RECEIVED
MAY 10 2010

MULTI-JURISDICTIONAL SOLID WASTE MANAGEMENT PLAN

Newton County, Georgia

Cities of Covington, Mansfield, Newborn, Oxford and Porterdale.

Planning Period
2008-2018

As Revised December 2009

MAY 0 8

TABLE OF CONTENTS

SUMMARY....3
S.1 AUTHORIZATION....3
S.2 OBJECTIVES....3
S.3 BACKGROUND....4
S.4 ACHIEVEMENT OF HISTORIC MSWMP GOALS....4
S.5 REVISED ACTION PLAN....7

SECTION 1 DEMOGRAPHIC INFORMATION....8
1.1 DEFINITION OF STUDY AREA....8
1.2 POPULATION, HOUSING AND EMPLOYMENT....8
1.2.A Population....8
Table 1-0 NEWTON COUNTY POPULATION DATA....9
Table 1-1 REGIONAL POPULATION DATA....9
Table 1-2 NEWTON COUNTY POPULATION PROJECTIONS....10
1.2.B Employment....10

SECTION 2 BASIC INVENTORY AND ASSESSMENT....11
2.1 INTRODUCTION....11
2.2 CURRENT QUANTITY OF WASTE....13
TABLE 2-0 2007 SOLID WASTE GENERATION BY JURISDICTION....13
2.3 CURRENT COLLECTION SYSTEM....14
TABLE 2-1 SOLID WASTE RELATED EQUIPMENT....14
2.3.A Disaster Related Waste and Contingencies....15
2.3.B Illegal Dumping and Litter....16
2.4 CURRENT WASTE STREAM COMPOSITION....17
TABLE 2-2 CHARACTERIZATION OF WASTE STREAM BY SOURCE – 2007....17
2.5 CURRENT DISPOSAL FACILITY....18
2.5.A Assurance of 10-Year Capacity....18
2.5.B Contingency Strategy....19
2.6 LAND LIMITATIONS FOR NEW LANDFILLS AND EXPANSIONS....19
2.6.A. Environmental Characteristics Overview....19
2.6.B. Needs and Goals....19
2.6.C. Environmental Limitations....20
2.6.C.1 Water Supply Watershed Areas....21
2.6.C.2 Groundwater Recharge Areas....21
2.6.C.3 Groundwater Pollution Susceptibility Areas....22
2.6.C.4 Spring and Wellhead Protection Areas....22
2.6.C.5 Wetlands Areas....22
2.6.C.6 Protected River Corridor Areas....23
2.6.C.7 Flood plains....23
2.6.C.8 Geology....23
2.6.C.9 Hydrology....24
2.6.C.10 Seismic Impact Zones or Fault Areas....24
2.6.D. Land Use Limitations....24
2.6.D.1 Existing Land Uses....24
2.6.D.2 Zoning....25
2.6.D.3 Airport....25
2.6.D.4 Traffic and Transportation....25
2.6.D.5 Water Capacity Restrictions....26
2.6.D.6 Historic Sites....26
2.6.D.7 Maps....26

2.6.E. Procedures for Determining Plan Consistency 27
2.6.F. Public Notification and Hearing Procedures 29
2.6.F.1 Application Submission and Hearing Schedule 30
2.6.F.2 Mailed Notice 30
2.6.F.3 Published Notice 30
2.6.F.4 Application Copies and Fee 31
2.6.F.5 Public Comment Hearing 31
2.6.F.6 Determination of Plan Consistency 32
2.6.F.7 Appeal Procedures 32
2.6.G Assessment of the Land Limitation Element 33
2.7 RECYCLING COLLECTION, PROCESSING, and EDUCATION 33
2.7.A. Recycling Collection 33
2.7.B. Recycling Processing Center 33
2.7.C. Recycling, Education, And Public Involvement Activities 35
2.8 CURRENT REVENUES AND FINANCING 36

SECTION 3 STATEMENT OF NEEDS AND GOALS 37
3.1 PROJECTIONS OF FUTURE WASTE QUANTITIES 37
TABLE 3-0 POPULATION/WASTE PROJECTIONS* 37
3.2 WASTE REDUCTION GOALS 37
Table 3-1 POPULATION/WASTE PROJECTIONS* 38
3.3 DISPOSAL FACILITY METHODOLOGY 38
3.4 COLLECTION METHODOLOGY 39
3.5 RECYCLING GOALS 39
3.6 SOURCE REDUCTION 39

SECTION 4 IMPLEMENTATION STRATEGY 40
4.1 COLLECTION METHODOLOGY 40
4.2 WASTE REDUCTION TECHNIQUES 40
TABLE 4-0 COMPOSITION OF RECYCLED MATERIAL – 2007 41
TABLE 4-1 2007 REDUCTION IN LANDFILL TONNAGE BASED ON RECYCLING ACTIVITIES 41
4.3 EVALUATION OF WASTE REDUCTION TECHNIQUES 43
4.4 EDUCATION AND PUBLIC INVOLVEMENT 43
4.5 PLAN IMPLEMENTATION AND FINANCING 44
4.5.A Waste Reduction Implementation Strategy 45
4.5.B Collection Implementation Strategy 45
4.5.C Disposal Implementation Schedule 45
4.5.D Land Limitation Implementation Schedule 45
4.5.E Education and Public Involvement Implementation Schedule 46
Table 4-2 Newton County 10-Year Solid Waste Enterprise Budget 47
Table 4-3 City of Oxford Solid Waste Implementation Budget 48
Table 4-4 City of Covington Solid Waste Implementation Budget 49

APPENDIX A Maps
APPENDIX B Ten Year Assurance of Landfill Capacity

SUMMARY

S.1 AUTHORIZATION

The preparation of this update for the Multi-jurisdictional Solid Waste Management Plan (MSWMP) was authorized by the Newton County Board of Commissioners in cooperation with the governing bodies of the Cities of Covington, Mansfield, Newborn, Oxford and Porterdale. The Newton County staff members responsible for the preparation of this report and their respective responsibilities in solid waste activities of the County are as follows:

- Landfill & Neighborhood Recycling Centers: James Peters (770) 786-5808
- Recycling Education: Connie Waller (770) 784-2015
- Financial: John Middleton (770) 625-1204

S.2 OBJECTIVES

The objective of this plan is to meet the updated requirements of the Georgia Comprehensive Solid Waste Management Act of 1990 as it pertains to Newton County and its cities. The current MSWMP was approved on May 28, 1993 and subsequently amended by Short Term Work Program (STWPs) updates on five year intervals in 1998 and 2004. This comprehensive revision of the MSWMP was prepared under the guidelines of the Georgia Department of Community Affairs Chapter 110-4-3 minimum Planning Standards and Procedures for Solid Waste Management.

This plan will address the minimum planning standards, the degree to which the goals of previous MSWMPs were achieved, ongoing modifications to the solid waste facilities within the County, and considerations peculiar to Newton County and its cities, including the unprecedented growth being experienced and projected for these communities.

The plan objectives remain based on the following Newton County policy goals:

- To be environmentally sound;
- To obey the spirit and letter of the law;
- To be economically feasible;
- To be compatible with future growth;
- To preserve community integrity; and

- To conserve valuable landfill space.

S.3 BACKGROUND

Historically, Newton County citizens and elected officials were aware of local waste handling practices and the potential impact these practices have on the environment. In 1989 the Solid Waste Study Committee (SWSC) was established with representatives from each participating government, interested local organizations and concerned individuals. The Keep Covington/Newton Beautiful program (KCNB), with a full time staff, was funded by Newton County and the City of Covington. The SWSC evolved into the Solid Waste Planning Committee (SWPC) and continues to be involved in coordinating Solid Waste planning activities and educating the public on environmental issues. The SWPC remains committed to the following principles:

- Solid waste is a county-wide problem and all communities in the county should participate in order that the plan may succeed; and
- If a component can be removed from the waste stream then the volume of waste being collected and disposed of will be reduced by diverting materials that are recyclable and reusable.

S.4 ACHIEVEMENT OF HISTORIC MSWMP GOALS

One goal of the Georgia Comprehensive Solid Waste Management Act of 1990 is that the amount of waste being disposed at MSWL's during fiscal year 1992 should be reduced by 25 percent by July 1, 1996. In order to achieve this goal, the 1993 MSWMP identified specific solid waste goals for Newton County. These goals, and a summary of achievement, are as follows:

Collection activities will be modified to increase voluntary separation for recyclable items by household and commercial/industrial generators. The Cities of Covington and Oxford provide weekly curbside collection of recyclables.

To improve the quality and marketability of recycled materials by having a limited number of manned recycling centers and expanding curb-side pickup programs. Efforts will also be undertaken to decrease neighborhood yard waste and start voluntary neighborhood recycling programs and home composting. Eleven manned

neighborhood recycling centers (NRCs) allow all citizens of Newton County to conveniently dispose of recyclables. Collected recyclables are transported to a central recycling processing center at the Newton County Lower River Road Municipal Solid Waste Landfill for baling and resale. In addition, Newton County provides a facility at the landfill to mulch all yard and wood wastes generated within the County. The resulting mulch is available to the citizens of Newton County and is used to control erosion at the Newton County Lower River Road Municipal Solid Waste Landfill.

Disposal activities will continue to be limited to the current Newton County Lower River Road Municipal Solid Waste Landfill (MSWL) and expansion of it onto an adjacent 275 acre site owned by Newton County. The above-referenced expansion was partially completed, and in 1998 all municipal solid waste (MSW) began to be placed into a lined landfill. Beginning in 2007, all waste, including construction demolition (C&D) waste, is now placed in the lined landfill.

Currently, Newton County's facility occupies approximately 217 acres, of which 88.1 acres are permitted for disposal. Permit modifications are pending to authorize relocation of the recycling processing center to a 65 acre parcel immediately west of the current landfill. Relocation of the recycling processing center will provide additional space for future expansion of the lined landfill.

Financing options will be explored to allow funding for improved collection and recycling operations and increased disposal capacity at the Lower River Road MSWL without placing undue financial burden on the county's residents or businesses. Newton County continues to explore options for financing expansion of the MSWL. To this end, the operation of the MSWL and NRCs was placed under an enterprise system July 1, 2000. The goal of the enterprise fund is for the operation of the MSWL and NRCs to be self-supporting from revenue generated. The MSWL is able to meet its operating expenses through revenue generated by the facility; however, the operation of the NRCs requires a general fund appropriation to meet all expenses.

Commercial and industrial generators will be targeted for specific recycling activities. The City of Covington offers a commercial and industrial Solid Waste Collection system

within the City of Covington. Each customer of the City of Covington is offered a cardboard collection box to be emptied free of charge by the City. In addition, some local industries have purchased and placed cardboard compactor boxes at their industrial site which are emptied by their garbage haulers.

Many small businesses within the City limits have been given City of Covington recycling collection boxes for the collection of office paper, newspaper, plastic bottles, glass bottles and aluminum cans. The City arranges for the pick up of these containers free of charge.

Newton County's Recycling Processing Center is available for drop off of any recyclable generated by any local business and industry. Businesses can also drop their recyclables at an additional site within the city limits of Covington, where they can weigh and record the weight of the recyclables, and proceeds from the sale of recyclables can be donated to a designated charity on a quarterly basis.

A program for shredding/mulching of yard waste on a county wide basis has been implemented. Newton County provides a facility at the landfill to mulch all yard and wood wastes generated within the County. The resulting mulch is available to the citizens and businesses of Newton County and is used to control erosion at the Newton County Lower River Road Municipal Solid Waste Landfill.

Implementation of the above-described goals did not achieve a 25% reduction in the per capita generation of solid waste as compared to generation in fiscal year (FY) 1992; however, as detailed below, Newton County experienced a slight decrease in per capita generation while the trend for the State of Georgia was a considerable increase in per capita generation. The amount of solid waste generated in incorporated and unincorporated Newton County was approximately 42,977 tons for fiscal year 1991-1992. During this period, the population was approximately 43,582 people resulting in a per capita solid waste generation rate of 0.986 tons/person/year or 5.40 lbs/person/day. The Georgia Department of Community Affairs estimates the 2007 population of incorporated and unincorporated Newton County to be 97,852.57 people generating 94,547.10 tons of solid waste. This represents an annual per capita disposal rate of

0.9662 tons/person/year or 5.29 lbs/person/day. The trend observed in Georgia, as reported in Georgia's 2006 Solid Waste Management Plan, is an increase in the per capita generation of solid waste from 5.66 lbs/person/day in FY 1994 to 7.39 lbs/person/day in FY 2004. Newton County's aggressive recycling program has enabled it to significantly outperform the State in general in limiting the volume of solid waste being landfilled.

S.5 REVISED ACTION PLAN

This revised MSWMP updates criteria for solid waste collection, reduction of volume, disposal, and public education and private actions. Revised goals and objectives, inventory analysis, and implementation strategies are addressed. The major elements of the plan are as follows:

The lined MSW and unlined C&D landfills will be consolidated to increase total reserve airspace and enable placement of all solid waste into a lined facility. Relocation of historic waste into the lined landfill is anticipated and permit modification requests to allow this work are pending.

Newton County has been approved by EPD to utilize a composite daily cover called Posi-shell which will reduce air space.

Newton County will explore the feasibility of implementing a qualification program for private solid waste collection firms operating within the county. Such a program would encourage all citizens of the County to participate in a solid waste recycling program and properly dispose of all waste.

Newton County will continue to explore the potential to expand the number of neighborhood recycling centers to better serve the rapidly expanding population.

Due to the large number of schools and strained intersections on the South Covington By-Pass Road, Newton County will limit the number of solid waste transfer trucks trafficking on this strategic road between the hours of 7:00 AM and 7:00 PM to volumes generated by in-County waste disposal needs. Increased volumes of such traffic will be allowed only if accompanied by a corresponding increase in the ability of roadways or intersections to maintain this level of solid waste related traffic at its current percentage levels.

SECTION 1- DEMOGRAPHIC INFORMATION

1.1 DEFINITION OF STUDY AREA

The Newton County Solid Waste Management Plan is multi-jurisdictional in that it includes the municipalities of Covington, Mansfield, Newborn, Oxford and Porterdale. The area considered under this plan includes all of Newton County, incorporated and unincorporated.

1.2 POPULATION, HOUSING AND EMPLOYMENT

Since 1940, Newton County has seen steady population growth. Some of the factors contributing to this growth are:

- The expansion of the Atlanta Metro area;
- Lower housing costs relative to other metro areas and
- Significant growth in industrial and manufacturing employment opportunities.

The 1990 Census estimated there to be a population of 41,808 in Newton County, with approximately one-third of the population residing within the city limits of Covington. The mix of housing units in Newton County consisted primarily of single family standard homes, multi-family housing and mobile homes.

1.2.A Population

The 2000 Census reported the total population of Newton County increased to 62,001. Covington is the county seat and the largest city within the county with a reported population of 11,547. The 2000 Census also reported 1892 citizens in the city of Oxford, and a population of 1281 in Porterdale. Newborn contained a population of 520 while Mansfield reported 392 citizens. The population of unincorporated Newton County was 46,360. **Table 1-0** is a compilation of the 2000 Census data for the unincorporated county and its municipalities; **Table 1-1** shows regional population statistics. Newton County does not experience a seasonal change in population.

These estimates forecast a population of 101,300 in the year 2008 and a population of 228,200 by 2028. The 2028 population projection is nearly a four fold increase from the 2000 Census level and represents an average annual growth rate of 9.6%. **Table 1-2** shows the population projections for Newton County through 2028.

Table 1-0 NEWTON COUNTY POPULATION DATA
2000 Census

2000 Census	Total County	62,001	100%
(Change Since 1990 Census)	Cities Total	15,632	25.21%
(+15%)	Covington	11,547	18.62%
(+2.8%)	Oxford	1892	3.05%
(+0.2%)	Porterdale	1281	2.06%
(+29%)	Newborn	520	0.84%
(+15%)	Mansfield	392	0.63%
(+67%)	Unincorporated County	46,369	74.79%

Table 1-1 REGIONAL POPULATION DATA

Area Counties	2006 Population	% Growth From 2000
Henry	178,033	32.97%
Rockdale	80,332	12.72%
Walton	79,388	23.56%
Morgan	17,908	13.69%
Newton	91,451	32.20%
Jasper	13,624	16.13%
Butts	23,561	17.14%

The County's Capital Improvement Element contains population projections through 2028.

