



MACON-BIBB COUNTY SOLID WASTE AND MATERIALS MANAGEMENT PLAN

2016 - 2025

Final Draft
April 2, 2015

Prepared by
A. Goldsmith Resources, LLC

Table of Contents

1	INTRODUCTION	1-1
1.1	About Macon-Bibb County	1-1
1.2	The Solid Waste and Materials Management Plan	1-2
2	SOLID WASTE MANAGEMENT IN MACON-BIBB COUNTY TODAY	2-1
2.1	Amount and Type of Municipal Solid Waste from Macon-Bibb County	2-1
2.1.1	Amount of Solid Waste Disposed	2-1
2.1.2	Solid Waste Projections	2-3
2.1.3	Composition of Solid Waste	2-4
2.2	Waste Reduction and Recycling.....	2-6
2.3	Collection	2-9
2.3.1	Residential Collection	2-9
2.3.2	Commercial Collection	2-10
2.4	Disposal.....	2-10
2.5	Land Limitation	2-11
2.5.1	Exclusions and Restrictions for Siting Solid Waste Handling Facilities	2-11
2.5.2	Procedure for Determining Consistency of Proposed Facility with Solid Waste Management Plan	2-14
2.6	Public Education and Outreach	2-14
3	GOALS AND STRATEGIES.....	3-1
3.1	Waste Reduction and Recycling.....	3-1
3.1.1	Goals.....	3-1
3.1.2	Strategies to Achieve Goals.....	3-1
3.2	Collection	3-5
3.2.1	Goals.....	3-5
3.2.2	Strategies to Achieve Goals.....	3-6
3.3	Disposal.....	3-7
3.3.1	Goals.....	3-8
3.3.2	Strategies to Achieve Goals.....	3-8
3.4	Land Limitation	3-11
3.4.1	Goals.....	3-11
3.4.2	Strategies to Achieve Goals.....	3-11
3.5	Public Education and Outreach	3-12
3.5.1	Goals.....	3-12
3.5.2	Strategies to Achieve Goals.....	3-13
3.6	Planning and Reporting	3-16

3.6.1	Goals.....	3-16
3.6.2	Strategy to Achieve Goals	3-16
4	IMPLEMENTATION SCHEDULE	4-1

LIST OF FIGURES

Figure 1-1	Location of Macon-Bibb County	1-1
Figure 2-1	Reported Tons of Solid Waste Received at MSW Landfills from Macon-Bibb County, 2013 ...	2-1
Figure 2-2	Estimated Sources of Solid Waste Received at MSW Landfills, 2013	2-3
Figure 2-3	Estimated Composition of MSW Disposed	2-5
Figure 2-4	Location of County Drop-Off Centers and Landfill.....	2-8
Figure 2-5	Excluded and Restricted Areas for Solid Waste Handling Facilities.....	2-13

LIST OF TABLES

Table 1-1	Projected Population of Macon-Bibb County, 2016-2025	1-2
Table 2-1	Amount and Type of Solid Waste Disposed in MSW Landfills, 2013	2-1
Table 2-2	Tons per Year and Pounds per Person per Day by Source, 2013	2-3
Table 2-3	Projections for Solid Waste and MSW Received at MSW Landfills, 2016-2025	2-5
Table 2-4	Estimated Tons of Materials in MSW Disposed, 2013	2-8
Table 2-5	Tons of Recyclables Collected through Macon-Bibb County Programs.....	2-13
Table 2-6	Summary of Residential Curbside Collection Programs.....	2-13
Table 4-1	Excluded and Restricted Areas for Solid Waste Handling Facilities.....	4-2

APPENDICES

Appendix A - Residential Solid Waste Collection Contract

Appendix B - Landfill Capacity Assurance Letters

Appendix C - Land Limitation Maps

Appendix D - Procedures to Demonstrate Consistency of Proposed Solid Waste Handling Facilities with Solid Waste and Materials Management Plan

Appendix E - Keep Macon-Bibb Beautiful Commission Activity Report

1 INTRODUCTION

1.1 ABOUT MACON-BIBB COUNTY

Macon-Bibb County covers 255.1 square miles in central Georgia (see Figure 1-1). Three interstates and several state and federal highways pass through the County, making it a transportation hub in the State.



