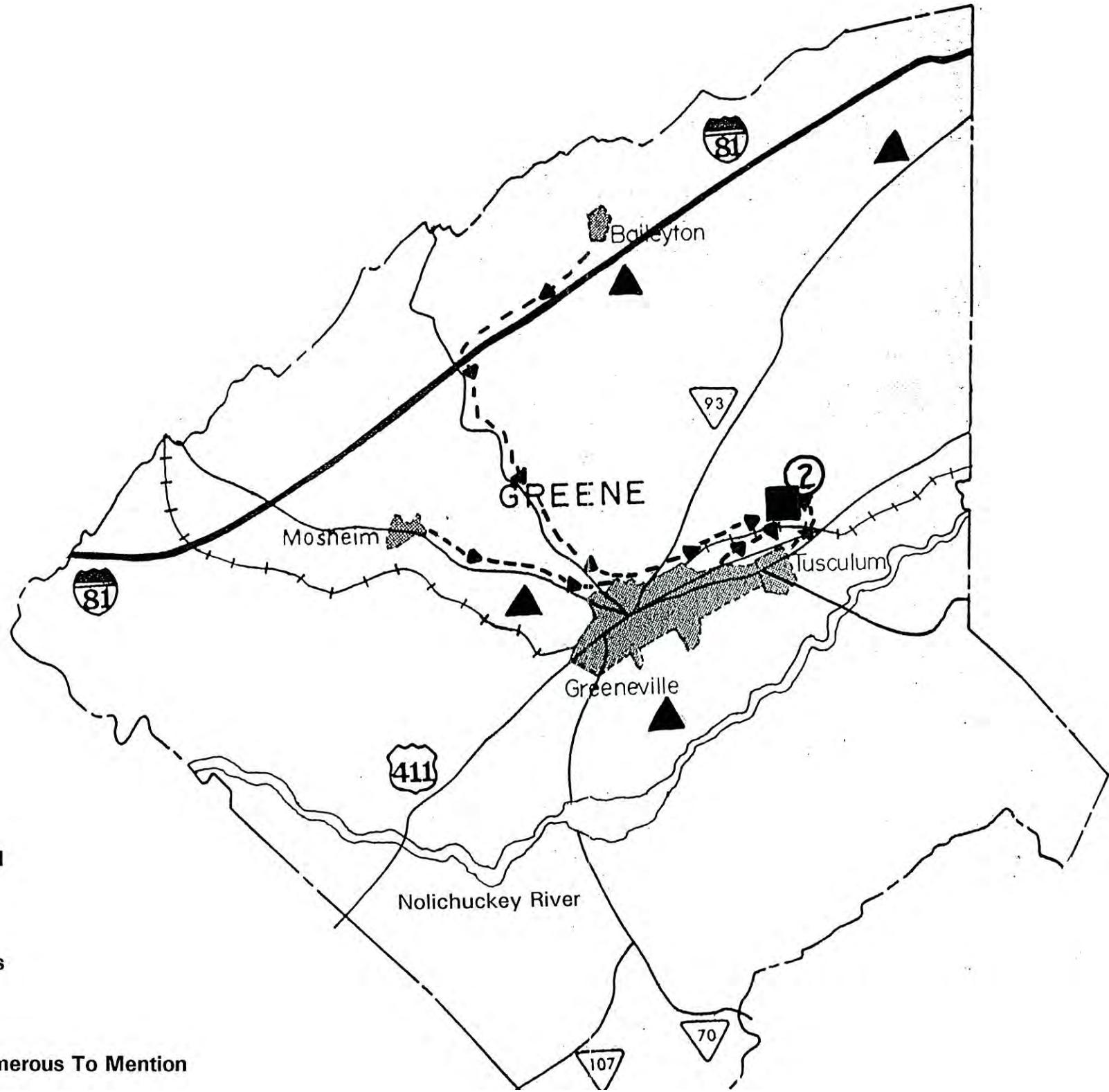
IMPLEMENTATION SCHEDULE

Table V-3

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Construction and Opening										
Initiation of Funding										
Data Collection										
Plan Updates										

LOCATION OF FACILITIES ON MAP

The location of all existing facilities and probable waste flows are shown on the system map in Chapter XI. These locations are also indicated on the map located in this chapter.



-  Greenville/Greene County Landfill
-  Transfer Station
-  Existing Convenience Center Sites

--- Transportation Routes

87 Greene Box Locations Too Numerous To Mention

CHAPTER VI

Recycling

Currently Greene County doesn't operate a county-wide recycling program, however there is some recycling efforts being conducted by non-profit organizations and one for-profit business. Planning Board members feel that a county-wide recycling program will be responsible for approximately a 5% reduction in the waste stream requiring disposal.

Existing Conditions

Keep Greene Clean is involved in some recycling within the Town of Greeneville. The organization is responsible for collecting mainly newspapers at various locations throughout the Town. There are eleven drop-off locations for recycling newspapers at businesses, schools, and government offices. The Town of Greeneville collects the newspapers and they are sold to Tennessee Cellulose in Limestone, TN for mulch production. The City of Tusculum offers door-to-door collection of recyclables to each of the residents.

Greeneville Iron and Paper, Inc. is a private business which collects cardboard from several businesses within the Town of Greeneville and surrounding areas. Greeneville Iron and Paper provides a dumpster to each interested business and collects the material several times per month for resale. There are 30 businesses that are currently participating in the program which began in May 1993.

**Table VI-1
Cardboard Program Collection Volumes**

Date	Tons Collected
May 1993	12.79
June 1993	9.80
July 1993	14.37
August 1993	8.32
September 1993	12.10
October 1993	10.80
November 1993	10.81
December 1993	10.88
January 1994	10.75
February 1994	15.15
March 1994	18.28
April 1994	16.68
May 1994	14.84

A total of 165.57 tons of cardboard have been eliminated from the waste stream since the program began (Table VI-1). Greeneville Iron and Paper will continue the cardboard collection program as well as a buy-back program for metal. White Goods are separated from the waste stream at the transfer station and recycled at Greeneville Iron and Paper. There are no other municipalities in the Region that have organized recycling programs.

Regional Needs

To meet the recycling requirements of the Solid Waste Management Act of 1991, Greene County will have at least one site for the collection of recyclable materials by January 1, 1996.

Greene County is fortunate to have an excellent recycling program offered by the private sector. To support the efforts of the private sector, the County has been involved with Greeneville Iron and Paper in developing the

county-wide recycling program. Greeneville Iron and Paper has agreed to place roll-off containers at each convenience center to collect metal goods. Greeneville Iron and Paper will be responsible for picking up the containers when they are full.

Different types of containers will be placed at each convenience center to collect other recyclable materials such as paper and cardboard. Greeneville Iron and Paper will receive the cardboard for recycling and Tennessee Cellulose will receive the newspaper. Two recycling trailers will also be on-site to facilitate recycling. The county-wide recycling program is proposed to have recycling containers located at each convenience center which will service the entire Region. Some of the centers will have different equipment, such as oil and antifreeze collection units.

**Table VI-2
Costs for Recycling at each Center**

Item	Cost
1. Container for bulk metals collection	Provided by Greeneville Iron and Paper
2. One 40 yd ³ roll-off container for newspapers	\$5,500.00
3. Two recycling trailers	\$5,000.00 each (est.)
Total	\$15,500.00
 Annual Maintenance Costs	
Recycling trailer annual servicing	\$5,800.00
Total	\$5,800.00

Funds to support the recycling program will be generated from the general tax revenue which will be responsible for operating the network of convenience centers. Although the Region has markets for the recyclables already identified, the Region will interact if necessary with the Office of Cooperative Marketing and consider membership in the Recycling Marketing Cooperative of East Tennessee. To close the loop between collection and purchasing of recyclable products, the Region will try to purchase products made from recyclable materials when possible.

Staffing

No additional staff will be needed to operate the county-wide recycling program. Personnel responsible for the upkeep and operation of the convenience centers will be responsible for collecting recyclables. Twelve additional personnel will eventually be used at the convenience centers.