Table 1-2 NEWTON COUNTY POPULATION PROJECTIONS

Projections from Newton County Capital Improvements Element

Year	Population Projection
2008	101,300
2013	134,100
2018	165,400
2023	196,800
2028	228,200

1.2.B Employment

Newton County enjoys a growing business sector that includes the following SIC code designations: 2013, 2043, 2084, 2281(3), 2241, 2292, 2299, 2396, 2399, 2421, 2434(5), 2439, 2441, 2452, 2517, 2541, 2631, 2653, 2673, 2711, 2752(2), 2759(2), 2821, 2824, 2851, 2875, 2879, 3069(2), 3081, 3085, 3086, 3089(3), 3221, 3272, 3273(2), 3281, 3443, 3444, 3446, 3449(3), 3496, 3499(3), 3465, 3469, 3471, 3479(3), 3537, 3544(2), 3549, 3553, 3555(2), 3569, 3585, 3593(2), 3599(6),3645,3714(3),3829, 3903, 3928, 3949 (ref. GeorgiaFacts.net). The number of employees by major SIC code are as follows: 2399(115), 2441(25), 2653(114), 2821(60), 2851(42), 3086(620), 3081(300), 3089(180), 3221(350), 3469(348), 3479(65), 3496(129), 3499(33), 3549(30), 3645(40), 3714(192), 3949(175).

SECTION 2- BASIC INVENTORY AND ASSESSMENT

2.1 INTRODUCTION

The inventory of the solid waste stream was conducted using the following definitions of waste as developed by the Environmental Protection Division:

"Asbestos-Containing Waste" means any solid waste containing more than 1 percent, by weight, of naturally occurring hydrated mineral silicates separable into commercially used fibers, specifically the asbestiform varieties of serpentine, chrysatile, cummingtomite-grunerite, amosite, rieheckite, crocidolite, anthopyllite, tremolite, and actinolite, using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.

"Biomedical Waste" means any solid waste which contains pathological waste, biological waste, cultures, and stacks of infectious agents and associated biologicals, contaminated animal carcasses (body parts, their bedding, and other wastes from such animals), chemotherapy waste, discarded medical equipment and parts, not including expendable supplies and materials which have not been decontaminated, as further defined in Rule .15.

"Construction/Demolition Waste" means waste building materials and rubble resulting from construction, remodeling, repair, and demolition operations on pavements, houses, commercial buildings and other structures. Such wastes include, but are not limited to, asbestos containing waste, wood, bricks, metal, concrete, wall board, paper, cardboard, inert waste landfill material, and other non-putrescible wastes which have a low potential for groundwater contamination.

"Hazardous Waste" means any solid waste which has been defined as a hazardous waste in regulations promulgated by the Board of Natural Resources, Chapter 391-3-11.

"Industrial Waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste under regulations promulgated by the Board of Natural Resources, Chapter 391-3-11.

"Inert Waste" means wastes that will not or are not likely to cause production of leachate of environmental concern. Such wastes are limited to earth and earth-like products, concrete, cured asphalt, rock, bricks, yard trash, stumps, limbs, and leaves. This definition excludes industrial and demolition waste not specifically listed above.

"Liquid Waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paints Filter Liquids Test), as described in "Test Methods for the Evaluation of Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

"Municipal Solid Waste" means any solid waste resulting from the operation of residential, commercial, governmental, or institutional establishments except such solid

waste disposed of in a private industry solid waste disposal facility. The term includes yard trash, but does not include solid waste from mining, agricultural, or silvicultural operations.

"Putrescible Wastes" means wastes that are capable of being quickly decomposed by microorganisms. Examples of putrescible wastes include, but are not necessarily limited to, kitchen wastes, animal manure, offal, hatchery and poultry processing plant wastes, dead animals, municipal solid waste and wastes which are contaminated by such wastes.

"Solid Waste" means discarded putrescible and non-putrescible wastes, except water-carried body waste and recovered materials, and shall include municipal solid waste, rubbish such as paper, cartons, boxes, wood, tree branches, yard trimmings, furniture and appliances, metal, tin cans, glass, crockery, or dunnage; ashes; street refuse; dead animals; sewage sludges; animal manures; industrial wastes such as waste materials generated by industrial operations; residue from solid waste thermal treatment technology; food processing wastes; demolition wastes; abandoned automobiles; dredging wastes construction wastes; and any other waste material in a solid, semi-solid, or liquid state not otherwise defined in O.C.G.A. 12-8-20, it. Seq. Such term shall not include any material which is regulated pursuant to Article 2 of Chapter 5 of Title 12, the Georgia Water Quality Control Act, or Chapter 9 or Title 12, the Georgia Air Quality Control Act of 1978.

"Special Solid Waste" means any solid waste not otherwise regulated under the Georgia Hazardous Waste Management Act, O.C.G.A. 12-8-60, et seq., and Rules promulgated thereunder, originating or produced from or by a source or generator not subject to regulation under O.C.G.A. 12-8-24.

These definitions are important when considering land disposal of municipal solid waste and refuse because municipal solid waste can only be landfilled in a sanitary landfill; refuse (generally residential yard waste, construction demolition waste and vegetative debris from land clearing activities) can be disposed either in a sanitary landfill or in a dry trash landfill. The County is now co-disposing of both municipal solid waste and refuse in a lined facility and intends to relocate municipal solid waste and refuse historically placed without a liner to the lined facility. Permit revision requests to enable this transition are currently pending.

Newton County continues to work collaboratively with Keep Covington/Newton Beautiful (KCNB) to find ways to save space in the landfill. A paint, pesticide, and household hazardous waste recycling program and electronics (e-cycling) program were established in the county. Previously, household hazardous waste and electronics were collected during periodic events. Beginning July 1, 2007, these two programs became monthly recycling programs and

appropriate containers were set up at the landfill site so that citizens can drop off these materials on a regular basis. Landfill personnel are assigned to monitor the site on these monthly collection days.

2.2 CURRENT QUANTITY OF WASTE

The amount of solid waste collected and disposed of in incorporated and unincorporated Newton County is 94,547.10 tons for fiscal year 2007. The tonnage generated is disposed of at the county's Lower River Road facility; currently no waste is exported. This facility accepts no waste from outside the county. The eleven manned recycling center sites probably receive a small amount of out-of county residential waste but it is not a significant quantity. Unincorporated Newton County is responsible for over half of the amount of solid waste being disposed of at the facility and the City of Covington contributes approximately 28% of the total solid waste generated. **Table 2-0** shows a breakdown by government of the total solid waste disposed of in Newton County in fiscal year 2007.

TABLE 2-0 2007 SOLID WASTE GENERATION BY JURISDICTION

Jurisdiction	Tons/Year	2007 Population	Per Capita (Tons/Year)
Unincorporated	65,084.71	78,354	0.8306
Covington	26,142.40	14,272	1.83
Oxford	828.68	2,214	0.3742
Porterdale	2,013.71	1,724	0.86
Newborn	24.40	738	0.0331
Mansfield	453.20	550	0.824
Newton County	94,547.10	97,852	0.9662

Collection rates for municipal, C&D, and inert wastes show no seasonal variation while yard wastes do increase in the spring and fall. No unique waste generation conditions are known to exist within the County.

2.3 CURRENT COLLECTION SYSTEM

Newton County has three methods of collecting solid waste. The first method is through eleven neighborhood recycling centers placed in strategic locations throughout the county where there are the highest densities of residences. The sites are serviced by Newton County Solid Waste Management. The second method is through private haulers, the largest serving the County include:

Browning Ferris Industries (BFI)
75 Curtis Road
Lawrenceville, Ga. 30245
(678) 407-6130

Burgess Hauling
700 North Lake Drive
Covington, Ga. 30016
(770) 787-3182

Waste Management
3001 S. Pioneer Drive
Smyrna, Ga. 30082
(770) 898-9289

United Waste Services
P.O. Box 459
Mableton, Ga. 30129
(678) 945-8074

Stone Sanitation
P.O. Box 2448
Covington, Ga. 30015
(770) 943-7593

Curbside Waste
11188 Hwy. 36
Covington, Ga. 30016
(770) 385-1000

The third method is through the municipalities' sanitation departments. **Table 2-1** shows an inventory of municipality owned collection equipment.

TABLE 2-1 SOLID WASTE RELATED EQUIPMENT

GOVERNMENT	EQUIPMENT	CONDITION
Covington-	3 roll off trucks; 3 front load refuge trucks; 3 rear load refuse trucks; 5 knuckle boom trash trucks; 1 recycling truck; 3 pickup trucks; 1 tractor w/60' refuse trailer; 1 skid steer loader	Good
Oxford-	1994 GMC Top Kick Truck	Fair
	1995 Ford Leaf Truck	Fair
	1995 Ford pickup truck	Poor
	Leaf Sucker Vacuum	Good

	Chipper	Good
	1994 Ford Recycling Truck	Good
	2004 Garbage Truck	Good
Porterdale-	2000 Garbage Truck	Good
	1996 Dump Truck	Fair
	1995 Dump Truck	Fair
Mansfield-	1 garbage compactor truck	Good
	1 flatbed truck	Good
Newborn-	None	
Newton County-	7 roll-off trucks; 2 bulldozers; 1 compactor; 1 excavator; 1 loader;	Good

2.3.A Disaster Related Waste and Contingencies

Historic disaster related waste has primarily been C&D, yard, and white metal related wastes generated by a hurricane. In the case of a disaster, temporary waste piles for each of these waste types would be established on these permitted areas for later processing and disposal of the waste. Hauling of disaster related wastes to the landfill would require contracting with outside contractors and utilization of non-solid waste related government equipment. Currently, all yard wastes are mulched by an outside contractor and it is anticipated that this same contractor would process the wood and yard debris generated by a hurricane. The emphasis of this program would be to quickly process wood and white metal wastes to ensure that they are not placed in the lined landfill. The C&D wastes are currently placed in the lined landfill and disaster generated C&D would in time also be placed in the lined landfill.

In the event of natural disasters within Newton County (tornadoes, hurricanes, flooding, etc.), the county currently maintains a significant capacity for the disposal of disaster debris within the limits of the current Lower River Road Landfill property. These wastes are anticipated to potentially include wood waste (timber, stumps), demolition debris (demolished dwellings, structures), and solid waste (municipal waste). In this regard, the site currently (as of April 2008) has over 50 acres available for wood waste stockpiling and processing, under emergency conditions. Additionally, the site currently holds permits for two Construction/Demolition (C&D) disposal landfill units (C&D-1 and C&D-2) covering about 37

acres. In the event that municipal solid waste resulting from disasters is needed, the site currently holds a permit for a 37-acre MSW facility (MSW-2). The on-site capacity for both C&D and MSW are summarized below:

C&D-1	200,000 CY (estimate only; conservatively low)	
C&D-2	1,600,000 CY	
Total C&D:	**1,800,000 CY as of 4/1/08**	
MSW-2:	258,000 CY	Phases I and II
	1,552,918 CY	Phase III
Total MSW:	**1,810,918 CY** as of 4/1/08	

In summary, the facility is permitted for over 3.6 million cubic yards of waste disposal, some of which could be used for disaster disposal, as necessary.

2.3.B Illegal Dumping and Litter

Historically, Newton County had problems with illegal dumping; however, since the establishment of the 11 Neighborhood Recycling Centers, illegal dumping is now virtually nonexistent. The Centers are staffed and open for operation ample time to allow citizens to utilize these efficient and user friendly facilities. Some of the Centers are even open from 7:00 am until 9:00 pm seven days a week.

In order to address the limited illegal dumping that still occurs, Newton County's Code Enforcement Officers are dedicated to investigating illegal dumps and bringing perpetrators into compliance. In addition to county ordinances prohibiting littering and illegal dumping, the officers are able to utilize a criminal statute addressing egregious litter control which was enacted by the Georgia General Assembly in 1993. O.C.G.A. §§ 16-7-51 et seq. The law defines egregious litter to include the following: (1) all litter exceeding ten pounds in weight or 15 cubic feet in volume; (2) any discarded or abandoned substance in any weight or volume if biomedical waste, hazardous waste, or a hazardous substance; and (3) any substance or material dumped for commercial purposes. O.C.G.A. §16-7-52. This law allows the judge to make a decision based on the totality of the circumstances, including the fact that an article or articles of litter displays

the name of the accused offender thereon. O.C.G.A. §16-7-54.

Newton County also established an Environmental Court program that allows a judge to hear environmental cases on specified days of the month and not have these cases heard along with unrelated matters. This provides the judge an opportunity to focus directly on adjudicating all environmental cases including illegal dumping and littering.

The volunteers and staff of the Keep Covington/Newton Beautiful program are assigned the task of educating citizens about proper Solid Waste Management including prevention of litter and illegal dumping. This is done through school programs, adult programs, community activities such as the Adopt-A- Highway program and Rivers Alive, and promoting media attention on the subject.

2.4 CURRENT WASTE STREAM COMPOSITION

County classifications of solid waste consider residential waste as that which is placed in cans or bags and collected curb-side or deposited at the neighborhood recycling centers. Commercial waste is that which is placed in dumpsters at a business or industry.

Commercial waste is the largest component of the waste stream at 61% and approximately 25% is residentially generated. Compostable materials, such as leaves and brush debris, represent approximately 2500 tons/year. These compostable materials are currently ground and used as mulch within the Lower River Road facility and offered to Newton County citizens and business owners free of charge. The characteristics of the waste streams of the municipalities have not been evaluated but is assumed to reflect the general State breakdown as given in Section 2.2 of the May 3, 2006 Solid Waste Management Plan for the State of Georgia. The source characterization of the waste received by the facility in 2007 is given on **Table 2-2**.

TABLE 2-2 CHARACTERIZATION OF WASTE STREAM BY SOURCE – 2007

GENERATOR	TONS/YEAR
Commercial	57,523.72
Residential	23,605.84
Brush, Leaves (Yard Waste)	2,472.65
Other, including construction and demolition debris	10,944.89
TOTAL	94,547.10

2.5 CURRENT DISPOSAL FACILITY

Newton County has one operating waste disposal facility which is owned and operated by the County. The site is located ¼ mile off the South Covington By-Pass Road on Lower River Road. The facility has a current life span of approximately 12 years for municipal solid waste and over 30 years for refuse. During the remaining life of the landfill, it will be operated, maintained and monitored in compliance with all EPD regulations for existing landfills.

Presently the landfill site occupies a total of 217 acres, of which 88.1 acres are permitted for disposal. Of the 88.1 acres permitted for disposal, 14.2 acres were used for sanitary fill (municipal solid waste) without a liner system prior to 2001 and 37.1 acres are currently used for sanitary fill with a liner system. Of the remaining 36.8 acres, 11.7 acres were historically used for dry refuse and an additional 25.1 acres were permitted to receive refuse but have not been used.

The landfill takes in an average of 250 tons of solid waste per day which is broken into 175 tons of sanitary waste and 75 tons of dry refuse waste. In addition, the landfill has separate sites within the compound which divides deposited materials into organic, recyclable metals, and residential wastes.

2.5.A Assurance of 10-Year Capacity

The remaining volume capacity for the landfill units currently permitted is as follows as of April 1, 2008:

MSW-2:	258,000 CY	Phases I and II (constructed)
MSW-3:	1,552,918 CY	Phase III (construction in 2009)
Total MSW:	1,810,918 CY	
C&D-1:	200,000 CY	Constructed
C&D-2:	1,600,000 CY	Permitted but not constructed
Total C&D:	1,800,000 CY	

Based on the estimates of MSW and C&D to be generated in this multi-jurisdiction, the required volumes over the next 10-years are 1,643,103 CY for MSW and 879,657 CY for C&D. The permitted and unused airspace therefore provide sufficient capacity to ensure capacity over the next decade. Appendix B presents supplemental information demonstrating capacity assurance for the next decade.