Figure 1-1 Location of Macon-Bibb County

According to the U.S. Census, Macon-Bibb County had an estimated population of 154,721 in 2013 living in 69,954 households. Although the US Census estimates a population decline of .5 percent between 2010 and 2013, population projections for the ten year planning period indicates slow growth. Table 1-1 shows the projected population for each year of the ten-year planning period addressed in this Solid Waste and Materials Management Plan.

The City of Macon and Bibb County consolidated to form a single government, Macon-Bibb County, effective January 1, 2014. The consolidated government passed a code of ordinances, elected a single County Commission, and created joint Departments, including the Solid Waste Department which has primary oversight for this Solid Waste and Materials Management Plan.

Table 1-1
Projected Population of Macon-Bibb County, 2016-2025

Year	Population ¹
2016	159,554
2017	160,158
2018	160,762
2019	161,366
2020	161,970
2021	162,502
2022	163,034
2023	163,566
2024	164,098
2025	164,630

1 Woods and Poole 2014 Population Projections for Macon-Bibb County provided by Middle Georgia Regional Commission for 2015, 2020, and 2025 and extrapolated for intervening years

A total of 81,543 people were employed in Bibb County in 2014 according to the Bureau of Labor Statistics with 45 percent of these employees in three sectors: health care and social assistance services (18.3 percent); retail trade (15.3 percent); and government (11.9 percent).

1.2 THE SOLID WASTE AND MATERIALS MANAGEMENT PLAN

Up until 2011, local governments in Georgia were required to be part of a ten year solid waste management plan to be eligible for solid waste permits, grants, or loans from the State. The Georgia Department of Community Affairs established Minimum Planning Standards for local government solid waste management plans and reviewed the plans to ensure that these standards were met. In 2011, Senate Bill 157 eliminated state review and approval of local solid waste management plans although local governments are still required to be part of a plan. Local governments solid waste management plans must 1) demonstrate ten years of collection capability and disposal capacity, 2) describe the type and size of solid waste handling facilities located within the jurisdiction, and 3) identify sites which are unsuitable for solid waste handling facilities based on environmental and land use factors.

The Macon-Bibb County Solid Waste and Materials Management Plan (the Plan) goes beyond the state planning requirements to identify goals for the next ten years and to define a roadmap to achieve these goals. Section 2 describes the current recycling and solid waste management system in place in the County. Section 3 identifies goals and strategies to reduce solid waste disposed, minimize the environmental impact of solid waste management, equitably distribute costs, and maximize the economic benefits of solid waste and materials management. Section 4 contains an implementation strategy that identifies the steps that the County Commission, the Solid Waste Department, and others will take over the next ten years to achieve these goals.

2 SOLID WASTE MANAGEMENT IN MACON-BIBB COUNTY TODAY

2.1 AMOUNT AND TYPE OF MUNICIPAL SOLID WASTE FROM MACON-BIBB COUNTY

2.1.1 Amount of Solid Waste Disposed

Municipal solid waste (MSW) landfills in Georgia are required to report the amount and origin of solid waste that they receive to the Georgia Environmental Protection Division (EPD). Seven MSW landfills in Georgia reported that they received a total of 243,529 tons of solid waste that originated in Macon-Bibb County in calendar year 2013. As shown in Figure 2-1, nearly two-thirds of this, or 159,290 tons, was disposed at Wolf Creek Landfill, a privately owned landfill located in Twiggs County. About 30 percent, or 72,577 tons, was disposed in Macon-Bibb County's own landfill on Walker Road.¹