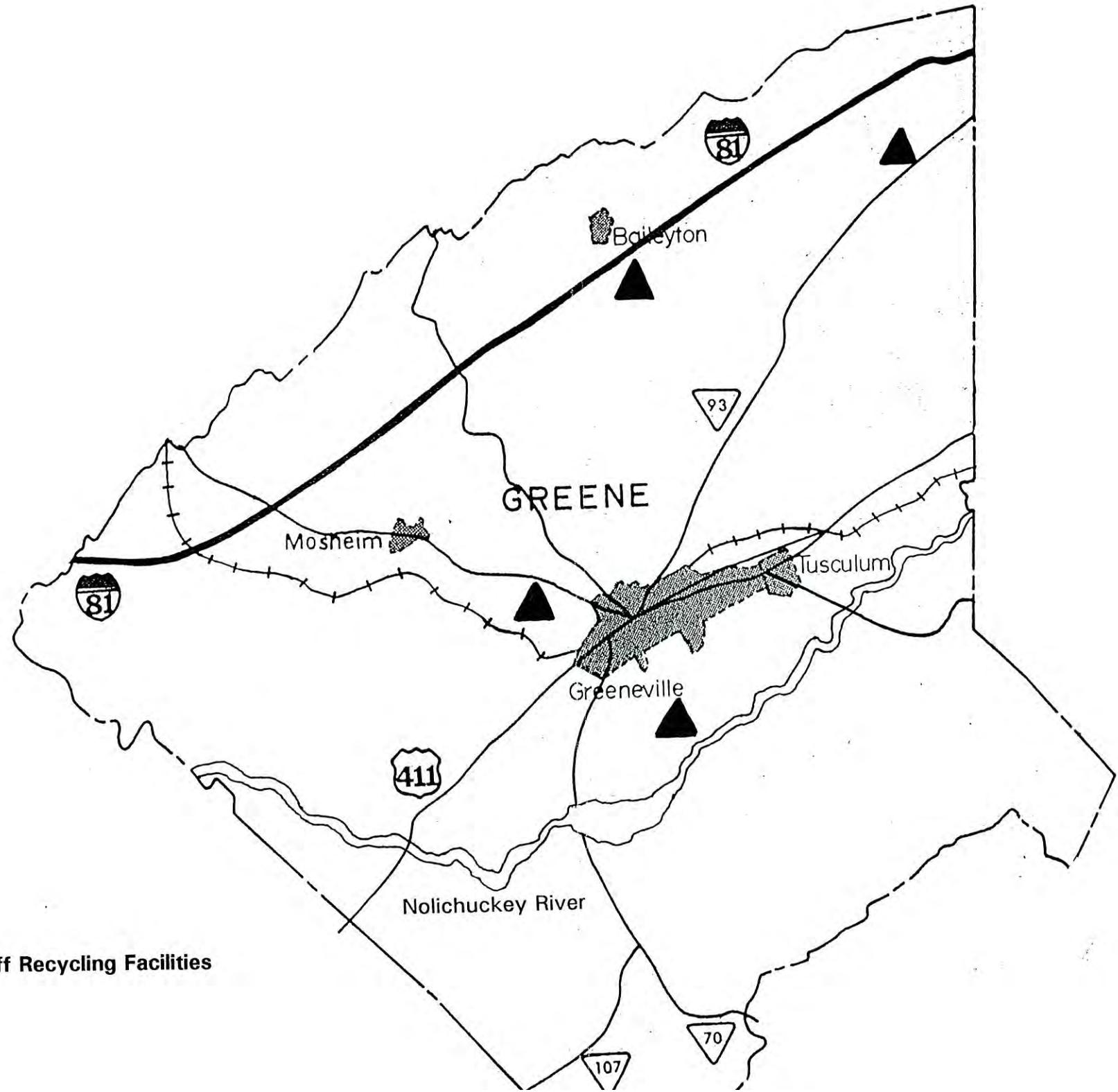
Data Collection and Report Submission

All data collection will be the responsibility of the County. The First Tennessee Development District will assist the County in completing quarterly reports for submission to the State. The County is responsible for implementation of the program. Any recycling conducted within the Town of Greeneville will supplement the county program.

Implementation Schedule

Table VI-3

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Begin Construction of Facilities										
Continue Public Education										
Data Collection and Maintenance										



 Drop-Off Recycling Facilities

CHAPTER VII

Composting, Solid Waste Processing, Waste-to-Energy and Incineration Capacity

EXISTING CONDITIONS

Other than a private facility, Greene County currently does not have any composting or incineration facilities operating within the Region. However the Region does collect brush for chipping and shredding and leaves which are disposed of in the construction /demolition landfill. Yard wastes, wood wastes, and food waste make up a significant portion of the total waste stream in Greene County. Mulch which is made from the chipping and shredding operation is sold to the public for \$5 per truck load, or given to public schools in the Region to be used for landscaping purposes. Municipalities in the Region are also permitted to have the mulch for landscaping purposes at no cost.

There is very little residual material which is landfilled. Most of the shredded product is used by the public. Any residual that is not used by the public is landfilled in the Class IV facility. There is one private composting operation within Greene County. The owners of this operation are planning to sell decomposed material as a refined product.

The chipping/shredding operation is conducted by landfill personnel as part of the daily routine. The operation is funded through tipping fees and is operated as part of the landfill budget.

The Region has one solid waste processing facility located at the Greeneville/Greene County Landfill. The area at the landfill which was once used to bale waste is now used as a transfer station to collect all of the solid waste generated by the municipalities and the county. Waste is compacted at the transfer station and transported to the Materials Recovery and Development Corporation. Greeneville Iron and Paper also operates a wood waste processing pit burner facility.

REGIONAL NEEDS

Since diverting yard waste and landscaping debris by chipping and shredding or disposing in the Class IV landfill will be applied to the 25% waste reduction goal, the Planning Board has not identified any regional needs for composting pertaining to reaching the 25% waste reduction goal. The Board has identified some composting alternatives to eliminating yard waste from the total waste stream.

- One of these alternatives is to encourage **backyard composting** by the residents of Greene County. The Planning Board has not discussed any incentives for this program, but the Board does recognize that incentives would be necessary to encourage residents to participate if the program is initiated.

- **Centralized Yard Waste Composting** is another possible alternative identified by the Planning Board. This alternative is based on the fact that all yard waste material would be brought to a central location in the Region. The material could then be composted and sold or given away. Large windrows, small windrows with frequent turning, or windrows with forced aeration are some of the options in the centralized yard waste composting program.

Construction of a regional composting facility or program currently is not under consideration by the Planning Board. Diversion of yard waste and landscaping debris is currently taking place at the Greeneville/Greene County Landfill. This diversion accounted for approximately 1,500 tons of the total waste stream in 1992. However, a county-wide composting program is an environmentally responsible method of waste reduction and may be implemented by the Region in the future. The Keep Greene Clean organization and the Agricultural Extension Service is encouraged by the Solid Waste Planning Board to increase public awareness and provide technical assistance for persons interested in backyard composting.

Implementation Schedule

Table VII-1

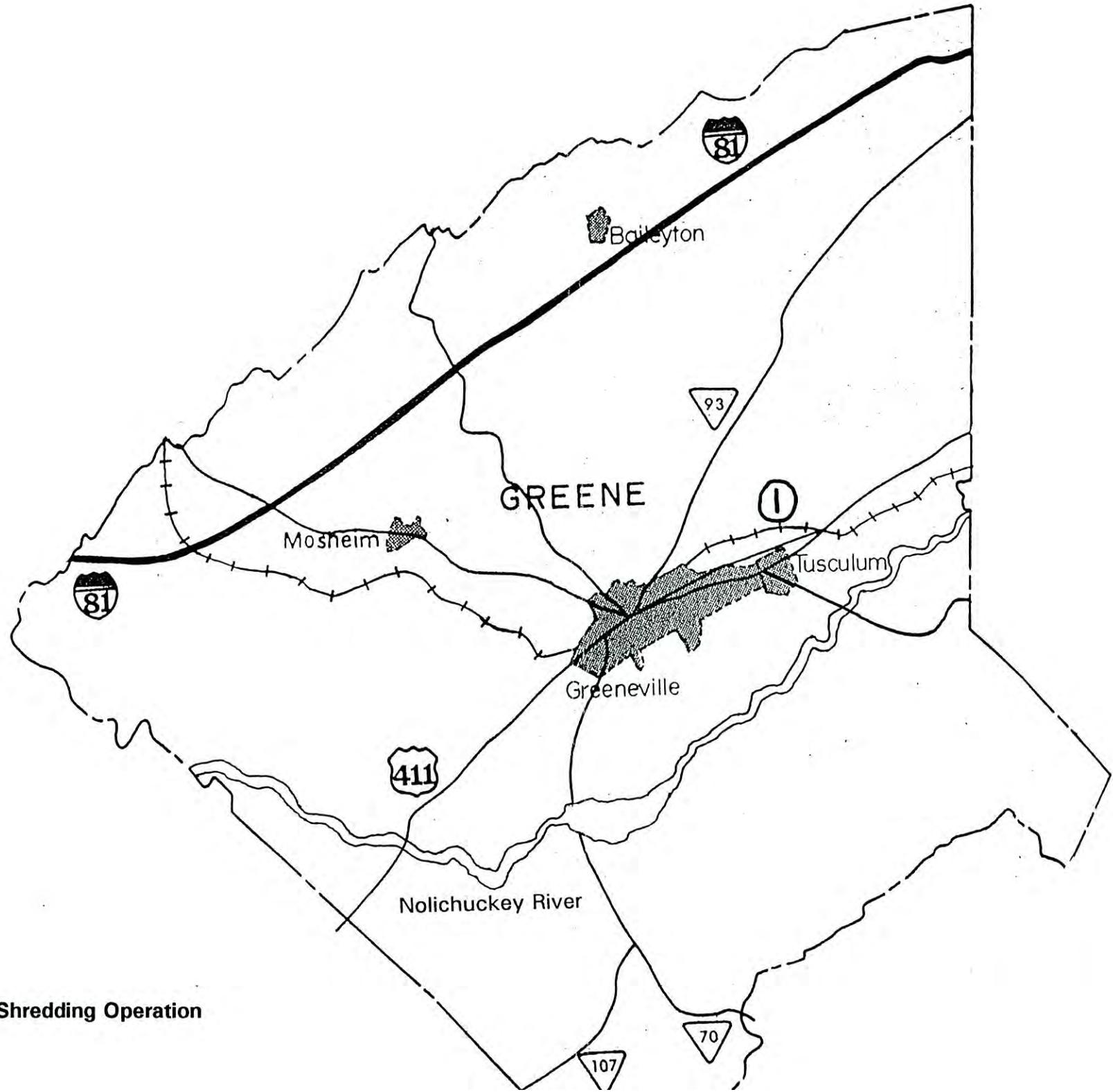
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Consider Expanding Composting Operations										