2.5.B Contingency Strategy

As of May 2007, all solid waste received at the facility is placed within the lined sanitary landfill. Permit modifications are currently being pursued to expand the footprint of the lined sanitary landfill to include the entire 88.1 acres currently permitted and additional acreage between the permitted units. This expansion will require relocation of the recycling processing facility to a 65 acre tract immediately west of the landfill. This development will also require relocation (mining) of all solid waste historically placed without a liner system to airspace within the expanded lined facility. In addition to being more protective of the environment, the proposed modifications increase the projected life expectancy of the facility for sanitary waste from approximately 12 years to over 30 years.

2.6 LAND LIMITATIONS FOR NEW LANDFILLS AND EXPANSIONS

2.6.A. Environmental Characteristics Overview

Newton County is limited in suitable areas for a solid waste landfill due to physical and geological features, infrastructure limitations, and existing land uses including development, historic sites, and an airport. In fact, there are few areas within the County which the Plan identifies as suitable for solid waste facilities. Relevant siting criteria and environmental limitations include water supply watersheds, groundwater recharge areas, pollution susceptibility areas, spring and wellhead protection areas, wetlands, protected river corridors, flood plains, geology, soil suitability, and disturbance of endangered species areas. Relevant land use limitations including existing land uses, zoning restrictions, the Covington airport, historic sites, and other data. The County is already served by a public landfill that, once the current expansion is approved, has over 30 years capacity.

2.6.B. Needs and Goals

There are several needs and goals for this Land Limitation Element. One is to ensure that proposed solid waste management facilities are compatible with surrounding areas and are sited in areas suitable for the location of such facilities based on natural environmental limitations and land use factors. Another purpose of this Land Limitation Element is to provide an assessment of areas in Newton County which are unsuitable for solid waste management facilities (which term includes, but is not limited to, municipal solid waste landfills, construction and demolition

landfills, inert landfills, thermal treatment or disposal facilities, recovered materials processing facilities, recycling centers, composting facilities, waste transfer stations, waste processing stations, waste collection centers, hazardous waste facilities, and similar facilities). Unsuitability is determined based on environmental criteria, land use criteria, and a variety of other criteria, including the County's zoning ordinance.

Environmental criteria, also known as natural environmental limitations, include water supply watersheds, groundwater recharge areas, pollution susceptibility areas, spring and wellhead protection areas, wetlands, protected river corridors, flood plains, geology, and soil suitability.

Newton County is in the process of expanding its landfill's footprint and capacity. Once that expansion is approved, the County does not anticipate opening a new solid waste management facility within its jurisdictional boundaries in the foreseeable future. This Plan is intended to apply to any expansions and renewals of any existing solid waste management facilities in the County and to all future facilities and their expansions. It is also intended to apply to any proposed expansion of any existing grandfathered non-conforming use. Future waste disposal facilities, whether landfill or thermal energy, or other, should be constructed on a size-need basis dependent upon waste generated within the County and its municipalities and not oversized to handle or dispose of imported waste. If any suitable disposal site or sites for any solid waste management facility can later be found in the County after a complete examination of particular sites and after a thorough analysis of all criteria determined to be necessary for choosing a suitable site, Newton County must conserve its scarce suitable disposal sites and must limit use of such sites to disposal of wastes generated from only within the County. It is the goal of Newton County to consider the following items in determining the suitability of any proposed location of any solid waste management facility.

2.6.C. Environmental Limitations

The following environmental limitations must be satisfied prior to approval of any solid waste management facility, or expansion of any solid waste management facility, or the renewal of a solid waste handling permit. Numerous limitations listed below refer to the Georgia Digital Environmental Atlas, which is available online at http://ga-ims.er.usgs.gov/website/atlas/viewer.htm. Given the scale of this Atlas, an individualized determination may need to be made by Newton County to determine the exact boundaries of any

particular listed element. Additional data may be developed by the County or received from the applicant to make such determination. Interpretation of whether a proposed solid waste management facility is or is not in an area depicted on such shall be made by Newton County. Location of *any part* of a solid waste management facility, or *any part* of the lot or parcel of land containing such facility, within an area restricted below, shall be prohibited unless a variance is obtained from the appropriate regulatory body and subsequently approved by the Newton County Board of Commissioners.

2.6.C.1 Water Supply Watershed Areas.

Protection of the Alcovy River basin is a key goal of this Plan. The criteria for location a solid waste management facility in a water supply watershed are as follows:

a. Within a seven mile radius of a public water intake, no solid waste management facility shall be constructed within a 200 foot buffer on both sides of a perennial stream. No impervious surface shall be constructed within 300 feet of either side of the stream.

b. In small water supply watersheds (with basis of less than 100 square miles), outside the seven mile radius discussed above, no solid waste management facility shall be constructed within a 100 foot buffer on both sides of a perennial stream. No impervious surface shall be constructed within 150 feet of either side of the stream.

c. No solid waste management facility shall be located in a 500 foot buffer around water supply reservoirs.

d. Any landfill located anywhere within a small water supply watershed must have synthetic liner and leachate collection system.

e. No solid waste landfill shall be located within two miles of any surface water intake point.

2.6.C.2 Groundwater Recharge Areas

No solid waste management facilities shall be located in any area designated a significant groundwater recharge area on the Georgia Hydrogeological Atlas, available as a part of the Georgia Digital Environmental Atlas or in any additional area designated as significant groundwater recharge area upon specific geologic mapping. A reduced version of this map is included in Appendix A to this Plan. No solid waste landfills shall be located within three miles of a significant groundwater recharge area.

2.6.C.3 Groundwater Pollution Susceptibility Areas

No solid waste management facility shall be located in any area designed as being of higher susceptibility to groundwater pollution in the Georgia Digital Environmental Atlas. A reduced version of this map is included in Appendix A to this Plan.

2.6.C.4 Spring and Wellhead Protection Areas

No solid waste management facility shall be located within 1000 feet of the boundary of any area designed as an inner or outer management zone of a public water supply spring or well for which a wellhead protection plan has been mapped by EPD. No solid waste management facility shall be located within 1000 feet of any water supply spring or well, public or private.

Prior to the commencement of the construction of any landfill not currently in operation within the County, the owner/operator of the proposed landfill shall obtain from all "state waters" and from all water supply wells, public and private, located within one mile of the boundaries of all property owned by the owner/operator of the landfill, a water sample, which shall be analyzed for all constituents listed in Appendix I and Appendix II to 40 CFR Part 258, Subpart E, as amended, 56 Fed. Reg. 51032-51039 (October 9, 1991), by a properly accredited laboratory approved by the Newton County Board of Commissioners. These samples shall contain the exact location from which they were obtained (by GIS survey), the name and mailing address of the property owner who owns the land from which the water sample was taken, and the name and address of the principle users of the water supply well, if different from the owner of the property upon which the well is located. The results of the individual analysis shall be certified by the laboratory, submitted to each property owner from whose property a sample was taken, and a copy filed with Newton County.

All wells to be included in the groundwater monitoring program required by the Georgia Environmental Protection Division shall be monitored quarterly for all constituents in Appendix I to 40 CFR Part 258, Subpart E, as amended, 56 Fed. Reg. 51032-51039 (October 9, 1991), and shall be monitored annually for all constituents in Appendix II to 40 CFR Part 258, Subpart E, as amended, 56 Fed. Reg. 51032-51039 (October 9, 1991). Copies of all monitoring test well results shall be delivered to Newton County promptly upon receipt by the owner/operator.

2.6.C.5 Wetlands Areas

No solid waste management facility shall be located in a wetland, or within 250 feet of a wetland, as wetlands are defined by the Code of Federal Regulations, 33 CFR part 328.3(b), unless the facility has received a Section 404 permit from the Corps of Engineers and a Section

401 water quality certification from Georgia Department of Natural Resources, Environmental Protection Division. Some wetland areas (but not necessarily all such areas) are shown on the Georgia Digital Environmental Atlas, under the "Lakes and Wetlands" and "Level I Land Use" layers. Reduced versions of these maps are included in Appendix A to this Plan.

2.6.C.6 Protected River Corridor Areas

A protected river is defined by the State as any perennial river or water course that has an average annual flow of at least 400 cubic feet per second. The Georgia DNR has deemed rivers of this size to be of vital importance to Georgia. Newton County does not contain any rivers meeting the Georgia DNR criteria; however, the Alcovy, South and Yellow Rivers have been designated for River Corridor Protection Overlays under the Newton County Zoning Ordinance. In accordance with the zoning overlay, no solid waste management facility may be located within 100 feet of the river bank of any county protected river.

2.6.C.7 Flood plains

No solid waste management facility may be located in any 100 year flood plain as shown on any FIRM flood plain map, or as shown by any competent study of flood plain areas more recent or up to date than the existing FIRM maps unless a demonstration of compliance with Section 600-080 of the Newton County Water Resources Management Ordinance is approved by the Director of the Newton County Department of Water Resources or his designee.

2.6.C.8 Geology

No solid waste management facility may be located in any area of unstable or unsuitable geology. Factors equating to unstable or unsuitable geology include:

a. On-site or local soil conditions that may result in significant differential settling;

b. Locations susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill.

c. Karst terrains, meaning areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

d. Locations susceptible to mass movement meaning those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the

movement of earth material at, beneath, or adjacent to the landfill unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, block sliding, and rock fall.

e. Poor foundation conditions, meaning those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a landfill unit.

2.6.C.9 Hydrology

Solid waste management facilities shall comply with County and State stream buffer requirements. Some lakes, streams, and rivers (but not necessarily all) are shown on the Georgia Digital Environmental Atlas under the "Lakes and Wetlands" and "Hydrology" layers. Reduced versions of these maps are included in Appendix A to this Plan.

2.6.C.10 Seismic Impact Zones or Fault Areas

No solid waste management facility may be located in any seismic impact zone, or within 200 feet of a fault that displaced in Holocene time. A seismic impact zone means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years. Maximum horizontal acceleration in lithified earth material means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment. Lithified earth material means all rock, including naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments.

2.6.D. Land Use Limitations

Newton County and all the municipalities in Newton County have adopted zoning ordinances. The following land use limitations must be satisfied prior to approval of any solid waste management facility, renewal of a permit from the EPD or EPA, or expansion of any solid waste management facility.

2.6.D.1 Existing Land Uses

No solid waste management facility shall be located within ½ mile of a jurisdictional

boundary without the permission of the adjoining jurisdiction. No solid waste management facility, except existing facilities and expansions of existing facilities, shall be located within 500 feet of a residentially-used parcel or subdivision, school or college, or public park.

2.6.D.2 Zoning

Solid waste management facilities must conform to all local zoning and land use ordinances. Landfills are limited to the heavy industry zoning classification, with a conditional use permit, under the Newton County zoning ordinance.

2.6.D.3 Airport

There is one airport currently located in Newton County east of Highway 81 in the City of Covington. Owners or operators proposing to site new Municipal Solid Waste Landfills and lateral expansions of such facilities within a five-mile radius of any public-use or private-use airport runway end or airstrip runway end used by turbojet or piston-type aircraft must notify the affected airport and the Federal Aviation Administration (FAA).

No solid waste management facility shall be located within 5,000 feet of any airport or airstrip used by piston, turboprop or jet powered aircraft. No MSW landfill shall be located within 10,000 feet of any airport or airstrip used by turboprop or jet powered aircraft. Note that FAA Advisory Circular AC No. 150/5200-34, which restricts new MSW landfills from being located within 6 miles of public airports, also applies.

2.6.D.4 Traffic and Transportation

Solid waste management facilities should only be located where the traffic and transportation infrastructure is suitable for such uses. No such facility shall be permitted if the infrastructure is incapable of handling the anticipated traffic, either in volume or weight terms, or for safety reasons. Most County roads are not built to sufficient standard to handle heavy waste hauling vehicles. In addition, due to the number of schools fronting on South Covington By-Pass Road and related intersection congestion, the traffic of solid waste related trucks must be limited. Newton County is limiting the increase in the number of solid waste transfer trucks trafficking on this strategic road between the hours of 7:00 AM and 7:00 PM to volumes generated by in-County waste disposal needs. Increased volumes of such traffic will be allowed only if accompanied by a corresponding increase in the ability of roadways or intersections to maintain this level of solid waste related traffic at its current percentage levels.

The Applicant shall detail its plans for truck traffic, rail traffic and any other sort of transportation of the waste to the facility. The Applicant shall be required to provide a traffic

study of existing road, rail and other transport capacities and the impact of the proposed facility on such capacities. In addition, any road approaching a solid waste management facility would have to be paved to include storm drainage, proper striping and signage, and turn lanes according to Georgia DOT specifications.

2.6.D.5 Water Capacity Restrictions

The combination of unprecedented growth and regional drought will strain the ability of Newton County to ensure adequate water supplies to its citizens. In addition to residential wells, Newton County currently has ten community water systems that derive their water from groundwater wells and an additional seven systems are sourced by surface water. Lake Varner is currently the only reservoir serving the County with an additional reservoir in advanced permitting stage. Future landfill sites must demonstrate that they do not impact the siting of critical future reservoirs beyond the limits of the proposed landfill site. Short term solid waste disposal capacity must not impact long term water storage capacity.

2.6.D.6 Historic Sites

Newton County contains areas of historical significance that are contained on the National Register of Historic Places. No solid waste management facility shall be located within a one mile radius of any site listed on the National Register of Historic Places

2.6.D.7 Maps

The maps presented in this Plan as attachments, exhibits, and in the appendices cover many of the criteria as of the adoption date of this plan. To the extent such maps are revised or amended in the future, such changes are incorporated herein.

2.6.E. Procedures for Determining Plan Consistency

In order for the Georgia Department of Natural Resources, Environmental Protection Division (EPD) to issue or renew a permit for a solid waste handling facility, the facility or facility expansion must be consistent with a local government's solid waste management plan. See Rules of the Georgia Department of Natural Resources (Georgia DNR), Environmental Protection Division Chapter 391-3-4 Solid Waste Management (Rules); and the Georgia Comprehensive Solid Waste Management Ac, O.C.G.A. 12-8-20 et seq. In addition to the Georgia DNR regulations and Newton County's ordinances, the County will also use the following criteria to determine whether the issuance of the requested permit is consistent with the County's Solid Waste Management Plan:

In order for the Georgia EPD and Newton County to determine whether an application for siting, renewal, or expansions of a solid waste management facility is consistent with this Plan, the following procedures shall be followed in submitting an application, notifying the public, and evaluating the impact of the proposed facility or expansion on the Plan. No solid waste management facility shall be deemed consistent with this Plan unless it receives an approval issued by the governing authority of Newton County and any affected jurisdiction.

No proposed facility or facility expansion will be sited in the planning area without a letter from the governing authority of the County (and of any affected municipality) stating that the facility is consistent with the Joint Solid Waste Management Plan (JSWMP). To determine if a proposed facility or facilities expansion is consistent with the Plan, an owner/operator of the facility shall:

At least 60 days prior to filing for a solid waste handling permit, or notifying EPD in the case of a solid waste handling facility that is permitted by rule, submit to the County a written statement (known as an Application for Determination of Plan Consistency) documenting the following:

(1) How the proposed facility or facility expansion will meet the specific goals and needs identified in the JSWMP, including specifically:

a. Impact on Reduction and Recycling

   The Applicant must submit information on how the proposed facility or expansion impacts the waste reduction and recycling efforts of the County. The needs and goals of this Plan shall be referenced in this analysis. A financial analysis shall be included.

b. Impact on Waste Handling and Collection

The Applicant must submit information on how the proposed facility or expansion impacts the waste handling and collection capability of the County. The needs and goals of this Plan shall be referenced in this analysis. A financial analysis shall be included.

c. Impact on Disposal

The Applicant must submit information on how the proposed facility or expansion impacts the disposal capability of the County. The needs and goals of this Plan shall be referenced in this analysis. A financial analysis shall be included.

d. Consistency with Environmental Limitations

The Applicant must submit information on how the proposed facility or expansion impacts each of the environmental limitations detailed in this Plan.

e. Consistency with Land Use Limitations

The Applicant must submit information on how the proposed facility or expansion impacts each of the land use limitations detailed in this Plan.

f. Effect on State's and County's 25 percent per capita disposal reduction goal.