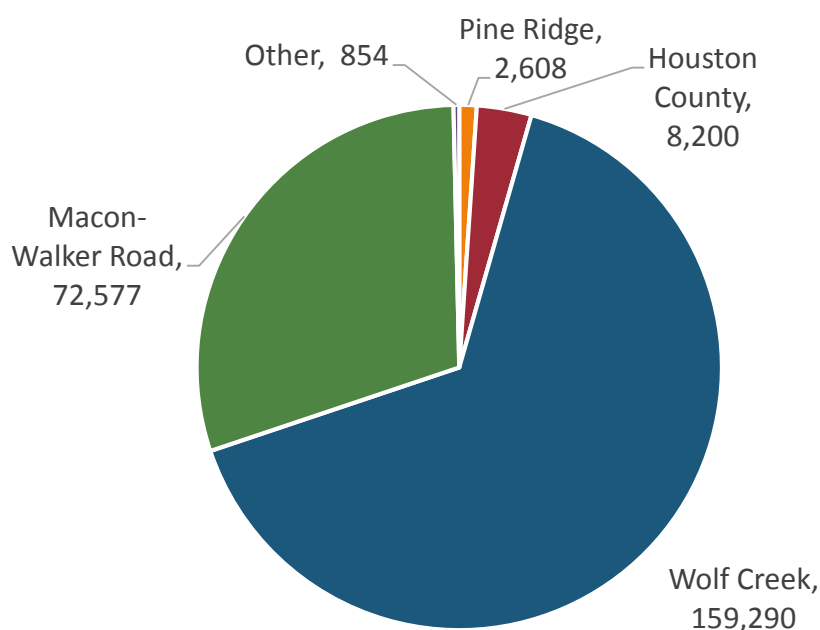


Figure 2-1
Reported Tons of Solid Waste Received at MSW Landfills from Macon-Bibb County, 2013

¹ Disposal tonnage data collected by EPD relies on reports from landfills that in turn rely on haulers to accurately report the origin of the solid waste being delivered. Despite the inherent inaccuracy of these data, they are the most accurate data about the amount of solid waste disposed in MSW landfills from Macon-Bibb County.

Not all of the solid waste disposed in MSW landfills meets the definition of MSW in state law and the County code (see box at right). According to a 2005 statewide survey², an estimated two-thirds of the solid waste received at MSW landfills in Georgia met this definition of MSW while the remainder was identified as industrial waste (14 percent), construction and demolition debris (12.3 percent) and sludge/biosolids (7 percent).³ As indicated in Table 2-1, if these statewide estimates are applied to the solid waste disposed from Macon-Bibb County in MSW landfills in 2013, then an estimated 162,434 tons of MSW (as defined) were disposed.

Municipal solid waste is defined as any solid waste derived from households, including garbage, trash, and sanitary waste in septic tanks and means solid waste from single-family and multifamily residences, hotels and motels, bunkhouses, campgrounds, picnic grounds, and day use recreation areas. The term includes yard trimmings and commercial solid waste, but does not include solid waste from mining, agricultural, or silvicultural operations or industrial processes or operations.

Section 22-2, Macon-Bibb County Code

Table 2-1
Amount and Type of Solid Waste Disposed in MSW Landfills, 2013

Type of Solid Waste	Tons Per Year
MSW (per definition, residential and commercial)	162,434
Industrial Waste	34,094
Construction and Demolition Debris	29,954
Sludge/Biosolids	17,047
TOTAL DISPOSED IN MSW LANDFILL	243,529

According to tonnage reports from the Macon-Bibb County Solid Waste Department and its contracted collector, approximately 89,236 tons of MSW was collected from residents in Macon-Bibb County. This is equal to about 55 percent of the estimated 162,434 tons of MSW from Macon-Bibb County. The remaining 73,198 estimated tons is assumed to have originated from commercial (including multi-family) and institutional sources. Figure 2-2 shows the resulting estimated breakdown of the sources of solid waste disposed in MSW landfills from Macon-Bibb County in 2013.

² *Georgia Statewide Waste Characterization Study*, prepared for the Georgia Department of Community Affairs by R. W. Beck, Inc., June 2005

³ Because the Macon-Bibb County Water Authority does not deliver the majority of the sludge from its wastewater treatment plant to disposal facilities, the percent of sludge and biosolids going to MSW landfills from Macon-Bibb County is likely to be lower than the State average and thus the percent of the other categories is likely to be higher.