Operating Budget

The chipping and shredding operation is coincided with the day to day operations of the landfill. The shredding unit was purchased for \$285,000. Since this time all funds to operated the unit and provide the mulch are taken from the overall operating budget of the landfill/transfer station. This budget is presented in Chapter V in more detail.

Location of Facilities

The location of the chipping and shredding operation is indicated on the system map as well as the map located in this chapter.



① Chipping/Shredding Operation

CHAPTER VIII

Disposal Capacity

Existing Conditions

Greene County is currently disposing of all Class I municipal solid waste at the Materials Recovery and Development Corporation in Rogersville, Tennessee. This landfill is a private facility operated by Jim Brooks. Greene County disposes of approximately 38,041 tons annually in the landfill. All Class IV waste is disposed of in the Greeneville/Greene County Landfill while wood and landscaping wastes are shredded for mulch. The Materials Recovery and Development Corporation is set for closure in October of 1994. At this time Greene County has plans to begin transporting waste to other landfills.

Greeneville or Greene County have no current plans to develop a Class I landfill within the Region. However the County is pursuing the development of another Class IV landfill when the current facility is closed. The current Greeneville/Greene County Class IV Landfill is set for closure in 1995. Greene County also operates a transfer station at the site of the Class IV landfill.

1. Projected Demand and Supply, and Identification of Potential Shortfalls or Surplus in Disposal Capacity

Table VIII-1

Tons Per Year

Year	Demand: Tons of Waste Requiring Disposal	Supply: Existing & Planned Capacity	Surplus (+)	Shortfall (-)
1993				
1994	87,636	77,196		10,440
1995	87,796	25,740		62,056
1996	87,890	0		87,890
1997	88,023	0		88,023
1998	88,146	0		88,146
1999	88,275	0		88,275
2000	88,395	0		88,395
2001	88,314	0		88,314
2002	88,213	0		88,213
2003	88,135	0		88,135

Existing supply is only in the Class IV facility. Currently in the region there is no Class I capacity. Since the County is still developing plans for a new Class IV landfill, the capacity after 1995 is 0. Thus all of the waste generated within the County is calculated in the shortfall amount.

Regional Needs

Since Greene County is only able to transport waste to the Material Recovery and Development Corporation until October of 1994, the region has a need to secure disposal capacity until 2003 and beyond. Greene County has no plans to construct a Class I facility within the County and will continue to transport waste out of the Region.

The immediate need of the Planning Board is to request proposals from interested landfills in the area and submit a recommendation to the Mayor of Greeneville and the County Executive. Greene County is fortunate to have several landfills in the area that have available capacity and are interested in receiving Greene County's solid waste. Among these options are two landfills located within 60 miles of the transfer station.

**Table VIII-2
Disposal Options**

Facility	Distance from the Transfer Station	Tipping Fee	Life Span
Iris Glen Environmental Center	28	\$24.65	Set to Open in Oct. 1994 with 20 yr. life span.
Carter Valley Landfill	54	\$21.71	16 million air space yd. extension in 1994.

Meeting Regional Needs

Bid proposals were submitted from Waste Management Inc., operators of the Iris Glen Environmental Center, and Browning Ferris Industries, operators of the Carter Valley Landfill. Vaughn and Melton, a local engineering firm, research the total annual costs of hauling to each of the locations. These comparisons are as follows:

	Tipping Fee	Hauling Costs Per Hour Actual Run Time	Total Hauling Cost
B.F.I.	\$21.71.00	\$45.80.00	\$1,151,600.00
Waste Management	\$24.65.00	\$45.80.00	\$1,170,375.00

Specifications:

38,041 tons @ 20 tons per load = 1,902 truckloads

Time includes loading and unloading

B.F.I. = 2.5 hours travel time = 0.75 hours load/unload; requires 4 trucks, 7.5 loads/day.

Waste Management = 1.5 hours travel time = 0.75 hours load/unload; requires 3 trucks, 7.5 loads/day.

Based on the B.F.I. bid price tipping fee of \$21.71.00 at a C.P.I. annual increase of 4.0% the fifth year tipping fee would be \$26.42.00 and the tenth year tipping fee would be \$32.14.

Based on lower annual hauling costs including lower tipping fees, the Planning Board made the recommendation to enter into contract negotiations with Browning Ferris Industries to haul waste to Carter Valley Landfill in Hawkins County. This recommendation will be considered by the Mayor of Greeneville and the Greene County Executive. These two individuals will make the final decision. Greene County is fortunate to have proposals from two landfills within a short distance of the County which gives the County more than one option for ten year disposal capacity.

Staffing and Training

No additional staff will be needed to continue transporting waste out of the Region. Since the County will not be operating a Class I landfill, no additional training is necessary for the employees. However, should it be necessary, Greene County will provide additional training for all solid waste employees to ensure that the County maintains an environmentally sound solid waste program.