The Applicant must submit information on the effect the facility will have upon waste generated within the State, achieving the State's 25 percent per capita disposal reduction goal and must submit information that all generating jurisdictions from which waste will be received are part of an approved solid waste management plan and have a strategy to meet, and are actively engage in meeting, the goal to reduce by 25 percent the per capita rate of municipal solid waste disposed statewide in solid waste facilities as compared with the per capita municipal solid waste disposal rate in fiscal year 1992.

g. Vehicle Traffic and Safety; Road Conditions

The Applicant must submit information on how the proposed facility or expansion impacts vehicle traffic and safety, as well as road conditions. Operation hours, estimated traffic, traffic routes, dust generation, noise, light and odor are all factors that should be analyzed.

h. Financial Viability of Existing Solid Waste Management System

The Applicant must submit information on how the proposed facility or expansion will impact the financial viability of the existing solid waste management system. In accordance with Murray County v. R & J Murray, LLC, the County considers

it significant if the proposed facility will have a negative impact on the County's ability to operate the exiting landfill.

i. Individual and Business Solid Waste Management Rates

The Applicant must submit information on how the proposed facility or expansion will impact individual and business solid waste management rates.

j. Natural and Cultural Resources

The Applicant must submit information on how the proposed facility or expansion will impact existing and nearby natural and cultural resources, within a two mile radius, including Historic Sites, lakes and rivers used for recreation, public parks, schools and other public facilities.

k. Current Solid Waste Management Infrastructure, Public and Private

The Applicant must submit information on how the proposed facility or expansion will impact the current solid waste management infrastructure, both public and private.

(2) The owner/operator must demonstrate how he and any future owner/operators will satisfy the financial assurance provisions of this plan and local ordinances.

(3) The owner/operator must demonstrate how the proposed facility is consistent with local zoning ordinances.

(4) The owner/operator must demonstrate how the proposed facility is sited in an area deemed suitable according to the criteria listed in the JSWMP.

2.6.F. Public Notification and Hearing Procedures

The Applicant must demonstrate that it has satisfied the following public notification requirements for submission of its Application for a Determination of Plan Consistency. In the event the applications only for a facility entirely within the County, only the County must hold hearings. In the event the proposed facility is to be partially or wholly within a municipality, the municipality shall also hold hearings. References below to "governing authority" shall mean either just the County or both the County and the affected City, as applicable.

2.6.F.1 Application Submission and Hearing Schedule

Upon receipt of an Application for Determination of Plan Consistency, the governing authority shall have seven business days to review the application for completeness. In the event two governing authorities are holding hearings, then both must approve the application's completeness. If the application is incomplete, the governing authority shall return the application with the deficiencies noted. The application may be resubmitted once the deficiencies are corrected. If the application is accepted as complete, the Applicant shall be advised of the date of the initial hearing, the public comment hearing, and the decision hearing. The initial hearing must be held within fifteen days of the date the application was deemed complete, and may be a called meeting. The public comment hearing shall be held within fifteen days after the initial hearing, but no sooner than one week after the initial hearing. The decision hearing shall be the next regularly scheduled governing body's hearing after the public comment hearing, provided that occurs at least three business days after the public comment hearing. The decision hearing may not occur at a called meeting.

2.6.F.2 Mailed Notice

Upon receipt of the date of the hearings, the Applicant shall cause to be mailed, via first class mail with proof of mailing, a letter advising all property owners any portion of whose property is within five hundred feet of the boundaries of the parcel or lot containing the proposed facility, of the time, place and purpose of the initial hearing, the public comment hearing, and the decision hearing, and containing a summary description of the proposed facility, including its size and purpose, the owner of the parcel or tract of land, the owner of the facility, the proposed operator of the facility, and Applicant for the approval.

The Applicant shall also cause a letter containing the above information to be mailed, along with a full and complete copy of the Application, to the legal organ, to each newspaper, radio station, television station in Newton County. Letters shall be mailed and postmarked at least two weeks prior to the date of the initial hearing. Proof of such mailing must be submitted to the governing authority at least one week prior to the initial hearing, along with a list of all owners. Ownership shall be determined based on Newton County tax records as of the date of the application.

2.6.F.3 Published Notice

The Applicant shall also be required to pay for notice to be published in the official legal organ where notices of foreclosure are published. The notice shall be published at least two times

in the legal organ. Each notice shall be at least four inches by six inches, shall be published as an advertisement in the general news section of the paper (not the legal notices or classified section) and shall contain a bold heading stating "Notice of Public Hearing, Proposed Solid Waste Facility." Each notice shall further state the time, place and purpose of the initial hearing, the public comment hearing, and the decision hearing; and shall further contain a summary description of the proposed facility, including its size and purpose, the owner of the parcel or tract of land, the owner of the facility, the proposed operator of the facility, and Applicant for the approval. The first notice shall be published at least one week before the initial hearing. The second notice shall be published after the initial hearing but at least one week before the public comment hearing. The final notice shall be published at least one week before the decision hearing. In the event two governing authorities are holding hearings, then both must be referenced in the notice.

The same notice must be posted at a prominent place of public notice at the Newton County Courthouse, City Hall of each municipality within the County (if permitted by said City).

2.6.F.4 Application Copies and Fee

The Applicant shall be required to submit fifteen copies of the application to each governing authority. Copies of the application shall be made available to the public for review for no charge. The Applicant shall also submit a fee of $15,000.00 for review to each governing authority.

2.6.F.5 Public Comment Hearing

The governing body shall hold a public hearing on the application and shall make its decision as provided in subsection six, below. At the public comment hearing, the Applicant shall present its application, and any supplemental information requested by the governing authority. The governing authority shall have the opportunity to ask questions of the staff, any experts, the applicant, supporters and opponents. The Applicant and supporters shall be granted equal time as opponents. The minimum time allowed per side is one hour. More time than the minimum may be allowed if the application is complex, or the number of witnesses warrants a further extension.

If the governing body determines that there are a great number of opponents with the same interest (for example, members of the same neighborhood), the governing authority may require that a spokesperson be designated. The opponents may also be represented by one or more attorneys. The applicant, supporters and opponents shall have the right to provide

testimony, including expert testimony, in support of their position. Each party shall have a reasonable opportunity to ask questions of the other side, in an orderly manner as controlled by the governing authority. At the close of the evidence at the public comment hearing, the governing authority shall discuss the application. No vote shall be taken at this time.

2.6.F.6 Determination of Plan Consistency

After the public comment hearing, the governing authority will issue a written decision at the next regularly scheduled governing body meeting after the public comment hearing, provided there are at least three business days between the public comment hearing and the meeting. The written decision, known as the "Determination of Plan Consistency", should be based on the evidence in the record and the criteria in the Plan. No vote shall be final until a written decision is adopted by the governing body. The decision shall state whether the application is consistent with the Plan and why it is deemed consistent or inconsistent.

To be consistent, the application must satisfactorily address all of the criteria listed above as relevant to the siting of a solid waste management facility. Failure to satisfactorily address all of the above criteria shall require a determination of inconsistency with the JSWMP. The governing authority shall notify the Applicant by sending a copy of the written decision within five days of the decision hearing.

2.6.F.7 Appeal Procedures

In the event the governing body or bodies find that the application is not consistent with the Plan, the Applicant shall have the right to appeal to the Superior Court of Newton County within thirty days of the date of the written decision (or the last of two written decisions, if two are issued by the county and a municipality). The Applicant shall also have the right to address the inconsistencies, resubmit the application and begin the process again. Such a resubmission shall not occur within three months of the date of the denial. In the event the Applicant chooses to appeal, the Applicant shall file a copy of the appeal with the County governing authority, and the County Clerk, assisted by the County Attorney, shall forward a copy of the entire record (including all evidence submitted by all sides) to the Superior Court as soon as is practicable, along with the minutes of the hearings, copies of any tapes or transcriptions of the hearings, the written decision, a copy of the Joint Solid Waste Management Plan, and all other relevant ordinances, maps and documents. The appeal shall be based on the record evidence.

2.6.G. Assessment of the Land Limitation Element

Based on the siting criteria identified above and the exhibits and appendices of this Plan, Newton County is of limited suitability for siting solid waste management facilities. The procedures described above, once put into place, will help ensure that facilities sited in the County are consistent with this Plan and that natural environmental resources and cultural and historic places and resources, as well as the citizens of the County and its municipalities, will be protected.

2.7 RECYCLING COLLECTION, PROCESSING, and EDUCATION

Over the past decade, Newton County and participating cities have implemented and aggressive program to encourage waste reduction and recycling of all marketable materials. The key elements of this program are described below.

2.7.A. Recycling Collection

Newton County maintains eleven manned Neighborhood Recycling Centers (NRCs) that receive bulk wastes, household wastes, and recyclables from County residences. No commercial waste is allowed at these centers. Recycling bins are provided at each NRC for the following recyclables: glass, aluminum cans, plastic bottles, steel or tin cans, newspaper, corrugated cardboard, "other" paper products, used motor oil and filters, yard waste, scrap metal and appliances, and tires. Recyclable material collected at the NRCs is transported by the County to the Recycling Processing Center located at the landfill.

Keep Covington/Newton Beautiful also promotes a recycling buy back system operated by the City Of Covington. Non-profit groups can deposit their recyclables at the buy back site and once quarterly, Keep Covington/Newton Beautiful will tally the results of the drop offs and pay the non-profit for deposits made

2.7.B. Recycling Processing Center

The Newton County Government built a Recycling Processing Center in 1999. The purpose of the Center is to provide a collection, preparation and distribution site for all recyclable materials generated at the County's Neighborhood Recycling Centers, curbside programs, and businesses and industries.

The processing facility was built with funds ($150,000) provided by the Georgia Environmental Facilities Authority (GEFA) and matched with $50,000 provided by Newton County. The facility is located at the site of the Newton County Solid Waste Facility (landfill). Utilizing a gravity feed baler, cardboard and plastic bottles are baled. Aluminum cans are crushed and collected in a 20-yard open top box. Glass bottles, brown, green and clear, are collected in bunkers and crushed prior to being hauled to the nearest recycling market. Newspapers are stacked in a 40-yard closed top box and office paper is stored in dumpster boxes awaiting pick up. Hardback books are collected in Gaylord boxes. Metal is collected in a 20-yard open top container. Paints and pesticides are collected once monthly in a box specifically designed for hazardous wastes. Electronics are collected in a 30 yard closed top container on the same days as the paints and pesticides.

The process of preparing the recyclables for market is handled by in-mates from the Newton County Enforcement Facility. When all materials have been prepared according to market specifications, the Newton County Solid Waste Department hauls the materials to market or the recycling company has the material picked up for delivery to their plants.

When the Recycling Processing Center was built, a space in the building was dedicated to educational purposes. The "Learning Lab" was built from recycled or reused materials for the purpose of offering a classroom experience for students and citizens who want to study the recycling process and purpose. The Learning Lab is operated by the Keep Covington/Newton Beautiful program and utilizes a curriculum provided by Keep America Beautiful and correlated with the state's Georgia Performance Standards (GPS). The eight-station lab experience is geared to 3rd through 5th graders. The Schools and Education Committee of KCNB works to get all classrooms in the community involved in a 2-hour excursion to visit the Recycling Processing Center and experience and learn from the "Learning Lab".

2.7.C. Recycling, Education, And Public Involvement Activities

The Keep Covington/Newton Beautiful (KCNB) program is a community organization primarily funded by the City of Covington and Newton County, with annual contributions from Oxford and Porterdale. Additionally, local civic clubs, businesses and industries offer financial

assistance as sponsors for specific programs and projects. An annual fundraiser generates approximately $25,000.00 to finance classroom education programs, which are offered to every school child in the community. Not only does this fundraiser generate money but it generates interest and involvement from all segments of the community. A third financial source is from grants and foundations, which earmark expenditures for environmental causes.

The Keep Covington/Newton Beautiful (KCNB) program is a part of the Keep Georgia Beautiful program housed in the State of Georgia Department of Community Affairs (DCA). KCNB is also an affiliate of the Keep America Beautiful program. Established in 1979, the mission of KCNB is to challenge, motivate and inspire everyone to take responsibility for a clean and beautiful community. Through the volunteer work of its six separate committees, KCNB teaches the business community and community citizens at large the importance of having a litter free community. The three main work areas include; litter prevention, recycling and proper solid waste management, and community beautification.

KCNB is dedicated to educating the public on environmental issues and proper waste management. The organization informs the public through classroom programs, workshops, publications, articles, and meetings, which provide up-to-date solid waste management and recycling information to the community. In addition, the organization is involved with the operation of recycling programs throughout the entire county. The cost of operating the KCNB program is included in the operating costs of Table 4-7.

KCNB consists of six separate committees which work with different segments of the community establishing programs designed to make a difference with solid waste disposal issues. Some of these programs include:

Drop off recycling – 11 Neighborhood Recycling Centers (NRCs) are operating throughout the County. In addition to household garbage and white goods, these sites accept the following pre-sorted recyclable material: glass, aluminum, newspaper, cardboard, mixed paper, plastic bottles, metals, used motor oil, oil filters, anti-freeze, tires and yard waste.

Curb-side-recycling - There is not enough density countywide to make curbside recycling economically feasible. The cities of Covington and Oxford operate curb-side recycling programs.

Paper recycling –Paper recycling is offered at 79% of the public schools in Newton County. This includes newspaper recycling as well as office\classroom paper. In addition, five schools have collection boxes for cardboard. Newspaper collection boxes are located at fire stations for the public's use. Phone books are collected annually when new phone books are distributed.

Grinding/chipping of yard waste at the landfill - Yard waste is collected at all 11 Neighborhood Recycling Centers. The Cities of Covington and Oxford collect yard waste at the curb. All yard waste is chipped quarterly by a contractor. The mulch is offered back to the public free of charge. Some mulch is used for daily cover at the landfill. Christmas trees are collected annually through the "Bring One for the Chipper" statewide recycling campaign.

Household hazardous waste recycling-Paints, pesticides, and electronics are collected at the landfill site on the first Saturday of each month.

E-Cycling collection is conducted on the same Saturdays at the same site as household hazardous waste collection. Materials that are collected include computer equipment and electrical machinery and appliances, excluding television sets. The materials are sent free of charge to a regional location to be reused and/or recycled.

TV Collection is conducted on an annual or semi-annual basis in a collection drive.

Hard Back books are collected at the Recycling Processing center on a daily basis.

Telephone books are collected in a phone book recycling drive once yearly when new phone books are delivered.

The volunteers and Staff of the Keep Covington/Newton Beautiful program are assigned the task of educating citizens about proper Solid Waste Management including prevention of litter and illegal dumping. This is done through school programs, adult programs, community activities such as the Adopt-A- Highway program and Rivers Alive and promoting media attention on the subject.

2.8 CURRENT REVENUES AND FINANCING

Newton County has a FY 2007 operating budget of $3,398,000 for waste collection and disposal. The majority of the projected revenue is from tipping fees ($2,867,000), sale of recycled materials ($160,000), and a general fund appropriation from the county of $365,000 per year.

SECTION 3- STATEMENT OF NEEDS AND GOALS

3.1 PROJECTIONS OF FUTURE WASTE QUANTITIES

The amount of waste projected to be generated by Newton County is based on the current per capita waste disposal profile. This is calculated by dividing the estimated yearly quantity of waste for fiscal year 2007 by the estimated 2007 population. This number is calculated to be 0.9662 tons/year or 5.29 lbs./person/day for the entire county.

Using the county wide figure of 0.9662 tons/year as the waste per capita quantity, the yearly waste quantity without waste reduction was projected for 10 years starting with 2008 as the base year (See Table 3-0). According to the comprehensive land use plan being developed for Newton County, the county will encourage commercial and industrial development in the next 10 years. If these efforts are successful, there will be a greater proportion of non-residential waste in the waste stream in the future.