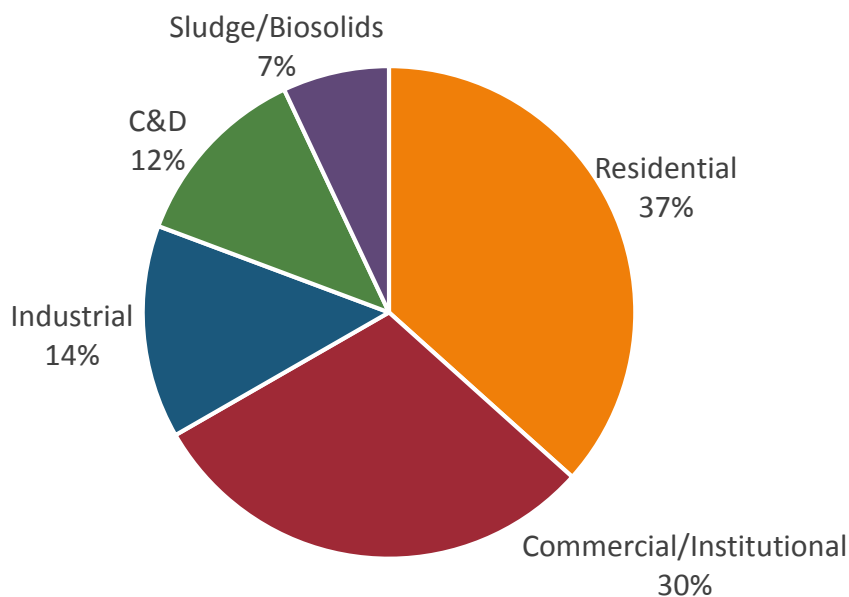


Figure 2-2
Estimated Sources of Solid Waste Received at MSW Landfills, 2013

Table 2-2 shows the estimated tons per year of the sources of solid waste that are disposed in MSW landfills from Macon-Bibb County and the resulting pounds per person per day (which will be relevant for making projections in the following section).

Table 2-2
Tons per Year and Pounds per Person per Day by Source, 2013

	Tons Per Year	Pounds per Person per Day
MSW (per definition)		
Residential	89,236	3.2
Commercial/Institutional etc.	73,198	2.6
Subtotal MSW (per definition)	162,434	5.8
Industrial Waste	34,094	1.2
Construction and Demolition Debris	29,954	1.1
Sludge/Biosolids	17,047	0.6
TOTAL DISPOSED IN MSW LANDFILL	243,529	8.6

2.1.2 Solid Waste Projections

For planning purposes, the baseline projections for future disposal assume that the per capita disposal rate remains the same throughout the ten year planning period. Thus, total MSW disposed increases with population. Table 2-3 shows the projected amount that will be disposed from Macon-Bibb County in MSW landfills and the projected amount of MSW (by definition) that will be disposed assuming that the 2013 rates of 8.6 and 5.8 pounds per person per day, respectively, do not change. Based on this assumption alone, a projected 251,129 tons of solid waste will be disposed at MSW landfills in 2016 and 259,126 tons in 2025. A projected 167,503 tons in 2016 and 172,837 tons in 2025 would meet the definition of MSW.

These tonnages are used as the baseline assumption for evaluating the impact of management strategies in this solid waste management plan.

Table 2-3
Projections for Solid Waste and MSW Received at MSW Landfills, 2016-2025

Year	Population¹	Tons Disposed in MSW Landfills	Tons of MSW as Defined
2016	159,549	251,129	167,503
2017	160,151	252,076	168,135
2018	160,755	253,027	168,769
2019	161,361	253,981	169,405
2020	161,970	254,939	170,044
2021	162,499	255,771	170,599
2022	163,029	256,605	171,156
2023	163,561	257,443	171,714
2024	164,095	258,283	172,275
2025	164,630	259,126	172,837

1 Woods and Poole 2014 Population Projections for Macon-Bibb County provided by Middle Georgia Regional Commission for 2015, 2020, and 2025 and extrapolated for intervening years

2.1.3 Composition of Solid Waste

The 2005 Statewide MSW Characterization Study⁴ quantified the type of materials in the MSW disposed at ten landfills across the state over four seasons. In this study, only the portion of the solid waste disposed that met the definition of MSW was sampled. Although the composition of MSW is likely to have changed since 2005 (for example, national studies suggest an increase in the percent of plastic and decrease in the percent of paper in MSW), these data are still likely to be the most applicable available.