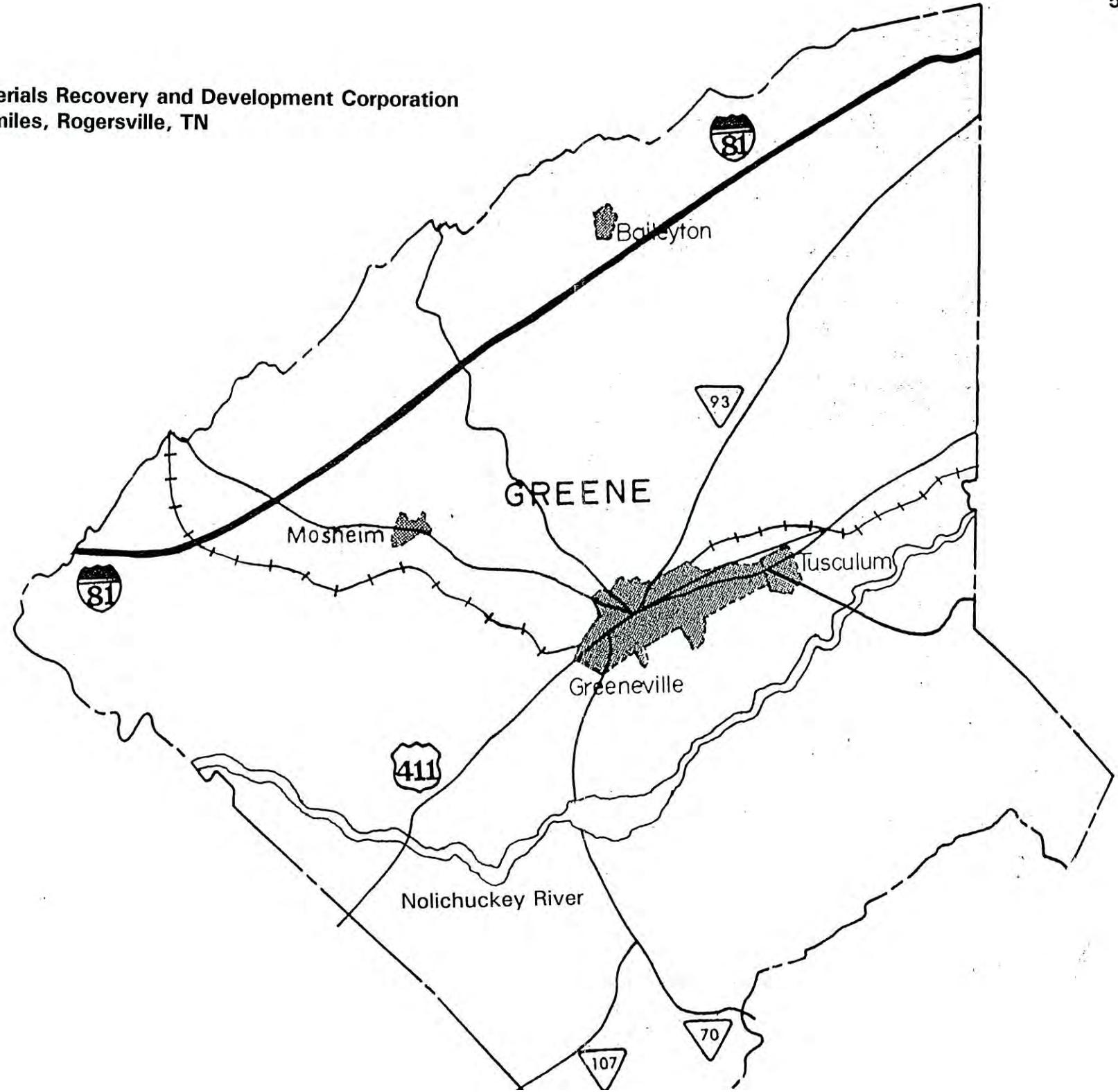
Implementation Schedule

Greene County will continue to transport waste to the Materials Recovery and Development Corporation until October 1994. At this time the region will begin transporting to Carter Valley Landfill pending approval by the Mayor and County Executive. The length of contract between Greeneville/Greene County will be determined at a later date, but it is certain the contract will extend past 2003.

Location of Facilities

The location of current and future disposal facilities is located on the map in this Chapter. These facilities are also located on the system map found in Chapter 11.

Materials Recovery and Development Corporation
40 miles, Rogersville, TN



CHAPTER IX

Public Education and Education

Existing Conditions

Recently the Solid Waste Planning Board established the Public Information and Education Task Force. The mission of the Task Force is "To increase public awareness of our communities' responsibilities and choices, today and in the future, concerning solid waste."

The goals of the Task Force are to:

- Encourage the participation of all Greene Countians in developing and implementing a solid waste plan.

- Sponsor solid waste programs and projects.

- Support the efforts of the Solid Waste Planning Board as it designs and implements a comprehensive solid waste program for Greene County.

- Provide direction for the Planning in responding to media inquiries and in gaining media support in information dissemination.

Keep Greene Clean is another organization in the Region which is responsible for public education on solid waste and recycling issues. Keep Greene Clean is an affiliate of the Keep America Beautiful. Keep Greene Clean has organized a community education effort. This efforts includes educational programs which address curriculum, community issues and services, adult education, and child education.

MEETING REGIONAL NEEDS

The Public Information and Education Task Force has identified methods for meeting the regional goals and needs discussed earlier. The following programs are recommended by the Public Information and Education Task Force.

- Establish a staffed public information function within the organization that will ultimately have the responsibility of managing the solid waste program in Greene County and that will be responsible for coordinating solid waste information dissemination.
- Publish a bi-monthly solid waste update newsletter. The newsletter would be mailed to all elected officials and the media and would include information on Greene County's solid waste program, including the cities, and updates on implementation of new solid waste regulations.
- Conduct public forums throughout the Region on a consistent basis. The meetings would be sponsored by the Solid Waste Planning Board and would be a time for the public to ask questions about solid waste management in the Region and become more involved in solid waste planning. Public workshops should also be initiated to inform the public about such programs as household hazardous waste, recycling, and source reduction.
- Sponsor school campaigns to develop a logo or slogan to represent solid waste management in the Region.
- Collect and disseminate informational materials concerning solid waste programs. Specific programs need to be geared toward school-age children beginning with K-6 grades. A standardized school curriculum should be developed to educate the youth of Greene County about effective solid waste management.
- Encourage local businesses participation in establishing public information and education programs. Business need to be targeted for in-house waste reduction programs.
- Develop a regional directory indicating where to get information on specific programs in Greene County. The directory should include all organizations that may potentially be involved with solid waste management. Some of these organizations include; Chamber of Commerce, Ruritans, Civitans, and 4-H Clubs.
- The Task Force will take advantage of special events such as the County Fair, to disseminate information and make sure an effort is placed on proper solid waste management.

STAFFING AND BUDGETING

All of the recommendations made by the Public Information and Education Task Force can be done with existing volunteers serving on the Task Force or the Keep Greene Clean committee. The Planning Board does not anticipate any need to add additional staff to complete the recommended programs.

Since all of the programs are recommendations, there are currently no available estimations on costs to operate the programs. Many of the programs will be operated with existing funds budgeted by the Town of Greeneville and Greene County for solid waste management. The County has applied for State solid waste education grants in the past and will do so again to provide additional funding for public information and educational programs.

EVALUATION AND REPORTING

Evaluation on the success of the proposed public education programs will be done by the Public Information and Education Task Force. Success of each program will be gauged on participation rates and implementation rates of each program.

The Task Force will be responsible for collecting data pertaining to the success of the programs. Any program updates necessary will also be the responsibility of the Task Force.

IMPLEMENTATION SCHEDULE

Table IX-1

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Consider Standardized Curriculum Package										
Public Information and Education Task Force Meetings										
Begin Discussions of Implementing Proposed Programs										

CHAPTER X

Special Wastes

HOUSEHOLD HAZARDOUS WASTES (HHW)

Household hazardous wastes are defined as any toxic or poisonous substances found in the home, which is used for general home, car, or yard maintenance.

Many products used for everyday household cleaning and upkeep contain substances that can threaten human health and environment if they are disposed of improperly. Common detergents, cleaners, furniture polishes, pesticides, paints, thinners, solvents, used motor oil, and many other items are materials normally found in the waste stream. Although these materials are often found in small quantities, if disposed of improperly they can be very dangerous.

Greene County is not eligible for a grant to establish a permanent household hazardous waste collection site, but is genuinely concerned about the detrimental effects which household hazardous wastes have on groundwater supplies or landfills. Currently the County does not have a designated site for the permanent collection of household hazardous wastes but has contracted with the State for use of the mobile collection unit in 1994 and future years.

The Region is a member of the Appalachian-Northeast Resource Conservation and Development Council and will rely heavily on this organization for publicity and planning in future events. The County applied for and received approval for a collection event which was held on April 23, 1994 at the Hal Henard Elementary School Parking Lot. This site met all of the criteria set by the State and is a central location in the more populated area of the County. As with the first event held in April, the Region will utilize the Appalachian-Northeast Resource Conservation and Development Council for purposes of disseminating information and education efforts. The collection events recently held in April were part of a Northeast Tennessee regional collection month and Greene County was able to be involved in Regional publicity. The County Agricultural Extension Agency is planning a used pesticide container collection event.

Publicity efforts included radio PSA's, television ads, newspaper ads, toll free telephone numbers to receive information, etc. Promotional materials were distributed at schools and businesses. All of the materials distributed included the amounts and a list of materials that will be accepted at the collection site. Due to the success of the first collection event, all of the publicity efforts made during the April 23 collection event will be utilized for future events.

Greene County is responsible for providing, fire, police, emergency response crews, and any additional personnel needed to assist with the event in cases of emergency. The emergency personnel are provided by the County or cities at no additional costs. All personnel involved in the collection event provided by Greene County are participating on a volunteer basis.

IMPLEMENTATION SCHEDULE

1993 -	Apply for collection event
March 1994 -	Begin media blitz about collection event.
April 1994 -	Initial Household Hazardous Waste Collection Event at Hal Henard Elementary School.
1995 -	Collection event
1996 -	Collection event
1997 -	Collection event
1998 -	Collection event
1999 -	Collection event
2000 -	Collection event
2001 -	Collection event
2002 -	Collection event
2003 -	Collection event

The dates and times of each collection event after 1994 are subject to location, time, and date change. The dates of future collection events are dependent upon application approval and availability of the mobile collection unit.

Waste Tires

Greene County is currently collecting whole waste tires at the Greeneville/Greene County Class IV Landfill. The tires are stockpiled at the landfill until the mobile tire shredding unit is available from the State. Landfill personnel are on hand to supplement the contractor's staff at the time of shredding. Since whole waste tires are not permitted in a Class I landfill, when the tires are shredded, they are disposed of in the Class IV Landfill. In 1993 43,909 new tires were sold in Greene County. County officials are satisfied that the storage/shredding rate is keeping up with the current discard rate.

Operating costs of the storage site are calculated as part of the annual operating costs of the landfill. Tires are not stored at the site long enough to initiate any type of vector control. Law enforcement personnel as well as solid waste staff are responsible for identifying, inventorying, and reporting illegal tires dumps to the State Department of Environment and Conservation field office.

Waste Oil

The Region collects waste oil at the Greeneville Street Department Building. Residents are allowed to bring waste oil and antifreeze to the Street Department where it is collected for recycling. A private company collects the used oil which is recovered or recycled. Records have not been kept as to determine the number of gallons being collected annually.