TABLE 3-0 POPULATION/WASTE PROJECTIONS*
(without reduction activities)

Year	Population	Quantity of Waste (tons/year)
2008	101,300	97,876
2013	134,100	129,567
2018	165,400	159,809

* using factor 0.9662 tons/person/year

3.2 WASTE REDUCTION GOALS

As required in the Georgia Comprehensive Solid Waste Management Act of 1990, the amount of waste disposed at MSWL's during fiscal year 1992 should be reduced by 25 percent by July 1, 1996. Based on a population for Newton County in 1992 of 43,582 people and a quantity of waste in fiscal year of 42,977 tons/year, the goal of 25% reduction by 1996 was to decrease the waste per capita to 0.74 tons/year or 4.06 lbs\person\day. The 2007 population of incorporated and unincorporated Newton County is approximately 97,852.57 people generating 94,547.10 tons of solid waste annually. This represents an annual per capita disposal rate of 0.9662 tons/person/year or 5.29 lbs/person/day. This does not achieve the goal of a 25%

reduction in the per capita generation of solid waste for fiscal year (FY) 2007; however, Newton County experienced a slight decrease in per capita generation while the trend observed in Georgia and reported in the 2006 Solid Waste Management Plan for the State of Georgia shows a significant increase. This State plan reported that the per capita generation of solid waste increased from 5.66 lbs/person/day in FY 1994 to 7.39 lbs/person/day in FY 2004.

Newton County continues to strive to meet the 25% reduction goal. Table 3-1 shows the targeted waste reduction goals and expected quantities of waste if this goal is met.

Table 3-1 POPULATION/WASTE PROJECTIONS*
(with 25 % waste reduction activities)

Year	Population	Quantity of Waste (tons/year)
2008	101,300	74,962
2013	134,100	99,234
2018	165,400	122,396

*using factor 0.740 tons/person/year

3.3 DISPOSAL FACILITY METHODOLOGY

Newton County is currently in the permitting stages to convert the four solid waste disposal units already permitted at the Newton County Lower River Road Municipal Solid Waste Landfill to a single co-disposal facility that overlies these existing units. This will provide the County with over 30 years of disposal capacity for both municipal solid waste and refuse. This significantly exceeds the 10-year capacity required by the state and exceeds the planning requirements for this report. As discussed in Appendix B, the currently permitted airspace for C&D and MSW provide for more than 10-years of disposal capacity. Modifications of these permits currently in review by Georgia DNR would increase this lifespan to approximately 30-years.

3.4 COLLECTION METHODOLOGY

Newton County will continue the present collection methods in place with the addition of compactor sites or Neighborhood Recycling Centers (NRCs) throughout the county as needed.

Collection costs are presented in Table 4-2. Private contractor collection will continue to be permitted to operate and the cities will continue to provide solid waste pick up within their jurisdiction. Currently there is one NRC site for approximately every 2,500 persons; an additional two sites are anticipated by 2010. There is currently a plan to purchase collection equipment for these two new sites.

The availability of eleven NRCs within the County that accept waste at no charge has effectively eliminated illegal dumping of wastes within the County. Geographically distributed throughout the County and close to all cities, the NRCs both discourage illegal dumping and encourage recycling. Given the success of this program, Newton County will continue to combat illegal dumping by increasing the NRC network as needs increase.

3.5 RECYCLING GOALS

Paper products such as newspaper, cardboard, and yard waste comprise a significant part of Newton County's waste stream. By recycling and composting, these quantities are reduced significantly. By providing convenient NRC sites to the unincorporated county and continuing curb-side pick up in certain cities, the potential for getting recyclables out of the waste stream is good.

3.6 SOURCE REDUCTION

Source reduction is a policy issue which is not easily addressed at the local level. To be effective, source reduction techniques, such as beverage container deposits and tax policies dealing with consumer packaging guidelines, needs to be a statewide legislative initiative. Other than encouraging organized lobbying activities by local groups, no source reduction goals are planned.

SECTION 4- IMPLEMENTATION STRATEGY

4.1 COLLECTION METHODOLOGY

The collection method anticipated for the next ten years will be a continuation of the present program. Collection programs in place in Oxford, Covington, Porterdale, and Mansfield will remain operational. There are currently plans to provide new collection equipment for at least two NRCs for the western part of the county.

Newton County is exploring the feasibility of implementing a qualification program for private haulers operating in unincorporated Newton County. The benefits of a qualification program are to encourage recycling operations by collection firms, to ensure proper disposal of all waste into a lined landfill facility and to ensure that Newton County citizens receive quality service.

4.2 WASTE REDUCTION TECHNIQUES

In an effort to reach the state's 25 percent waste reduction goal, Newton County has set forth the following waste reduction goals:

1. Continue to encourage "Breakroom Recycling" programs in local government, businesses and industry facilities.

2. Continue to provide receptacles for recyclable materials at community events and at all public buildings throughout the county.

3. Encourage both the city and private haulers to provide financial incentives to their customers who recycle. One way this can be achieved is to charge an additional fee for an extra garbage can for overflow of waste if the customer does not take advantage of the bin offered for recycling.

4. Encourage municipalities to continue providing curb-side pickup for yard waste in order to support large scale composting operations.

Recycling is a key waste reduction technique. Recycling, as defined by the Rules of the Georgia Department of Resources Environmental Protection Division Chapter 391-3-4, means any process by which materials which would otherwise become solid waste are collected, separated or processed and reused or returned to use in the form of raw materials or products. The major benefits of recycling are environmental benefits, marketability, ease of

implementation, and volume of waste reduced. The waste identified as most readily recyclable in Newton County are paper, aluminum cans, glass bottles, plastic bottles and metals. The Keep Covington/Newton Beautiful organization is involved with all aspects of recycling in the county. The estimated amount of recyclable products collected in fiscal year 2007 is shown in Table 4-0. The estimated county revenue from municipal and commercial recyclable products is shown in Table 4-1.

TABLE 4-0 COMPOSITION OF RECYCLED MATERIAL – 2007

Newspapers from County collection boxes	1,494,512 lbs.
Materials collected at landfill	
Tires:	690,330 lbs.
Metal:	2,604,460 lbs.
Phone books:	12,580 lbs.
Christmas trees:	21,000 lbs.
Electronics	13,892 lbs.
Household Hazardous Waste	4,660 lbs
Neighborhood recycling centers	
Paper (cardboard)	1,561,480 lbs.
Glass:	373,840 lbs.
Scrap metal:	2,604,460 lbs.
Newspaper:	1,462,340 lbs.
Aluminum:	24,160 lbs.
Plastic:	142,100 lbs.
Total	**6,838,642 lbs.**

TABLE 4-1 2007 REDUCTION IN LANDFILL TONNAGE BASED ON RECYCLING ACTIVITIES

TOTAL LBS. RECYCLED 2007 6,838,642 LBS.

(CURB-SIDE, NEIGHBORHOOD RECYCLING CENTER, AND LANDFILL)

TOTAL GARBAGE COLLECTED 2007 189,094,200 LBS.

TOTAL QUANTITY RECYCLED IS 3.62% OF WASTE STREAM

(FIGURES INCLUDE CITY PROGRAMS)

Several methods of recycling collection have been evaluated to determine which type would best suit the lifestyle and economic parameters of Newton County residents. The following recycling options were evaluated:

1. Mandatory Recycling

In this scenario, recycling is legislated and enforced by the local governments. The MSWL would not accept any recyclables in the waste stream. Residents would have to make individual arrangements to have recyclables picked up or transport them to collection centers themselves. The cost to the county is reduced since the responsibility lies with the generator, but a burden is placed on residents and business owners to create individual recycling plans.

2. Voluntary Recycling

In this scenario, residents and business owners voluntarily separate recyclables from their waste stream. The recyclables are taken to the recycling centers or the recycling processing center, deposited at compactor sites, or picked up at curb-side. The responsibility of voluntary recycling is shared between the generator and the local government. The generator is responsible for keeping recyclables separated until pick up or drop off. The cost is absorbed by the local governments with the incoming recycling revenues helping to finance the program.

3. Buy Back Centers

Recycling activities using cash incentives are commonly referred to as buy back centers. Individuals bring recyclables to the center, the staff weighs them, and the individual receives a cash payment according to the weight. The county is participating in a modified buy back program. Non-profit organizations can take their recyclables to a collection site where the materials are weighed and recorded. Although money is not exchanged on the spot, a check, which reflects a portion of the proceeds from the sale of recyclables, is sent to the participating organization on a quarterly basis.

4. Material Recovery Facilities (MRF)

These facilities receive unsorted waste and through various mechanical and manual operations separate recyclable items from the waste stream. An advantage to MRFs is that they achieve a very high recovery rate for recyclable items with little or no effort required by the waste generator. However, MRFs have very high costs to implement and operate and would likely cause significant increases in taxes and fees. The success of

current voluntary recycling activities indicate no need for a MRF during the life of this plan.

5. Composting/Shredding & Chipping

Composting is the biological degradation of materials such as grass cuttings, brush, leaves and other organic matter by naturally occurring organisms. These organisms break down the inert matter into a humus-like material. The yard waste is dumped into piles, left to decompose, and periodically mixed. This ensures optimum oxygen and moisture content ratios are maintained in order to elevate the temperature to 100-120°F within the interior, allowing organic decomposition to occur.

Composting waste requires varying amounts of time depending on the method used. The simplest method is to place the waste in piles, let it sit two to three months, then mix and aerate the pile. The process takes approximately one year to compost. Shredding and chipping operations reduce the volume of brush and tree debris by mechanical processes.

Prospective compostable waste comprises over 11% of Newton County's current waste stream and this is largely in the form of yard waste. The cost is variable depending on the type of equipment used. Although the County does not currently carry out complete composting, all yard waste is chipped as mulch and offered back to the public.

4.3 EVALUATION OF WASTE REDUCTION TECHNIQUES

The success of current recycling efforts, educational activities, and public involvement by Newton County citizens points to a continuation of current voluntary recycling programs.

4.4 EDUCATION AND PUBLIC INVOLVEMENT

Education of Newton County citizens by the Keep Covington/Newton Beautiful (KCNB) organization will be the key to continuing and improving the effective recycling program that is currently being practiced. Ongoing efforts and awareness of shared responsibility with local governments concerning solid waste reduction and environmental concerns will continue to be a goal of the organization.

Education of citizens is achieved through seminars, public meetings, articles, and handouts. The KCNB organization is involved not only with the adult population, but within the

school system by introducing recycling programs and awareness of waste reduction to the children.

Local governments will continue to work with KCNB to insure viable results by developing programs to encourage further reduction of waste at the source. Potential source reduction programs are:

1. Provide consumers with information on products that are reusable, recyclable, durable, and environmentally sensitive.
2. Encourage consumers to repair and reuse products to extend and delay disposal.
3. Promote reduction of commercial and industrial waste through the implementation of programs such as the Keep America Beautiful "Guide to Waste in the Workplace," and by encouraging the business community to share source reduction techniques.
4. Encourage consumers to use environmentally safe household products to reduce toxic substances.
5. Promote home composting by providing "how to" instructions through publications at all recycling centers.

The educational process targets city, town, and county meetings, church groups, business associations, civic clubs, neighborhoods, garden clubs and schools. Citizen involvement should not be limited to participation, but expanded to incorporate comments and suggestions that could improve the entire program.

4.5 PLAN IMPLEMENTATION AND FINANCING

The total budgeted solid waste management expenses for fiscal year 2007 were $3,398,000. Tipping fees, the sale of recyclables, and a county appropriation generated the majority of the revenue to finance the expenditures. Supplemental grants from State funds have been used for recycling and education efforts but the overall fiscal impact of these funds is minimal.

Table 4-2 shows the costs and revenues projected for Newton County's solid waste management activities from fiscal year 2007 through fiscal year 2018. Costs include education, collection, disposal and reduction activities. Revenues will be increased over the next 10 years by raising the average tipping fee from $33/ton to $40/ton and the aggressive sale of recyclables. The goal is to maintain a fiscally sound enterprise fund for the Solid Waste Department that does not rely on county appropriation from general funds nor State grants.

Tables 4-3 and 4-4 show the currents costs and projected costs for both current and

proposed solid waste services for the Cities of Oxford and Covington respectively. Both of these cities actively participate in and assist in financing of the KCNB organization. Additionally, both of these cities operate independent recycling and yard waste collection and processing programs. Note that no major additions or deletions are proposed in the current solid waste programs over the next decade.

4.5.A Waste Reduction Implementation Strategy

To implement the goals outlined in Section 4.2, the Keep Covington/Newton Beautiful program (KCNB) will, for the foreseeable future, continue to be funded primarily by the County and Cities of Covington and Oxford with supplemental funds from grants from the remaining cities in the county and supplemental fund raising events. The 10-year goal is to develop a fiscally sound County solid waste enterprise fund that can assume these costs. State grants are currently limited and fund minor items such as additional recycling containers.

4.5.B Collection Implementation Strategy

As discussed in Section 4.1, the only major additions to the current collection strategy include the addition of several Neighborhood Recycling Centers (NRC) as the growth in the Count dictates. NRCs will continue to be fully funded by the County with the goal of a fiscally sound County Solid Waste Enterprise Fund assuming these costs. The timing of the addition of supplemental NRCs is unknown given the current uncertainty in the growth of the regional housing market.

4.5.C Disposal Implementation Schedule

As discussed in Section 3.3, the Newton County solid waste facility is currently undergoing a significant redesign to both increase its service life to 30 years and to improve operational efficiency. The income generated by waste passing over the landfills scales represents the majority of income for the County solid waste enterprise fund. Over the next decade, the County will construct two or three new cells in their lined landfill with the actual number being a function of growth in the County.

4.5.D Land Limitation Implementation Schedule

Other than sites for new NRCs, no new sites for solid waste facilities will be required

during the next 10 years. Several sites for new NRCs have been identified on existing County lands such that funds related to land acquisition are not required for this growth.

4.5.E Education and Public Involvement Implementation Schedule

As discussed in Section 4.4, the Keep Covington/Newton Beautiful program (KCNB) currently maintains one of the most aggressive educational programs in the state. As discussed in 4.5.A above, the KCNB will, for the foreseeable future, continue to be funded primarily by the County and the Cities of Covington and Oxford with supplemental funds from grants from the remaining cities in the county and supplemental fund raising events. Currently a small grant from US-EPA supplements this effort but future funding of the program is assumed to come from sources within the County.