Figure 2-3 shows the percentage of each group of materials in MSW. Paper and organics comprise the two largest components, totaling nearly two-thirds of the MSW disposed. Plastic comprises another 15.8 percent. Table 2-4 shows the resulting tonnage of each material group and category in MSW disposed from Macon-Bibb County in 2013.

⁴ Georgia Statewide Waste Characterization Study, prepared for the Georgia Department of Community Affairs by R. W. Beck, Inc., June 2005

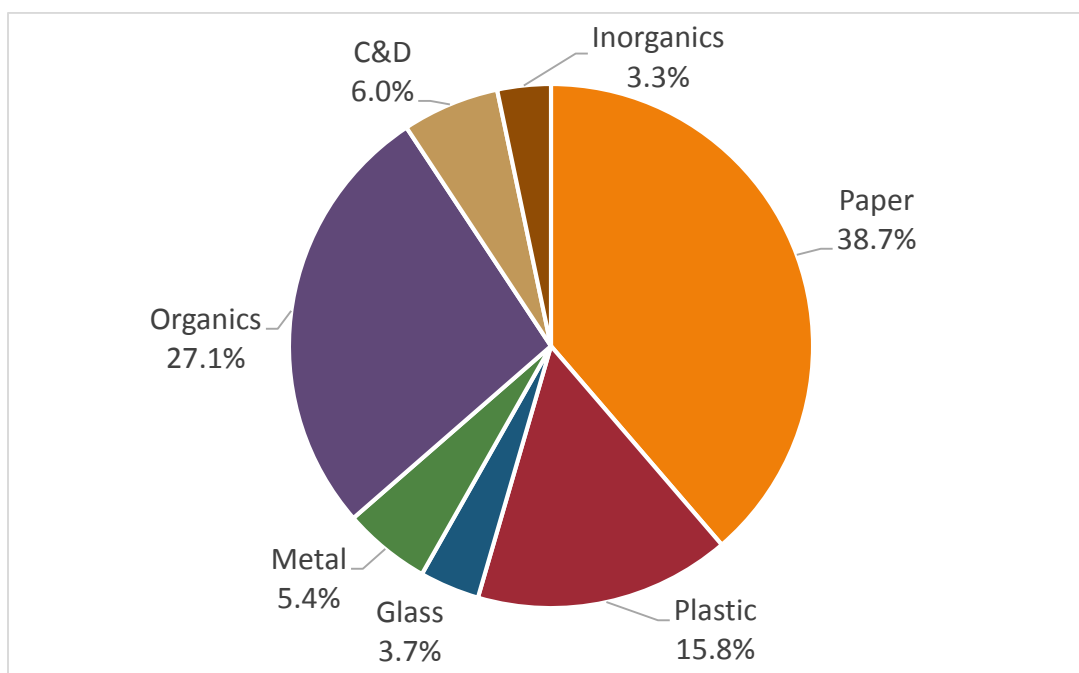


Figure 2-3
Estimated Composition of MSW Disposed

Table 2-4
Estimated Tons of Materials in MSW Disposed, 2013

Group	Material	Percent	Tons Disposed
Paper	Newspaper	4.8	7,797
	Corrugated Cardboard	11.0	17,868
	Office	3.4	5,523
	Magazine/Glossy	2.6	4,223
	Paperboard	3.4	5,523
	Mixed (Other Recyclable)	3.0	4,873
	Other (Non-recyclable)	10.5	17,056
	Total Paper	38.7	62,862
Plastic	#1 PET Bottles	1.3	2,112
	#2 HDPE Bottles	1.1	1,787
	#3-#7 Bottles	0.2	325
	Expanded Polystyrene	1.4	2,274
	Film Plastic	7.4	12,020
	Other Rigid Plastic	4.4	7,147
	Total Plastic	15.8	25,665
Glass	Clear	1.7	2,761