The Region will also collect waste oil at some of the convenience center sites. The private sector is efficiently operating the program and the Planning Board feels that the private sector should be allowed to continue the process to supplement the County efforts.

Lead Acid Batteries

Lead batteries are collected at the Greeneville/Greene County Landfill tipping floor. All batteries that come into the tipping floor are removed by the landfill employees and stored for recycling.

The Region does not allow any lead batteries to enter the waste stream. The batteries are recycled either by private citizens or by landfill employees.

Litter

Greene County receives a litter grant from the State some of which is used for litter control along roadways. The litter control program is operated through the Greene County Sheriff's office and utilizes work release prison personnel. The Litter Grant Manager conducts litter collection along roadways in Greene County with the prison personnel.

The litter grant is also used to distribute educational materials to residents about the hazards of improper disposal of litter.

CHAPTER XI

Implementation: Schedule, Staffing, and Funding

System Definition

Greene County will utilize four strategies to implement a truly integrated waste management system in reaching and maintaining the 25% waste reduction goal. The Region will use recycling, diversion to Class IV landfill, diversion of wood and yard wastes, and industrial reduction. In 1995 Greene County will generate an estimated 90,816 tons of solid waste requiring disposal (Table III-3).

The Planning Board estimates that nearly 15% of the total waste stream can be diverted to a Class IV landfill located within the County. A majority of this 15% is from non-hazardous industrial sources and is mainly sand. The County diverted 37% of the waste stream to the Class IV landfill in 1991. The goal of 15% reduction through diversion is very conservative but allows the County some leeway to reach the goal if other programs aren't as successful as predicted. Also among this 15% reduction goal are shredded waste tires, and non-hazardous sludges.

Recycling, yard waste diversion, and industrial waste reduction are the three remaining strategies identified by the Planning Board to allow Greene County to reach the 25% waste reduction goal. In its infancy, the yard waste diversion program was responsible for diverting 1,500 tons of waste from the waste stream. It is felt that this volume will gradually increase over time. A County-wide recycling program which is to be established in the next year will account for a waste reduction 5%. Recycling has been operated in Greeneville by private interest groups for several years, however no accurate data is available to determine how much the program needs to increase to reach 5%. Planning Board members however feel that 5% is an attainable goal by December 31, 1995.

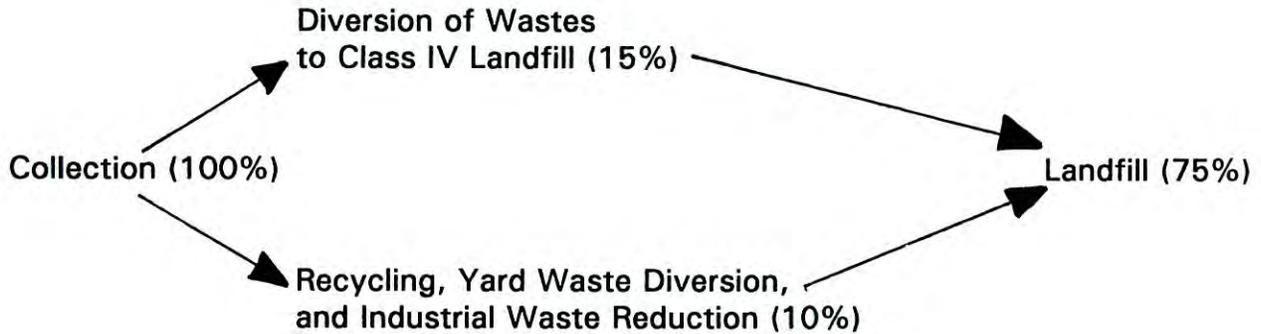
Finally, industrial waste reduction another component of the Plan that will reduce approximately 3% of the total waste stream. Industries in Greene County have taken part in industrial waste reduction seminars provided by the UT-CIS. Due to the large number of industries in Greene County, industrial recycling and waste reduction will help the County reduce its waste considerably.

Table XI-1

Strategy	% Reduction
Diversion of Wastes to Class IV Landfill	15%
Recycling, Yard Waste Diversion, and Industrial Reduction	10%

A successful public education program is perhaps the most important strategy in an integrated waste management program. Public information and education is not assigned a percentage of waste reduction, but it is the driving force behind the success of all of the proposed strategies. Greene County will strive to increase its public education efforts in the communities and schools. Through the work of the Public Education and Information Task Force and other civic non-profit organizations, solid waste and recycling education will eventually be made available to all County residents.

The following is a flow diagram of the Greene County integrated waste management program and the amount of reduction assigned to each strategy.



Due to the unique relationship between the Town of Greeneville and Greene County in solid waste management, the Town of Greeneville will assume most of the implementation responsibilities of the solid waste plans. The Greeneville and Greene County partnership will take the responsibility for operation of the transfer station and all operations that take place at that facility including the chipping/shredding operation.

All manned convenience centers are under the direction of Greene County. The county-wide recycling program implementation responsibilities will be with the County. Any programs implemented within Greeneville or Tusculum will be the responsibility of these respective cities. All data collection and record keeping will be done by the County, Greeneville, or Tusculum depending on the location of each program.

Implementation Schedule

Table XI-2

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Public Education Programs										
Initiate County-Wide Recycling Program										
Construct Convenience Centers										
Data Collection										
Begin Storing Batteries, Tires, and Auto Fluids at Approved Sites										
Begin Development of New Class IV Landfill										
Update to the Plan										
Consider Expanding Yard Waste Diversion Program										
Begin Transporting Waste to Carter Valley Landfill										

Staffing and Training Requirements

Table XI-3

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Collection										
Drivers	17	17	17	17	17	17	17	17	17	17
Laborers	24	28	28	28	32	32	32	36	36	36
Transfer Station										
Drivers	3	3	3	3	3	3	3	3	3	3
Laborers	1	1	1	1	1	1	1	1	1	1
Class IV Landfill										
Clerks	1	1	1	1	1	1	1	1	1	1
Operators	1	1	1	1	1	1	1	1	1	1
Laborers	2	2	2	2	2	2	2	2	2	2
Yard Waste Diversion										
Laborers	1	1	1	1	1	1	1	1	1	1

Table XI-4

Expenditures

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Waste Collection	\$1,624,388	\$1,705,605	\$1,790,885	\$1,880,429	\$1,974,450	\$2,073,172	\$2,176,830	\$2,285,671	\$2,399,954	\$2,519,951
Landfill/Transfer Station	\$1,876,802	\$1,969,592	\$2,068,071	\$2,171,474	\$2,280,047	\$2,394,049	\$2,513,751	\$2,639,438	\$2,771,409	\$2,909,979
Costs for Disposal	\$224,000	\$825,870	\$876,163	\$919,521	\$965,497	\$1,013,771	\$1,064,459	\$1,117,681	\$1,173,565	\$1,232,243

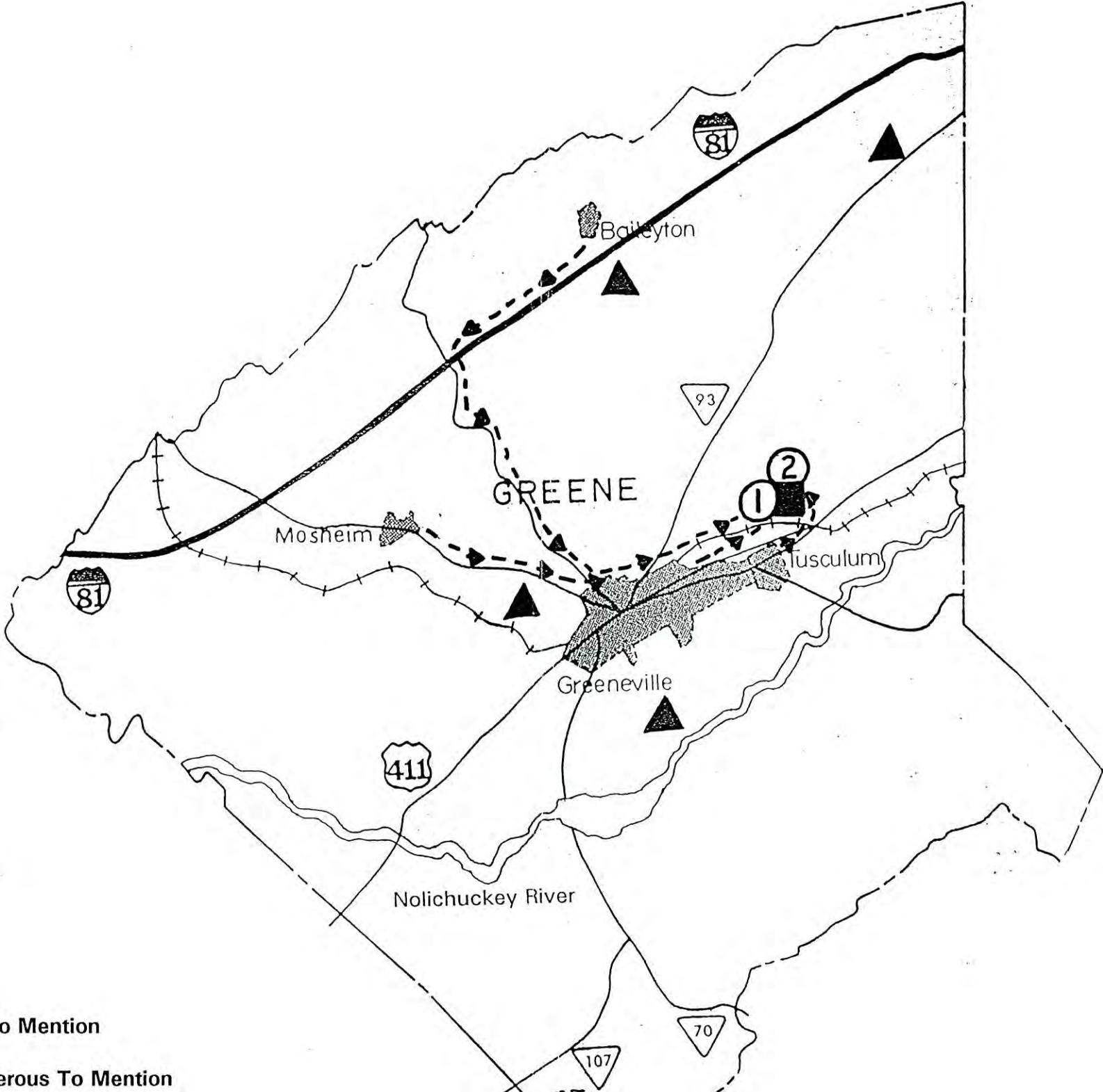
A C.P.I. Index/Inflation rate of 5.0% was used