Table 4-2 Newton County 10-Year Solid Waste Enterprise Budget

FISCAL YEAR	OPERATING COSTS x1000	SPECIAL ACCOUNT x1000	CAPITAL COSTS x1000	TOTAL COSTS x1000	TONNAGE	TIPPING RATES	INCOME TIPPING FEE, x1000	INCOME RECYCLE x1000	TOTAL INCOME x1000	SURPLUS COST x1000
2007	3,300	0	98	$3,398	94,547	$30.00	$2,867	$160	$3,027	[$371]
2008	3,498	200	104	$3,602	97,876	$33.00	$3,230	$220	$3,450	[$152]
2013	4,681	200	139	$4820	129,576	$36.00	$4,665	$360	$5,025	$205
2018	6,264	200	185	$6449	159,809	$40.00	$6,392	$430	$6,822	$373

Table 4-2 Newton County 10-Year Solid Waste Enterprise Budget

FISCAL YEAR	OPERATING COSTS x1000	SPECIAL ACCOUNT x1000	CAPITAL COSTS x1000	TOTAL COSTS x1000	TONNAGE	TIPPING RATES	INCOME TIPPING FEE, x1000	INCOME RECYCLE x1000	TOTAL INCOME x1000	SURPLUS COST x1000
2007	3,300	0	98	$3,398	94,547	$30.00	$2,867	$160	$3,027	[$371]
2008	3,498	200	104	$3,602	97,876	$33.00	$3,230	$220	$3,450	[$152]
2013	4,681	200	139	$4820	129,576	$36.00	$4,665	$360	$5,025	$205
2018	6,264	200	185	$6449	159,809	$40.00	$6,392	$430	$6,822	$373

Table 4-3 City of Oxford Solid Waste Implementation Budget

City of Oxford Implementation Strategy

Program/Activity	Years Program/Activity Takes Place										Responsible Party	Estimated Cost Annual	Funding Source
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017			
Waste Reduction Element Needs/Goals:													
Increase citizen participation in recycling program	X	X	X	X	X	X	X	X	X	X	City Council Sanitation Committee	$500	Sanitation fee General fund
Reduce yard waste going to Landfill by composting	X	X	X	X	X	X	X	X	X	X	City Supervisor And crew	Est. $1500 savings	Sanitation fee
Collection Element Needs/Goals:													
Consolidate schedule of yard Waste collection and chipping	X	X	X	X	X	X	X	X	X	X	City Supervisor	Est. $1000 savings	Sanitation fee
Disposal Element													
Needs/Goals													
Collaborate with County in Development of county Landfill	X	X	X	X	X	X	X	X	X	X	City Council City Supervisor	$269,000 (adjust for inflation)	Sanitation fee General fund
Education and Public Involvement Element													
KCNB	X	X	X	X	X	X	X	X	X	X	City Council	$5,000 (adjust for inflation)	Sanitation fee General Fund

Table 4-4 City of Covington Solid Waste Implementation Budget

City of Covington Implementation Strategy

Program/Activity	Years Program/Activity Takes Place										Responsible Party	Estimated Cost Annual	Funding Source
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017			
Waste Reduction Element Needs/Goals:													
Continue to Promote Recycling	X	X	X	X	X	X	X	X	X	X	Solid Waste Mgr	$1,000	Solid Waste Fees
Continue Curbside Collection of Recyclables	X	X	X	X	X	X	X	X	X	X	Solid Waste Crews	$325,000	Solid Waste Fees
Continue Grinding Yard Debris into Mulch	X	X	X	X	X	X	X	X	X	X	Solid Waste Crews	$50,000 Savings	Savings in Landfill fees
Collection Element Needs/Goals:													
Collection vehicles	X	X	X	X	X	X	X	X	X	X	Solid Waste Mgr	$200,000	Solid Waste Fees
Collection Containers	X	X	X	X	X	X	X	X	X	X	Solid Waste Mgr	$55,000	Solid Waste Fees
Education and Public Involvement Element													
KCNB	X	X	X	X	X	X	X	X	X	X	Mayor and Council	$60,000	General Fund

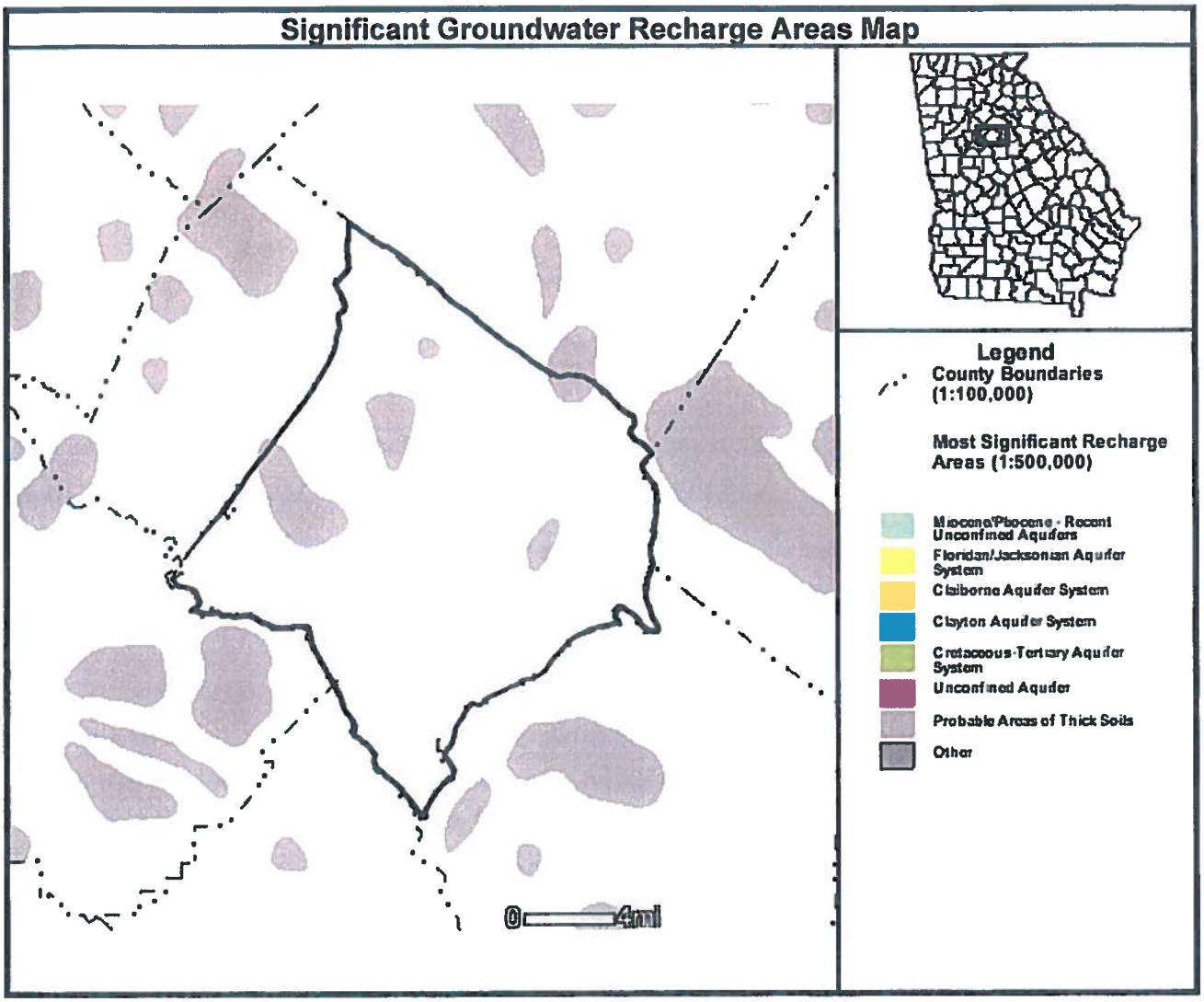
Table 4-4 City of Covington Solid Waste Implementation Budget

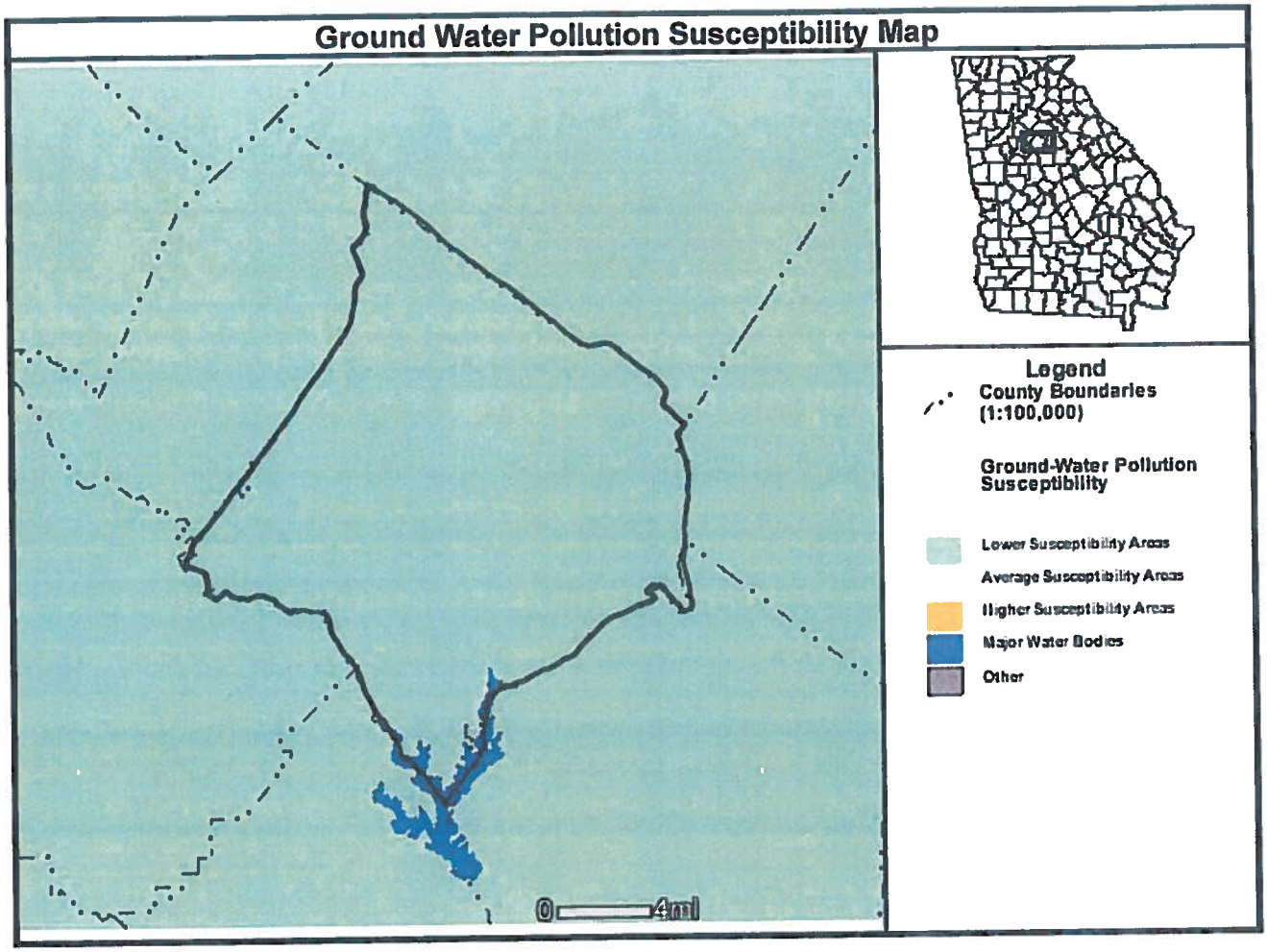
City of Covington Implementation Strategy

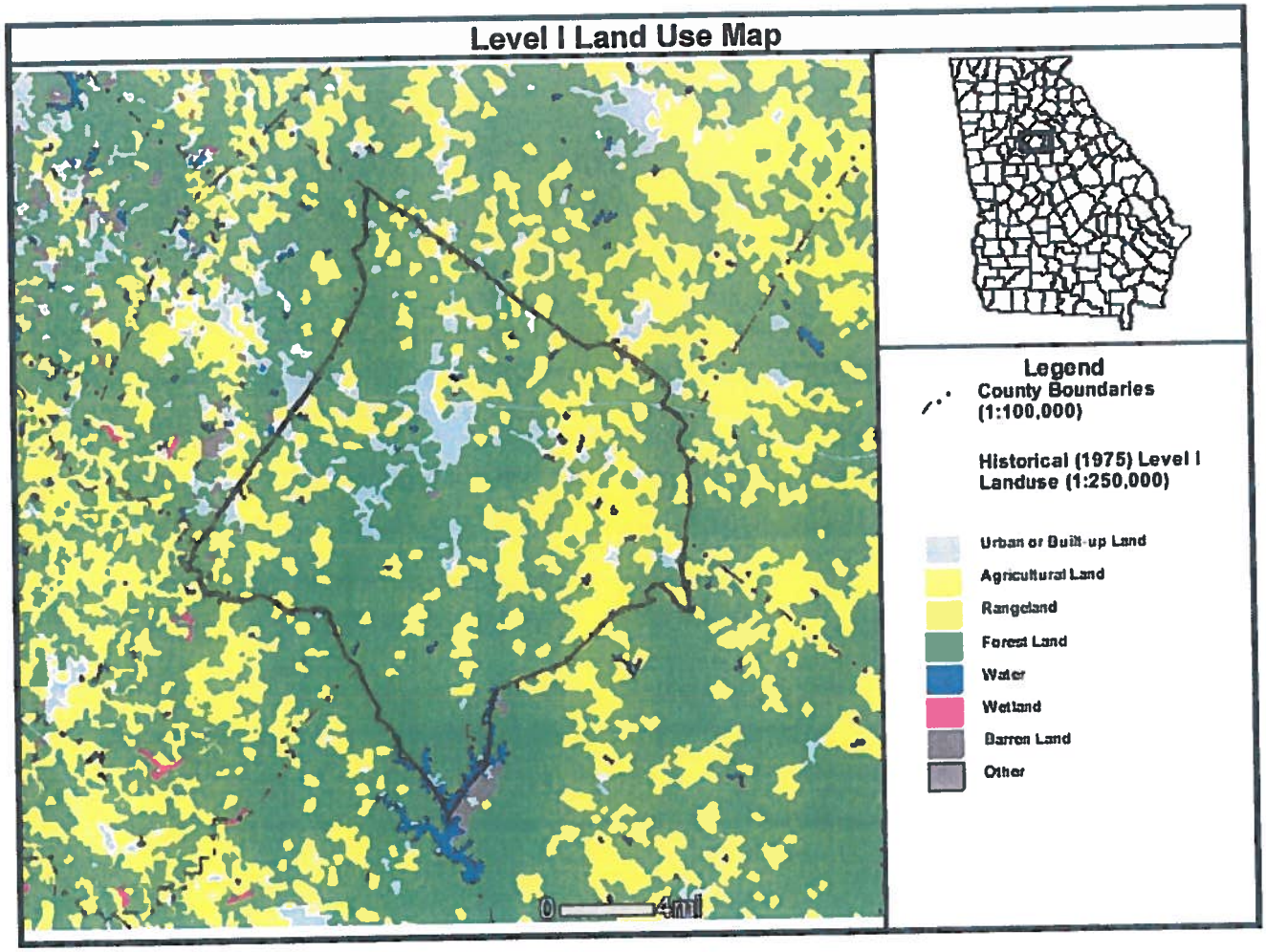
Program/Activity	Years Program/Activity Takes Place										Responsible Party	Estimated Cost Annual	Funding Source
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017			
Waste Reduction Element Needs/Goals:													
Continue to Promote Recycling	X	X	X	X	X	X	X	X	X	X	Solid Waste Mgr	$1,000	Solid Waste Fees
Continue Curbside Collection of Recyclables	X	X	X	X	X	X	X	X	X	X	Solid Waste Crews	$325,000	Solid Waste Fees
Continue Grinding Yard Debris into Mulch	X	X	X	X	X	X	X	X	X	X	Solid Waste Crews	$50,000 Savings	Savings in Landfill fees
Collection Element Needs/Goals:													
Collection vehicles	X	X	X	X	X	X	X	X	X	X	Solid Waste Mgr	$200,000	Solid Waste Fees
Collection Containers	X	X	X	X	X	X	X	X	X	X	Solid Waste Mgr	$55,000	Solid Waste Fees
Education and Public Involvement Element													
KCNB	X	X	X	X	X	X	X	X	X	X	Mayor and Council	$60,000	General Fund