Table XI-5

Revenues

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Collection from Businesses	\$343,660	\$360,843	\$378,885	\$397,829	\$417,720	\$438,606	\$460,536	\$483,562	\$507,740	\$533,127
Tipping Fees	\$975,802	\$1,024,592	\$1,074,821	\$1,128,562	\$1,184,990	\$1,244,239	\$1,306,450	\$1,371,772	\$1,440,360	\$1,512,378

A C.P.I. Index/Inflation rate of 5.0% was used



- Greenville/Greene County Landfill
- 1 Transfer Station
- 2 Chipping/Shredding Operation
- Existing Convenience Center Sites
- Transportation Routes
- Recycling Locations

27 Public Schools Too Numerous To Mention

87 Greene Box Locations Too Numerous To Mention

CHAPTER XII

Allocation of Implementation Responsibilities: Plan Adoption and Submission

Plan Adoption

The plan will be submitted to the Greene County Commission for approval prior to being submitted to the Division of Solid Waste Assistance. County Commission approval is not required by the Solid Waste Management Act of 1991 or by resolution establishing the Planning Board, however the Planning Board feels that County Commission involvement and subsequent approval of the Plan is necessary to facilitate its success.

Plan Submission

Ten copies of the Plan will be submitted to the Tennessee Department of Conservation, Division of Solid Waste Assistance before the July 1, 1994 deadline.

CHAPTER XIII

Flow Control and Permit Application Review

Flow Control

Greene County will initiate flow control on waste received at the convenience centers. Personnel at the centers will monitor the flow of waste to ensure that only waste from Greene County residents is accepted. Greene County will also continue to control the waste which is received at the transfer station. The County will not accept any waste generated from outside the Region. The County will also only accept waste from County residents to be disposed of at the Class IV landfill.

Permit Application Review

The Greeneville/Greene County Solid Waste Planning Board, in conjunction with the Town of Greeneville and the County Commission, will review all permit applications for landfills, incinerators, etc. Approval of such permits will be based on the consistency of the application with the solid waste management plan.

All permits will be addressed to the Solid Waste Planning Board and will be reviewed in ninety days. Public information hearings will be conducted in accordance with the Tennessee Code Annotated. The Planning Board will review all applications and make recommendations to the Town Council and County Commission. The Planning Board will rely on the Tennessee Department of Environment and Conservation for technical review of permits and final approval or disapproval of the permit application.

APPENDIX A

Greeneville/Greene County Regional Solid Waste Board
Appointed Members

Greene County Representatives

Initial Term

Mr. Delmar (Butch) Teglas
Phillips Consumer Electronics
P.O. Box 1210
Greeneville, TN. 37744

(1) 2 year term

Mr. Willie Good
Greene County Commissioner
Rt. 1
Chuckey, Tn 37641

(1) 4 Year Term
Expires 11/97

Mr. Gary Rupert
Greene County Solid Waste
Greene County Courthouse
Main at Depot Street
Greeneville, TN 37743

(1) 6 Year Term
Expires 11/99

Town of Greeneville Representatives

Mrs. Sarah Webster
1241 Tanglewood Dr.
Greeneville, TN 37743

(1) 4 Year Term
Expires 11/97

Mr. Al Giles
Ball Zinc Products
P.O. Box 1890
Greeneville, TN 37744

(1) 2 yr. Term
Expires 11/95

Mr. Bob Bird
Town of Greeneville
200 N. College St.
Greeneville, TN 37743

(1) 6 Year Term
Expires 11/99

Tusculum Representative

Mr. Robert Bird
Rt. 8, Box 168-A
Greeneville, TN 37743

6 Yr. Term
Expires 11/99

Regular Meeting

The Board of Mayor and Aldermen met in Regular Session on Tuesday, November 2, at 4:00 P.M. in Town Hall with Alderman Betsey Bowman presiding. Present were: Aldermen W. T. Daniels, Jim Emory and Sarah Webster. Mayor G. Thomas Love was absent.

Motion by Alderman Daniels, seconded by Alderman Webster to approve the minutes of October 5, 1993. The motion passed unanimously.

Motion by Alderman Daniels, seconded by Alderman Webster to approve resolution calling for a public hearing to determine if properties along the Old Asheville Highway should be annexed. The motion passed with Alderman Jim Emory abstaining due to a vested interest in the property.

Motion by Alderman Emory, seconded by Alderman Daniels to approve the appointment of Sarah Webster, Bob Bird and Al Giles to the Greene County Municipal Solid Waste Regional Planning Board. The motion passed with Alderman Sarah Webster abstaining.

Motion to adjourn by Alderman Emory, seconded by Alderman Daniels. The motion passed unanimously.

Alderman Betsey Bowman

ATTEST:

James L. Warner, Recorder

A RESOLUTION TO NAME GREENE COUNTY'S APPOINTEES TO
THE MUNICIPAL SOLID WASTE REGION BOARD

WHEREAS, by resolution, Greene County has recently established a Solid Waste Planning Region; and

WHEREAS, pursuant to T.C.A. Section 68-211-813 (b) (1), a Municipal Solid Waste Region Board must be established to administer the activities of this planning region; and

WHEREAS, it has been resolved that three (3) Greene County appointees shall be chosen by the County Executive and approved by the Board of County Commissioners; and

WHEREAS, it is necessary that members of the board of the Municipal Solid Waste Region shall serve a six (6) year term. Initial terms for Greene County appointees shall be: One (1) two (2) year term, One (1) four (4) year term, and one (1) six (6) year term; and

WHEREAS, it is the recommendation by the County Executive for the members who already represent Greene County on the City/County Solid Waste Advisory Board to also serve on the Municipal Solid Waste Region Board.

NOW THEREFORE LET IT BE RESOLVED that the following persons be appointed as members of the Greene County Municipal Solid Waste Region Board and serve initial terms as outlined:

Mr. Delmar "Butch" Teglas	(1) 2 year term
Mr. Willie Good	(1) 4 year term
Mr. Gary Rupert	(1) 6 year term

ENTER THIS THE 15TH DAY OF NOVEMBER, 1993, the welfare of the county requiring it.

Alan D. Broyles
Sponsor

County Executive

County Court Clerk

D

A RESOLUTION CREATING
GREENE COUNTY'S MUNICIPAL SOLID WASTE PLANNING REGION

WHEREAS, the adoption of the Subtitle D landfill regulations by the United States Environmental Protection Agency and companion regulations adopted by the Tennessee Solid Waste Control Board will impact on both the cost and method of disposal of municipal solid waste; and

WHEREAS, at the urging and support of a coalition of local government, environmental, commercial, and industrial leaders, the 97th Tennessee General Assembly enacted T.C.A. Section 68-211-801 et seq titles "Solid Waste Management Act of 1991" and

WHEREAS, with the view that better planning for solid waste will help control the additional costs that will be imposed by the new landfill regulations, help protect the environment, provide an improved solid waste management system, better utilize our natural resources, and promote the education of the citizens of Tennessee in the areas of solid waste management including the need for and desirability of reduction and minimization of solid waste, local governments in Tennessee supported and worked for the passage of this Act; and

WHEREAS, one of the stated public policies of this act is to institute and maintain a comprehensive, integrated, statewide program for solid waste management; and

WHEREAS, as per T.C.A. Section 68-211-811, the nine development districts in the State of Tennessee have completed a district needs assessment which are inventories of the solid waste systems in Tennessee; and

WHEREAS, Greene County's Board of County Commissioners has given consideration to the needs assessment prepared by the First Tennessee Development District; and

WHEREAS, T.C.A. Section 68-211-813, requires that counties in Tennessee form municipal solid waste regions; and

WHEREAS, the Act's stated preference is the formation of multi-county regions with counties having the option of forming single or multi-county municipal solid waste regions; and

WHEREAS, the State of Tennessee will provide grant monies of varying amounts to single county, two county, and three or more county municipal solid waste regions to assist these regions in developing their municipal solid waste region plans; and

WHEREAS, the primary and prevailing purpose of the municipal solid waste regions are the preparation of municipal solid waste regional plans which among other requirements must identify how each region will reduce its solid waste disposal per capita by twenty-five (25%) by December 31, 1995, and a planned capacity assurance of its disposal for a ten (10) year period; and

WHEREAS, the development of a municipal solid waste regional plan that results in the most cost effective and efficient management of municipal solid waste is in the best interest of the citizens of Greene County.

NOW, THEREFORE BE IT RESOLVED, by the Board of County

Commissioners of Greene County, Tennessee, acting pursuant to T.C.A. Section 68-211-801 et seq., that there is hereby established a Municipal Solid Waste Region for and by Greene County, Tennessee; and

BE IT FURTHER RESOLVED, that pursuant to T.C.A. Section 68-211-813 (a) (2), that the Board of County Commissioners of Greene County, Tennessee finds and determines that Greene County shall be and shall constitute a single county municipal solid waste region in accordance with the Solid Waste Management Act of 1991, for the following reasons:

- (A) Greene County is a large geographic region and has the second (2) largest number of road miles, second only to Shelby County.
- (B) Greene County and the Town of Greeneville wish to continue a cooperative and successful working partnership in matters relating to solid waste management.
- (C) Greene County has a good integrated solid waste management system in place and foundations laid for future enhancements to our system.
- (D) Greene County has prepared a basic solid waste plan with input from a citizen task force and this plan has been presented to the populace of Greene County via a series of five (5) public meetings held specifically to discuss and review the plan.

BE IT FURTHER RESOLVED, that pursuant to T.C.A. Section 68-211-813 (b) (1), a Municipal Solid Waste Region Board is hereby established to administer the activities of this Region; and

BE IT FURTHER RESOLVED, that this Municipal Solid Waste Region Board shall be composed of seven (7) members; and

BE IT FURTHER RESOLVED, that the Legislative Body of Greene County and each municipality that provides solid waste collection services, Greene County, the Town of Greeneville and the City of Tusculum shall have representation on this Board. Greene County and the Town of Greeneville, sharing all costs associated with solid waste disposal on a 50/50 basis shall each have three (3) representatives on the Board. The City of Tusculum shall have one representative; and

BE IT FURTHER RESOLVED, that the Greene County appointees shall be appointed by the County Executive and approved by the Board of County Commissioners. The Greeneville and Tusculum appointees shall be appointed by the Mayor of each respective community and approved by the legislative body of each respective community; and

BE IT FURTHER RESOLVED, that members of the Board of the Municipal Solid Waste Region shall serve a six (6) year term except initial terms. Initial terms for Greene County appointees shall be one (1) two (2) year term; one (1) four (4) year term; and one (1) six (6) year term. The Town of Greeneville appointee's terms shall be one (1) two (2) year term; one (1) four year term; and one (1) six year term. Tusculum's appointee shall serve a six year term; and

BE IT FURTHER RESOLVED, that this Municipal Solid Waste Region Board shall have all powers and duties as granted it by T.C.A. Section 68-211-813 et seq. and in addition in the performance of its duty to produce a municipal solid waste region plan, it shall be empowered to utilize existing Greeneville and Greene County governmental personnel, to employ or contract with persons, private consulting firms, and/or governmental, quasi-

governmental, and public entities and agencies and to utilize
Greeneville and Greene County's services, facilities and records
in completing this task; and

BE IT FURTHER RESOLVED, that at the Municipal Solid Waste
Region Board's initial organizational meeting it shall select from
its members a chair, vice-chair, and secretary; and

BE IT FURTHER RESOLVED, that the Municipal Solid Waste
Region Board, in the furtherance of its duty to produce a municipal
solid waste region plan, is authorized to apply for and receive
funds from the State of Tennessee, the federal government, Greene
County, Greeneville, and Tusculum, and to apply for and receive
donations and grants from private corporations and foundations; and

BE IT FURTHER RESOLVED, that the Town of Greeneville
shall receive, disburse, and act as the fiscal agent for the
administration of the funds of the Municipal Solid Waste Region and
the Region's Board; and

BE IT FURTHER RESOLVED, that upon the passage of this
Resolution that the County Clerk of Greene County shall transmit
a copy of this Resolution to the Tennessee State Planning Office.

RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF GREENE
COUNTY, TENNESSEE this 18th day of January, 1993, the welfare of
the citizens of Greene County requiring it.

Willie Good
Sponsor

Willie L. Good
County Executive

Fredrick Shaw
County Court clerk

ADVISORY BOARD STRUCTURE

Members

Ben Whinnery
Steve Buono
Oliver Burkey
Milton Chapman
Virginia Brown
M.C. Rollins, Jr.
Sarah Webster
Gary Bowers
Doug Ratledge
Kidwell King
Robby Rader
Ann Hawkins

Mission Statement

"Increase public awareness of our communities' responsibilities and choices, today and in the future, concerning solid waste, and to assist the Planning Board with the development of a 10 year solid waste management plan."

Summary of Activities

The Advisory Board also functioned as the Public Education Task Force. This Board met regularly throughout the development of the Solid Waste Plan. The Board addressed issues relative to the Plan and offered advice or comments when necessary.

Probable Role In Implementation

The Advisory Board will continue to meet and provide technical support to the Planning Board. The Advisory Board will also be involved in developing public education programs for the residents of Greene County.



Town Hall

MAYOR
 G. Thomas Love
 ALDERMAN
 Betsey J. Bowman
 W. T. Daniels
 James A. Emory
 Sarah E. T. Webster
 RECORDER
 James L. Warner

TOWN OF GREENEVILLE

Greenville, Tennessee 37743-5096 -- (615) 639-7105

May 10, 1994

Mr. Christopher Craig
 Environmental Specialist
 First Tennessee Development District
 207 North Boone Street
 Johnson City, TN. 37604

Dear Mr. Craig:

In compliance with the requirements set forth in TCA 68-31-874, the Town of Greenville has established the Greenville-Greene County Landfill Fund 128. Please accept this letter as certification that the accounting requirements have been complied with.

Thank you for your assistance and should you need further information, please feel free to contact me.

Sincerely,

G. Thomas Love
 Mayor



Home of
ANDREW JOHNSON



CITY OF TUSCULUM

P.O. Box 5674 — Tusculum Station
Greeneville, TN 37743

May 20, 1994

Mr. Christopher L. Craig
Environmental Specialist
First Tennessee Development District
207 North Boone Street, Suite 800
Johnson City, TN 37604

Dear Mr. Craig:

As the State of Tennessee is requiring that each municipality in the Region comply with the solid waste financial accounting system requirements of T.C.A. 68-31-874, this letter will certify that the City of Tusculum is complying with these rules.

As Greene County is our chief financial officer and pays all tipping fees, we have listed this account under City of Tusculum, Sanitation Department, in our 1993-1994 Budget.

Please contact me if you have any other questions.

Sincerely,



Eddie Malone
Mayor

EM/baf

APPENDIX B



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

NED McWHERTER
GOVERNOR

J. W. LUNA
COMMISSIONER

June 22, 1994

Sarah E. T. Webster, Chairman
Greenville/Greene County Regional Solid Waste Planning Board
Town Hall
Greenville, Tennessee 37743-5096

Dear Ms. Webster:

We have received your request for an adjustment to Greene County's solid waste base year data. Based on the information provided, Greenville/Greene County's Regional Solid Waste Board's request for an adjustment to Greene County's base year data is approved to reflect an annual per capita disposal rate of 1.11 tons.

If we can be of further assistance on this or any other matter, please do not hesitate to contact us.

Sincerely,

Paul Evan Davis
Director
Division of Solid Waste Assistance

PED:GHD:dhm

cc: Chris Craig, FTDD

APPENDIX C

Fee \$..... Paid

Fee \$..... 38.40----- not paid

PASTE COPY HERE

vs

In the Court of Greene County, Tennessee.