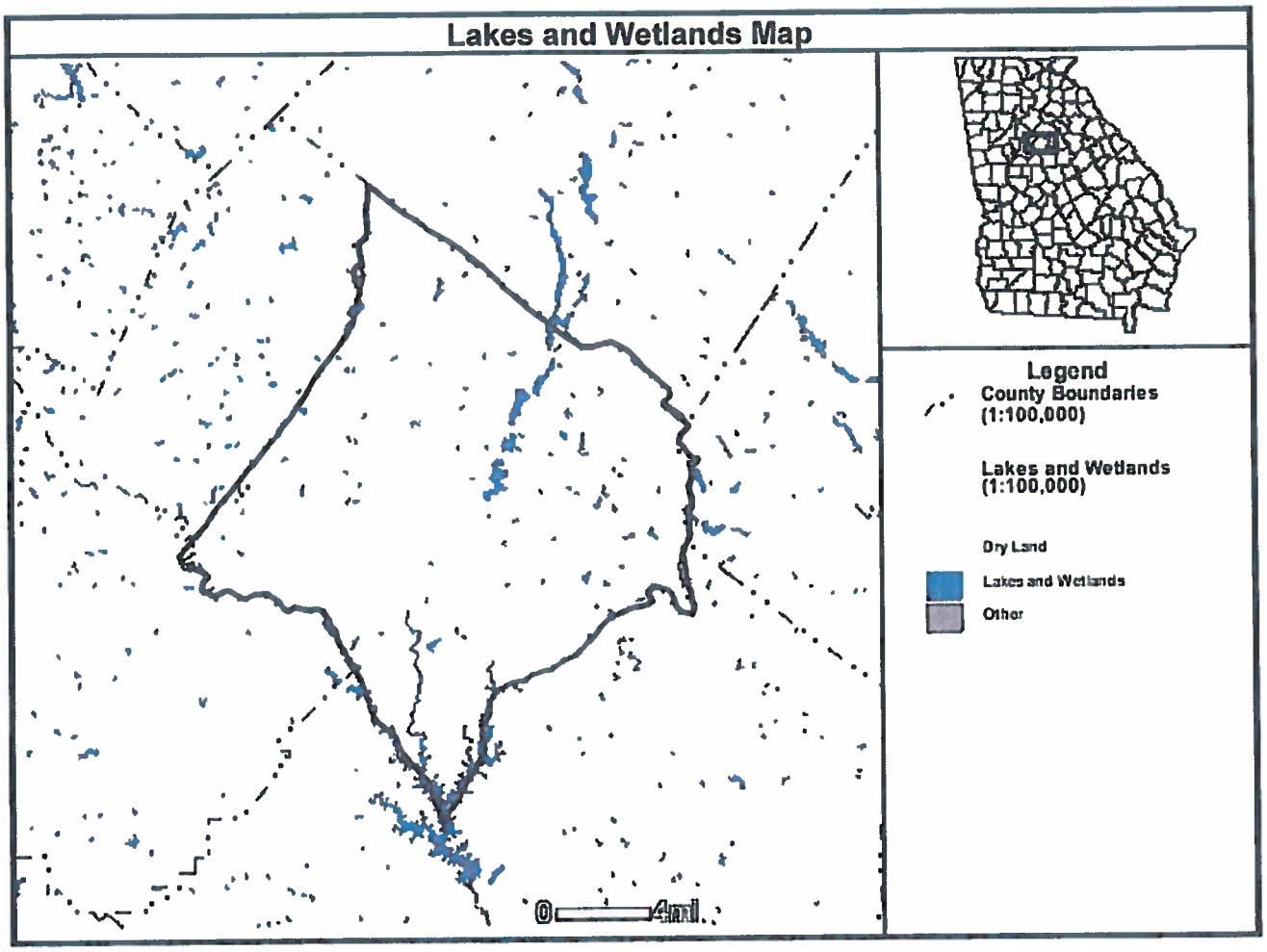
APPENDIX A

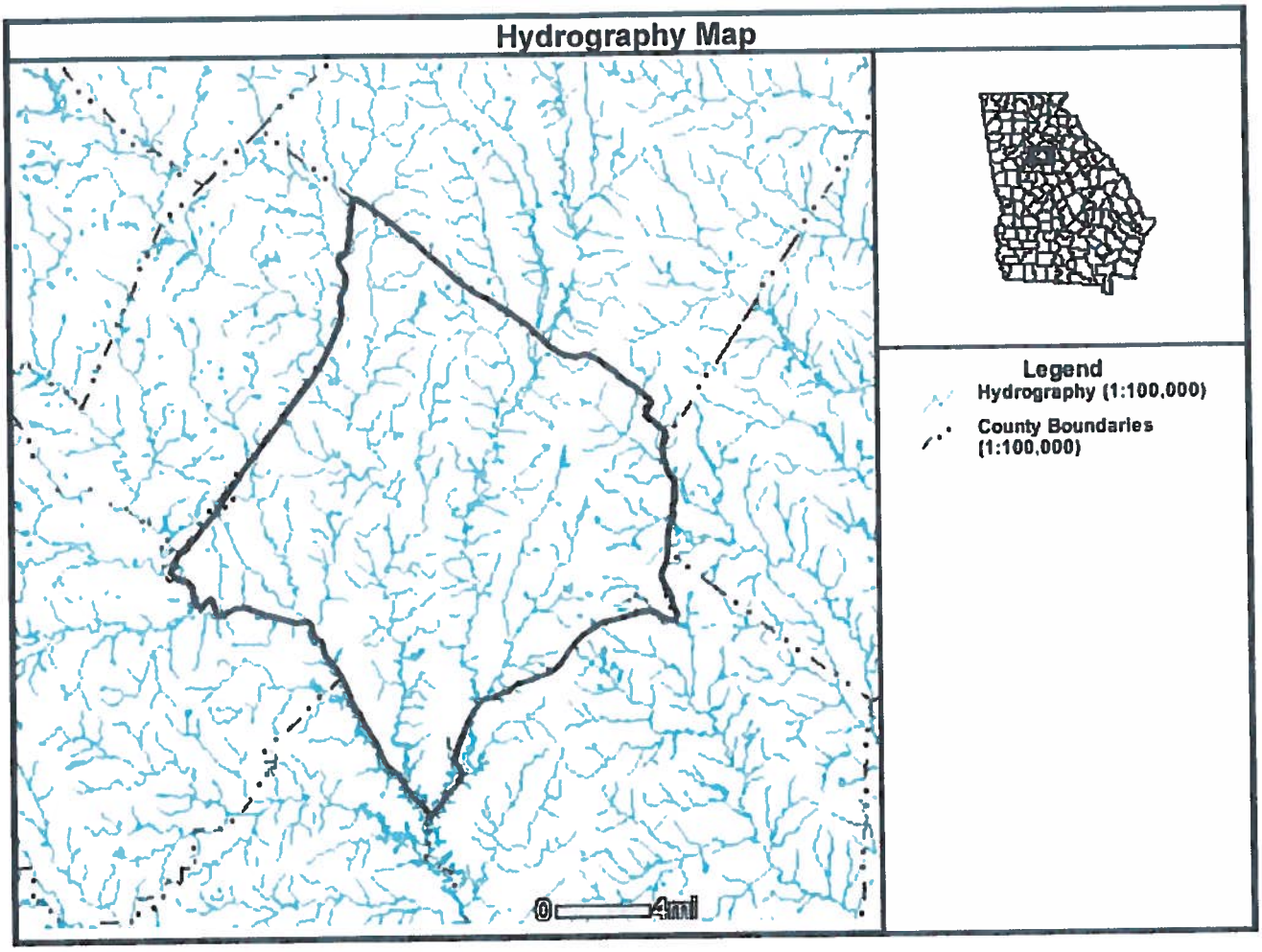
Maps


Significant Groundwater Recharge Areas Map
Legend
County Boundaries (1:100,000)
Most Significant Recharge Areas (1:500,000)
Miocene/Pliocene - Recent Unconfined Aquifers
Floridan/Jacksonian Aquifer System
Claiborne Aquifer System
Clayton Aquifer System
Cretaceous-Tertiary Aquifer System
Unconfined Aquifer
Probable Areas of Thick Soils
Other
0
4mi


Ground Water Pollution Susceptibility Map
Legend
County Boundaries (1:100,000)
Ground-Water Pollution Susceptibility
Lower Susceptibility Areas
Average Susceptibility Areas
Higher Susceptibility Areas
Major Water Bodies
Other
0
4mi


Level I Land Use Map
Legend
County Boundaries (1:100,000)
Historical (1975) Level I Landuse (1:250,000)
Urban or Built-up Land
Agricultural Land
Rangeland
Forest Land
Water
Wetland
Barren Land
Other
0
4mi


Lakes and Wetlands Map
0
4mi.
Legend
County Boundaries
(1:100,000)
Lakes and Wetlands
(1:100,000)
Dry Land
Lakes and Wetlands
Other


Hydrography Map
Legend
Hydrography (1:100,000)
County Boundaries (1:100,000)
0
4mi

APPENDIX B

Ten Year Assurance of Capacity

RICHARDSON SMITH GARDNER & ASSOCIATES, INC.
Engineering and Geological Services

MEMORANDUM

Date: July 9, 2008

To: James Peters

From: John M. Gardner, P.E.
Senior Project Manager

Re: **Newton County Capacity Assurance**
Georgia EPD Solid Waste Permit No. 107-013D(SL)(2)
205 Lower River Road, Covington, GA 30016

As you are aware, the GA DCA is requiring a letter to Newton County (in this case from Newton County Solid Waste Department), that assures 10 years of capacity, to coincide with the Solid Waste Management Plan (SWMP) that is now in the final stages of review by the DCA (Mr. Joe Dunlop).

As Newton County possesses multiple solid waste disposal permits, it is our opinion that there is at least 10 years of site capacity, based on the solid waste projections contained within the latest version of the SWMP (copies of excerpted pages are attached). The following serves to summarize how we are able to assure this 10-year capacity.

Remaining Site Capacity for the various solid waste units is as follows:

MSW-2:	258,000 CY	Phases I and II[1]
	1,552,918 CY	Phase III[1]
Total MSW:	**1,810,918 CY** as of 4/1/08	

C&D-1	200,000 CY (estimate only; conservatively low)
C&D-2	1,600,000 CY[2]
Total C&D:	**1,800,000 CY** (estimate only) as of 4/1/08

Projected Capacity Needs

Based on the attached estimate of MSW and C&D projected to be disposed at the site, the required capacities are needed:

MSW: 1,643,103 CY (assuming a conservative in-place waste-plus-cover density of 0.6 T/CY)

---

[1] Referencing the latest airspace estimate prepared by RSG (Memo dated May 12, 2008.
[2] Assumes all design capacity remains in this unit since the site is not yet constructed.

C&D: 879,657 CY (assuming a conservative in-place waste-plus-cover density of 0.50 T/CY)

Summary

Since both the available MSW and C&D capacity exceeds the projected airspace needs over the next 10 years, capacity is therefore assured.

A few additional observations and assumptions are also important to note:

1. 2007 data was assumed for the percentages of MSW and C&D in the projected (10-year) waste stream based on waste totals directly from the SWM Plan.
2. As you are well aware, the site has a pending expansion application that will add between 20 and 30 years of site capacity and the EPD approval process for this is proceeding rapidly, incorporating the added environmental benefits of waste relocation, groundwater remediation, control of methane migration, etc. Georgia EPD has played an active role in the expansion concept and although no permit can be guaranteed, we believe the likelihood of permit issuance is extremely high, based on EPD review thus far.
3. Since May 7, 2007, with a few exceptions, and at RSG's recommendation, the site has been co-mingling C&D and MSW into the MSW-2 site. In the event that the proposed site expansion would be delayed or postponed, C&D waste could once again be disposed into the permitted C&D units on site to conserve MSW capacity.
4. Solid Waste Plans in Georgia are interimly reviewed/updated every 5 years so if any of the above assumptions change, adjustments can be made at that time.

Please call me to discuss any portions of this that require clarification.

Attachment

ESTIMATE OF CAPACITY ASSURANCE

	TONS OF WASTE DISPOSED				
	C&D	MSW	TOTAL	% MSW	% C&D
2007	30,045	67,345	97,390	0.6915	0.3085
2008			97,876	67,681	30,195
2009			104,216	72,065	32,151
2010			112,141	77,545	34,596
2011			118,481	81,929	36,552
2012			124,821	86,313	38,508
2013			129,576	89,602	39,974
2014			135,623	93,783	41,840
2015			141,669	97,964	43,705
2016			147,716	102,145	45,571
2017			153,762	106,326	47,436
2018			159,809	110,508	49,301
			1,425,690	**985,862** TONS	**439,828**
				1,643,103 CY at 0.60 TCY	879,657 CY at 0.5 TCY
				1,516,711 CY at 0.65 TCY	799,688 CY at 0.55 TCY
				1,408,374 CY at 0.7 TCY	733,047 CY at 0.6 TCY

TABLE 4-2

10-YEAR PROJECTION

SOLID WASTE COLLECTION, REDUCTION AND DISPOSAL BUDGET

NEWTON COUNTY

FISCAL YEAR	OPERATING COSTS x1000	SPECIAL ACCOUNT x1000	CAPITAL COSTS x1000	TOTAL COSTS x1000	TONNAGE	TIPPING RATES	INCOME TIPPING FEE, x1000	INCOME RECYCLE x1000	TOTAL INCOME x1000	SURPLUS COST x1000
2007	3,300	0	98	$3,398	94,547	$30.00	$2,867	$160	$3,027	[$371]
2008	3,498	200	104	$3,602	97,876	$33.00	$3,230	$220	$3,450	[$152]
2013	4,681	200	139	$4820	129,576	$36.00	$4,665	$360	$5,025	$205
2018	6,264	200	185	$6449	159,809	$40.00	$6,392	$430	$6,822	$373

REF: SWM PLAN, FEB. 2008

NEWTON COUNTY

SOLID WASTE DEPARTMENT
Lower River Road Landfill
Newton County, Georgia
Yearly Tonnage Report for 2007

	C & D	MSW	TOTAL DISPOSED	AVG. TPD	Yard Debris	Operating Days	C&D Average Tons per Op. Day	MSW Average Tons per Op. Day	Total Average Tons per Op. Day
January	2,054	4,637	6,691	223	174	26	79.0	178.4	257.4
February	1,802	4,022	5,825	194	122	24	75.1	167.6	242.7
March	2,661	6,558	9,219	307	273	26	102.3	252.2	354.6
April	2,508	9,822	12,330	411	239	25	100.3	392.9	493.2
May	5,448	5,472	10,920	364	231	26	209.5	210.5	420.0
June	2,280	4,996	7,276	243	222	25	91.2	199.8	291.1
July	4,305	5,041	9,346	312	211	26	165.6	193.9	359.5
August	2,371	5,432	7,803	260	221	26	91.2	208.9	300.1
September	1,578	4,718	6,296	210	219	25	63.1	188.7	251.8
October	1,691	4,991	6,681	223	129	26	65.0	192.0	257.0
November	1,752	4,960	6,712	224	116	25	70.1	198.4	268.5
December	1,595	6,696	8,291	276	147	26	61.3	257.5	318.9
Total	**30,045**	**67,345**	**97,390**	**271**	**2,302**	**306**	**98.2**	**220.1**	**318.3**

*Started combining all waste on May 07,2007
*The Old Executive Building was dumped in December 2007 on the C & D site.
The total tonnage for the building was 175.21. This has been subtracted from the December C&D value.
*There were 306 operating days in 2007.

REF: NEWTON COUNTY

C+D SITE 1

NARRATIVE

NEWTON COUNTY LANDFILL

DESIGN AND OPERATIONAL PLAN

OPERATIONAL PROCEDURES

(1) Volume determinations:

(a) Total capacity: 544,000 C.Y.

(b) Total cover material required: 163,000 C.Y

(c) Total waste capacity: 381,000 C.Y.

(d) Estimated life of site: 10 YEARS

(e) Total Newton County Property: 275.17 AC.

(f) Total usable approved land: 17 ACRES

(2) Controlled unloading of waste: Solid waste shall be unloaded at or near the working face.

(3) Spreading and compaction: A. Solid waste fill: Solid waste shall be spread in uniform layers not over two (2) feet thick and compacted before covering with earth. B. Earth backfill: In areas where earth fill will occur, strip the top two (2) feet of existing soil and backfill with suitable material in six (6) inch layers to (95) percent compaction in accordance with the Modified Proctor Test. Compaction shall be performed with a sheepsfoot roller until the sheepsfoot roller "walks out" or equivalent compacting method.

(4) Monthly cover: A uniform compacted layer of clean earth cover at least (6) inches in depth shall be placed over all exposed solid waste by the end of each month operation. In no case may solid waste be left uncovered for more than 30 days.

(5) Intermediate cover: One (1) foot of top soil shall be placed on all waste areas in each lift as shown.

(6) Final cover: A uniform compacted layer of clean earth cover not less than two (2) feet in depth shall be placed over the final lift not later than one (1) week as that lift is completed.

(7) Fire protection: Stockpiled soil shall be available near the working face at all times. (Minimum 25 cubic yards.)

(8) Supervision: The disposal site shall be supervised at all times during operation.