I, Rubye Sparks, Accounting Manager of THE GREENEVILLE SUN, a daily newspaper published in the Town of Greeneville, Greene County, Tennessee, do solemnly swear that the attached Notice was

published in said newspaper for 1 consecutive weeks, the first publication being on the 16 day of June , 1994, and the last one on the day of , 19

..... Rubye Sparks Accounting Manager

Sworn to before me, this 21 day of

..... June , 19 94 Debbie Carson Notary Public

My Commission expires 2/14/95

PUBLIC NOTICE Pursuant to the Solid Waste Management Act of 1991, each municipal solid waste planning region is required to develop a 10 year solid waste plan. A public meeting has been scheduled by the Greeneville Greene County Solid Waste Board to discuss the Solid Waste Management Plan. This Plan was written in 1991 but has been slightly modified to meet the State's criteria. The meeting will be held at 9:00 a.m. on June 23, 1994 in the Greeneville Town Hall Board Room. The public will have the opportunity to ask questions or make comments on the Plan. For additional information contact Debbie Smith, Town of Greeneville, 639 7105. 6-16;11chro

Greenville/Greene County Public Meeting 6-23-94

<u>Name</u>	<u>City, Zip</u>
Sarah Hatcher	Greenville 37742
Robert H. Bird	(Tusculum) 37743
Sary Rupert	Greenville 37743
Willie Good	Chucky 37641
Dolmer R Taylor	Chucky 37641
Albert Giles	Greenville 37745
B. Jancey	Greenville 37745
Jeff Collins	Greenville 37745

APPENDIX E

**First
Tennessee
Development
District**

207 North Boone Street, Suite 800 • Johnson City, Tennessee 37604
(615) 928-0224 • Fax (615) 928-5209

Carter
Elizabethton
Watauga

June 6, 1994

Greene
Baileyton
Greeneville
Mosheim
Tusculum

Dear Baileyton Planning Commission,

As you know the Greeneville/Greene County Solid Waste Planning Board and the First Tennessee Development District are completing the Greeneville/Greene County Solid Waste Management Plan which meets the requirements of the Solid Waste Management Act of 1991. Due to the fact that the planning document may affect the future of a given area in the Region, the document is to be made available to the appropriate municipal and regional planning commissions.

Hancock
Sneedville

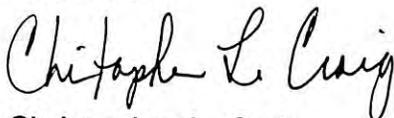
The Solid Waste Plan will be available for your review in the Greeneville Town Hall and the Greene County Executive's office on July 1, 1994 Monday through Friday 8:30 to 4:30 p.m. Any comments you may have on the Plan can be addressed to the First Tennessee Development District.

Hawkins
Bulls Gap
Church Hill
Carmel
Rogersville
Surgoinville

Thank you for your attention.

Sincerely,

Johnson
Mountain City



Christopher L. Craig
Environmental Specialist

Sullivan
Bluff City
Bristol
Kingsport

Unicoi
Erwin

Washington
Johnson City
Jonesborough

**First
Tennessee
Development
District**

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Carter
Elizabethton
Watauga

June 6, 1994

Greene
Baileyton
Greeneville
Mosheim
Tusculum

Dear Greene County Planning Commission,

Hancock
Sneedville

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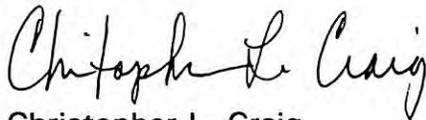
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Bulls Gap
Church Hill
Carmel
Rogersville
Surgoinsville

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Thank you for your attention.

Sincerely,

Johnson
Mountain City



Christopher L. Craig
Environmental Specialist

Sullivan
Bluff City
Bristol
Kingsport

Unicoi
Erwin

Washington
Johnson City
Newburgh

First
Tennessee
Development
District

207 North Boone Street, Suite 800 • Johnson City, Tennessee 37604
(615) 928-0224 • Fax (615) 928-5209

Carter
Elizabethton
Watauga

June 6, 1994

Greene
Baileyton
Greeneville
Mosheim
Tusculum

Dear Tusculum Planning Commission,

As you know the Greeneville/Greene County Solid Waste Planning Board and the First Tennessee Development District are completing the Greeneville/Greene County Solid Waste Management Plan which meets the requirements of the Solid Waste Management Act of 1991. Due to the fact that the planning document may affect the future of a given area in the Region, the document is to be made available to the appropriate municipal and regional planning commissions.

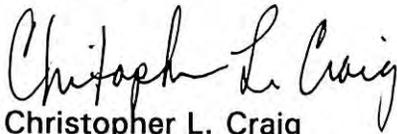
Hancock
Sneedville

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Hawkins
Bulls Gap
Church Hill
Carmel
Logersville
Surgoinville

Thank you for your attention.

Sincerely,



Christopher L. Craig
Environmental Specialist

Johnson
Mountain City

Sullivan
Bluff City
Bristol
Kingsport

Unicoi
Erwin

Washington
Johnson City
Jonesborough

**First
Tennessee
Development
District**

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(615) 928-0224 • Fax (615) 928-5209

Carter
Elizabethton
Watauga

June 6, 1994

Greene
Baileyton
Greeneville
Mosheim
Tusculum

Dear Mosheim Planning Commission,

As you know the Greeneville/Greene County Solid Waste Planning Board and the First Tennessee Development District are completing the Greeneville/Greene County Solid Waste Management Plan which meets the requirements of the Solid Waste Management Act of 1991. Due to the fact that the planning document may affect the future of a given area in the Region, the document is to be made available to the appropriate municipal and regional planning commissions.

Hancock
Sneedville

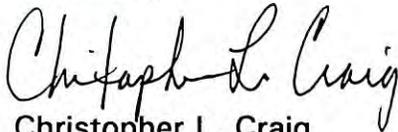
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Hawkins
Bulls Gap
Church Hill
Carmel
Rogersville
Surgoinville

Thank you for your attention.

Johnson
Mountain City

Sincerely,



Christopher L. Craig
Environmental Specialist

Sullivan
Bluff City
Bristol
Kingsport

Unicoi
Erwin

Washington
Johnson City
Newborough

First
Tennessee
Development
District

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Carter
Elizabethton
Watauga

June 6, 1994

Greene
Baileyton
Greeneville
Mosheim
Tusculum

Dear Greeneville Planning Commission,

Hancock
Sneedville

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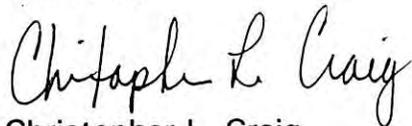
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Thank you for your attention.

Johnson
Mountain City

Sincerely,



Christopher L. Craig
Environmental Specialist

Sullivan
Bluff City
Bristol
Kingsport

Unicoi
Erwin

Washington
Johnson City
Seabrook

A RESOLUTION BY THE GREENE COUNTY LEGISLATIVE BODY TO
ESTABLISH A SOLID WASTE DISPOSAL PLAN
FOR GREENE COUNTY

WHEREAS, the General Assembly of the State of Tennessee enacted the "Solid Waste Management Act of 1991", effective July 1, 1991.; and

WHEREAS, Section 12(C) of the "Solid Waste Management Act of 1991" stipulates that each county or region shall develop a solid waste plan for a ten (10) year disposal capacity; and

WHEREAS, the Greeneville/Greene County Regional Solid Waste Board, with guidance from citizen task forces and First Tennessee Development District, has developed a solid waste plan for Greeneville and Greene County; and

WHEREAS, Greene County has for several years jointly owned with the Town of Greeneville, the solid waste disposal facility with each governmental body sharing the operational cost of said facility on a fifty-fifty basis.

NOW THEREFORE BE IT RESOLVED by the Greene County Legislative Body meeting in regular session on July 18, 1994, a quorum being present and a majority voting in the affirmative;

(1) that Greene County adopt the Greeneville/Greene County Solid Waste Plan developed by the Greeneville/Greene County Regional Solid Waste Board;

(2) that Greene County shall continue to share in the solid waste disposal facility ownership and operation expenses with The Town of Greeneville with each entity paying fifty percent (50%) of the costs incurred, including the site selection and development of a new disposal facility.

(3) that the Greene County Legislative Body authorizes the County Executive to enter into a contract agreement with the Town of Greeneville, with the consent of the City Legislative Body, for the purpose of jointly owning and operating the disposal facility on an equal basis and to apply for any and all grants related to the handling of solid waste for the county.

Alan D. Boyler
County Executive

Franklin Shaw
County Court Clerk

Solid Waste Committee
Sponsor

STATE OF TENNESSEE 155
COUNTY OF GREENE 155

I, Clerk of the County Court for Greene County, do hereby certify that the foregoing is a true and correct copy of the

Resolution

As the same appears of record in my office

Witness my hand and seal of office this 22nd day of July 1994

Franklin Shaw Clerk
Franklin Shaw
Franklin Shaw