(9) Continuity of operating: A. The working trench shall be accessible by an all weather access road. B. All equipment shall be maintained according to a maintenance schedule and repaired promptly to cause as little interference with the landfill operation as possible.

[illegible] control: The disposal site shall be [illegible]

C+D SITE 2

OPERATIONAL PLAN

CALCULATIONS:

11.

VOLUME CALCULATIONS: (Based upon current waste stream)

Total Volume of Waste and Cover		1,662,123 cy
Soils Needed for Cover		
Intermediate Cover	79,669 cy	
Final Cover	60,349 cy	
Total Soils Volume		140,018 cy
Waste Volume		1,522,105 cy
Estimated Life of Phase (Approx.)		25.7 Years

REA OF SITE:

Total Area Within Site Suitability	76.49 acres
Total Area Used for Waste Disposal	24.25 acres

OTE: No off-site borrow area is needed for the soil requirements of the development of this facility.

NTROLLING UNLOADING OF WASTE:

12.

nstruction and Demolition (C&D) waste placement shall be restricted to the working face e operation in such a manner that waste may be easily incorporated into the ntruction and demolition waste landfill with available equipment. The immediate rvisor will determine where the wastes are to be unloaded. The facility shall be ated and maintained in a manner to prevent scavenging, burning or open dumping of

E PLACEMENT OPERATIONS:

uction and demolition waste placement may be in uniform layers compacted to its t practical volume. The working face shall be sloped at 3:1 maximum.

ILY COVER:

n compacted layer of clean earth cover at least six (6) inches in depth shall be ver all exposed construction and demolition waste at least monthly. Monthly soil ll conform to the following:

Must be capable of preventing attraction of disease vectors, minimizing production of odors, and preventing blowing litter.
Must be capable of completely covering waste without change in the cover properties by rain, heat, cold and other

JMG COPY

RICHARDSON SMITH GARDNER & ASSOCIATES, INC.
Engineering and Geological Services

MEMORANDUM

May 12, 2008

To: James Peters
Newton County

From: John M. Gardner, P.E.
Richardson Smith Gardner & Associates

5/12

Re: **Remaining & Projected Capacity**
Lower River Road Landfill
Newton County, Georgia

The following presents a brief summary of 1) remaining capacity in the constructed cells (Phases I and II) and 2) projected capacity for Phase III which is planned to be constructed later this year. RSG recently estimated the projected capacity of Phase III based on an assumed waste density. A refined capacity estimate is presented in this memorandum based on: (1) a calculated site-specific waste density; and (2) a reduced Phase III footprint (i.e., from 14.93 ac. to 13.70 ac.) as needed to avoid conflict with the existing recycling building area. In addition, the national vertical datum (NAVD88) is used for the design grades and surveyed surfaces, rather than a site datum as in the past.

REFERENCES

A. Calculation 1:
   1. Lower surface: Phase II: Design grades for top of liner converted from site datum to NAVD88 datum.
   2. Upper surface: March 18, 2007 topographic mapping from aerial photogrammetry (NAVD88).

B. Calculation 2:
   1. Lower surface: March 18, 2007 topographic mapping from aerial photogrammetry (NAVD88).
   2. Upper surface: October 3, 2007 field survey of Phases I and II (NAVD88).

C. Calculation 3:
   1. Lower surface: October 3, 2007 field survey of Phases I and II (NAVD88).
   2. Upper surface: February 8, 2008 field survey of Phases I and II (NAVD88).

D. Calculation 4:
   1. Lower surface: February 8, 2008 field survey of Phases I and II (NAVD88).
   2. Upper surface: Design grades for Phases I and II (1 lift lower than final grades), with a 3:1 slope from the Phase III boundary up to the top of Phases I and II, converted from site datum to NAVD88. Note that RSG is in the process of submitting an application for a minor modification to allow the top lift to be placed on Phase I and II prior to the construction of Phase III.

E. Newton County Solid Waste Disposal Reports for 2007 and the first quarter of 2008, showing 20,898 tons received from January 1 through March 31, 2008.

References A through D are presented in **Attachment 1**. Reference E is presented in **Attachment 2**.

MAJOR ASSUMPTIONS

1. Airspace assumes utilization of all capacity between the topographic mapping (in constructed cells or permitted protective cover grades in unconstructed cells) and the permitted final cover grades and assumed interim slopes.
2. *Gross* airspace includes waste plus operational cover, final cover, and the volume occupied by the liner and protective cover. *Net* airspace is gross airspace minus final cover and liner/protective cover volume and represents only waste plus periodic cover (daily, intermediate, and/or that soil used for vector control or revegetation).
3. Final cover is 2.0 feet in thickness, assuming that EPD will approve an alternate cap without an 18-inch thickness of low-permeability soil. Liner and protective cover thickness is 4.0 feet in thickness based on the permitted design. Intermediate slopes are assumed to be 3H:1V.
4. Annual consumed airspace for the Site 2 MSWL is about 182,000 CY/Year. This is estimated as follows: 300 TPD at a waste+cover density of 0.504 TCY and 306 days per year. The calculation of the average waste+cover density plus other calculations are shown in **Attachment 3**.
5. Note that calculation 4 shows 96,000 CY of overfill on the top and slopes of Phase I. The overfill on top is within permitted final grades after Phase III is constructed, but the overfill on the slopes is not. It was assumed that sufficient settlement will occur before final cover construction to eliminate the need to relocate any of the current overfill on the slopes.
6. The estimate of remaining life does not include relocation of any of the overfilled materials from the side slopes of Phase I. Of the 96,000 CY of overfilled material, approximately 28,000 CY is on the top of Phase I and approximately 68,000 CY is on the side slopes of Phase I. However, two estimates of remaining life are presented: one based on the current permit and one based on the proposed minor modification to the sequence of development.

REMAINING CONSTRUCTED AIRSPACE (as of 4/1/08)

Based on the above assumptions, the NET airspace remaining in (constructed) Phase I and II is about 194,000 CY (**Attachment 3**). Using the estimated depletion rate of about 182,000 CY/Year would realize almost 13 months remaining as of 4/1/08; or capacity remaining until almost 4/30/09 (without including the final lift on Phases I and II).

Upon approval of the minor modification allowing placement of the final lift of Phases I and II prior to construction of Phase III, the remaining constructed airspace will be approximately 258,000 CY. This would provide capacity for about 17 months until approximately 9/1/09.

PROJECTED PHASE III AIRSPACE

The current design for Phase III has a footprint that is 1.23 acres smaller than the permitted design. The permitted design for Phase III provides a waste+cover volume of 1,522,918 cy over a footprint of 14.93 acres, which is an average capacity of 102,000 cy/ac. Therefore, it is estimated that a 1.23 acre decrease in footprint will result in a 125,000 cy decrease in volume. Based on the above assumptions, the NET airspace estimated for Phase III is about 1,400,000 cubic yards (CY).

At a depletion rate of 182,000 CY annually, the site life for Phase III would therefore be estimated, based on this simple analysis, as about 7.7 years from May 2009. However, a detailed phasing and development analysis performed by RSG, which accounts for population increase and airspace consumed by waste relocated from unlined areas, indicates that Phase IV will need to open sometime in 2013. This means that Phase IV construction may need to begin as early as 2012.

RSG will periodically update these estimates and will keep you apprised of the results. Should you have any additional questions/comments please call me.

• • • • •

Encls.

R040610a

A RESOLUTION TO ADOPT THE MULTI-JURISDICTIONAL SOLID WASTE MANAGEMENT PLAN AS AMENDED

WHEREAS, the Georgia General Assembly enacted the Georgia Comprehensive Solid Waste Management Act of 1990, as amended, O.C.G.A. § 12-8-20, et seq. (the "Act"), requiring all local governments to prepare a solid waste plan in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management promulgated by the Georgia Department of Community Affairs; and

WHEREAS, in 1993 the "Multijurisdictional Solid Waste Management Plan for Newton County and Cities of Covington, Mansfield, Newborn, Oxford, and Porterdale" (the "Plan") was prepared in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management; and

WHEREAS, said Plan was approved by the Department of Community Affairs by letter dated May 28, 1993 and formally adopted by the Newton County Board of Commissioners on June 15, 1993 and adopted by the City of Covington, the City of Oxford, the City of Porterdale, the City of Mansfield, and the City of Newborn; and

WHEREAS, updates to said Plan were adopted by the Newton County Board of Commissioners on March 2, 1999 and September 7, 2004, and said Plan was readopted by the Newton County Board of Commissioners on December 6, 2005; and

WHEREAS, said Plan was revised in 2008 by resolutions of adoption of the Newton County Board of Commissioners, the City of Covington, the City of Oxford, the City of Porterdale, the City of Mansfield, and the City of Newborn after preparation in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management; and

WHEREAS, additional amendments to said Plan were prepared in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management and approved in 2009 for transmittal to the Northeast Georgia Regional Commission of the Department of Community Affairs by the Newton County Board of Commissioners, the City of Covington, the City of Mansfield, the City of Newborn, the City of Oxford, and the City of Porterdale;

NOW THEREFORE, BE IT RESOLVED by the Board of Commissioners that the Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia, as revised December 2009 and approved by the Georgia Department of Community Affairs, which is attached hereto to this resolution and incorporated by reference herein, is hereby adopted, and furthermore, that the Northeast Georgia Regional Commission shall be notified of said adoption within seven (7) days of the adoption of this resolution.

Adopted and approved by the Board of Commissioners on the 6th day of April, 2010.

Board of Commissioners of Newton County, Georgia

Kathryn G. Morgan

Kathryn G. Morgan, Chairman

Attest:

Jackie Smith

Jackie Smith, Clerk

COUNTY SEAL NEWTON GEORGIA

RESOLUTION

WHEREAS, the Georgia General Assembly enacted the Georgia Solid Waste Management Act, requiring all local governments to prepare a solid waste plan in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management promulgated by the Georgia Department of Community Affairs; and

WHEREAS, the Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia, adopted April 19, 2010, was prepared in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management; and

NOW THEREFORE, BE IT RESOLVED by the City of Covington that the Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia dated December 2009, as approved by the Georgia Department Community Affairs is hereby adopted, and furthermore, that the Northeast Georgia Regional Commission shall be notified of said adoption within seven (7) days of the adoption of this resolution.

Adopted this 19 day of April, 2010.

City of Covington

Kimberly C. Carter, Mayor

Tonya R Grier

Clerk

CITY OF COVINGTON CORPORATE SEAL NEWTON COUNTY, GEORGIA

RESOLUTION

WHEREAS, the Georgia General Assembly enacted the Georgia Solid Waste Management Act, requiring all local governments to prepare a solid waste plan in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management promulgated by the Georgia Department of Community Affairs; and

WHEREAS, the Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia, adopted December 2009, was prepared in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management; and

NOW THEREFORE, BE IT RESOLVED by the Town of Newborn that the Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia dated December 2009, as approved by the Georgia Department Community Affairs is hereby adopted, and furthermore, that the Northeast Georgia Regional Commission shall be notified of said adoption within seven (7) days of the adoption of this resolution.

Adopted this 3rd day of May, 2010.

TOWN OF NEWBORN INCORPORATED SEAL AUG. 16. 1913 GEORGIA

Town of Newborn

Roger Sheridan, Mayor

Elisa Rowe, Town Clerk

A Resolution Approving Of The Final Multi-Jurisdictional Solid Waste Management Plan For Newton County And The Cities Of Covington, Mansfield, Newborn, Oxford, And Porterdale, Planning Period 2008-2018, As Revised December 2009

BE IT RESOLVED,

WHEREAS, the Georgia Comprehensive Solid Waste Management Act of 1990, as amended, OCGA § 12-8-20, et seq. (the "Act"), requires all local governments to develop a solid waste management plan and periodic updates;

WHEREAS, Newton County and its municipalities developed a joint plan in 1993 entitled "Multijurisdictional Solid Waste Management Plan for Newton County and Cities of Covington, Mansfield, Newborn, Oxford, and Porterdale" (the "Plan");

WHEREAS, said Plan was approved by the Department of Community Affairs by letter dated May 28, 1993 and formally adopted by the Newton County Board of Commissioners on June 15, 1993 and adopted by the City of Covington, the City of Mansfield, the City of Newborn, the City of Oxford, and the City of Porterdale as required by the Act;

WHEREAS, said Plan was formally amended by the Newton County Board of Commissioners, the City of Covington, the City of Mansfield, the City of Newborn, the City of Oxford, and the City of Porterdale in July 2008; and

WHEREAS, said Plan was revised further in order to comply with State requirements in modifying the permit from the Environmental Protection Division of the Department of Natural Resources for the operation of the Newton County Landfill at 205 Lower River Road, Covington, Newton County, Georgia, said revision being dated December 2009;

NOW THEREFORE, BE IT RESOLVED, by the Council of the City of Porterdale, Georgia as follows:

The document entitled **"Multi-Jurisdictional Solid Waste Management Plan for Newton County and the Cities of Covington, Mansfield, Newborn, Oxford, and Porterdale, Planning Period 2008-2018, as Revised December 2009"** attached as Exhibit "A" and incorporated herein by reference hereto is hereby adopted, and shall amend the Multi-Jurisdictional Solid Waste Management Plan as adopted in 1993 and since amended.

Read and adopted in the regular meeting of the City Council held on this 3Rd day of May, 2010.

ATTEST:

Judy T. Johnson City Clerk

Bobby Hamby Mayor

Tim Chambers City Attorney

Robert Foxworth Council Member

Linda Finger Council Member

Arline Chapman Council Member

Mike Harper Council Member

Lowell Chambers Council Member

RESOLUTION

WHEREAS, the Georgia General Assembly enacted the Georgia Solid Waste Management Act, requiring all local governments to prepare a solid waste plan in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management promulgated by the Georgia Department of Community Affairs; and

WHEREAS, the Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia, adopted 4/12/10, was prepared in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management; and

NOW THEREFORE, BE IT RESOLVED by the City of Mansfield that the Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia dated December 2009, as approved by the Georgia Department Community Affairs is hereby adopted, and furthermore, that the Northeast Georgia Regional Commission shall be notified of said adoption within seven (7) days of the adoption of this resolution.

Adopted this 12th day of April, 2010.

City of Mansfield

William Cocchi

William Cocchi, Mayor

Clerk

RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF OXFORD, GEORGIA

WHEREAS, the Georgia General Assembly enacted the Georgia Solid Waste Management Act of 1990, requiring all local governments to prepare a solid waste plan in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management promulgated by the Georgia Department of Community Affairs; and

WHEREAS, the City of Oxford, (the "City"), the Newton County Board of Commissioners and the Cities of Covington, Mansfield, Newborn and Porterdale did enter into such an amended Plan on or about July 30, 2008, said Plan having been prepared in accordance with the Minimum Planning Standards and Procedures for Solid Waste Management; and

WHEREAS, after due deliberation, The Mayor and City Council of the City of Oxford, Georgia, (the "Council"), has determined that, by reason of public needs it is necessary for the City, along with said other entities, to further amend the Plan; and

WHEREAS, Newton County, Georgia has compiled, reviewed and modified an update to amend the Solid Waste Management Plan for Newton County; and

WHEREAS, Newton County, Georgia has complied with the Rules of Georgia Department of Community Affairs Minimum Planning Standards and Procedures for Solid Waste Management (Chapter 110-4-3) including public participation requirements; and

NOW, THEREFORE, BE IT RESOLVED, by the City of Oxford that said Multi-Jurisdictional Solid Waste Management Plan for Newton County, Georgia dated December 2009, as approved by the Georgia Department Community Affairs is hereby adopted, and furthermore, that the Northeast Georgia Regional Commission shall be notified of said adoption within seven (7) days of the adoption of this resolution.

SO ORDAINED this 3rd day of May, 2010.

CITY OF OXFORD

Jerry Roseberry, Mayor

_____, Council Member

_____, Council Member

_____, Council Member

_____, Council Member

_____, Council Member

_____, Council Member

ATTEST:

Georgia
Carol A. Poole, CMC, City Clerk

(The Seal of the City of Oxford,

APPROVED AS TO FORM:

C. David Strickland, City Attorney