Group	Material	Percent	Tons Disposed
	Green	0.4	650
	Amber	1.2	1,949
	Other	0.4	650
	Total Glass	3.7	6,010
Metal	Steel Cans	1.3	2,112
	Aluminum Cans	0.7	1,137
	Other Ferrous	2.6	4,223
	Other Non-Ferrous	0.7	1,137
	Total Metal	5.4	8,771
Organics	Yard Waste	2.7	4,386
	Wood (non-C&D)	1.9	3,086
	Food Waste	12.0	19,492
	Textiles	4.0	6,497
	Diapers	2.5	4,061
	Fines	2.8	4,548
	Other Organics	1.3	2,112
	Total Organics	27.1	44,020
C&D	Drywall	0.4	650
	Wood	2.5	4,061
	Inerts	0.4	650
	Carpet	1.4	2,274
	Other C&D	1.2	1,949
	Total C&D	6.0	9,746
Inorganics	Televisions	0.1	162
	Computers	0.1	162
	Other Electronics	1.8	2,924
	Tires	0.2	325
	HHW	0.4	650
	Other Inorganics	0.8	1,299
	Total Inorganics	3.3	5,360
TOTAL		100.0	162,434

2.2 WASTE REDUCTION AND RECYCLING

The Macon-Bibb County Solid Waste Department collects paper (newspaper, magazines, home office paper but not cardboard) for recycling weekly from each of the 26,000 households it serves (those within the boundaries of what used to be the City of Macon). These households are directed to set out paper in a bundle or bag on top of their garbage container. The paper collected from residents at the curb is delivered to a County roll-off and hauled to a local processor when full.

The Department offers biweekly curbside collection of single-stream recyclables (paper, cardboard, plastic bottles and jugs, aluminum, steel, and tin-plated cans but not glass bottles and jars) to 2,000 homes in the InTown, Vineville, and Shirley Hills neighborhoods. The single-stream materials are delivered to a local recycling facility that pays the County \$15 per ton. This is a pilot program to evaluate the feasibility of single-stream recycling throughout the County.

The Department contracts for biweekly curbside collection of newspaper and plastic, metal, and glass containers from 19,800 households in the area that was formerly the unincorporated County. The contractor provides 18-gallon bins to their residential customers for recycling and deliver co-mingled (single-stream) recyclables to its local sorting facility.

In addition to curbside recycling, the County provides four drop off centers for recyclables at fire stations on Coliseum Drive, Forsyth Road, Jones Road, and Riverside Drive (shown on the map in Figure 2-4). Source separated recyclables are collected in carts and compartmentalized containers at each of these sites and transferred to a private company for processing and marketing. The Department also recovers scrap metal for recycling at the Walker Road landfill. The Keep Macon Bibb Beautiful Commission (KMBBC), often in collaboration with the Solid Waste Department collects recyclables at certain events. Table 2-5 indicates the tons of material collected for recycling through these programs in 2013 and 2014.

Table 2-5
Tons of Recyclables Collected through Macon-Bibb County Programs

Program	2013	2014
Curbside Paper Collected by Department (Weekly to 26,000 homes)	150	114
Single Stream (Biweekly to 26,000 homes)	269	385
Curbside Single-Stream Collection by Contractor (Biweekly to 18,900 homes)	725	583
Drop-Off Centers at Fire Stations	76	98
Scrap Metal Sorted at Landfill	134	109
Wesleyan Market Recycling Drive-Thru (KMBBC) (electronics, cardboard aluminum, paper, glass, plastic)	7.5	N/A
Christmas trees (KMBBC)	358 trees	

Some multi-family residences, businesses and institutions in Macon-Bibb County also recycle, either by collecting and delivering recyclables to market or by contracting with a private company to do so. However, there is currently no reporting mechanism to enable Macon-Bibb County to assess the degree of non-residential recycling in the County.

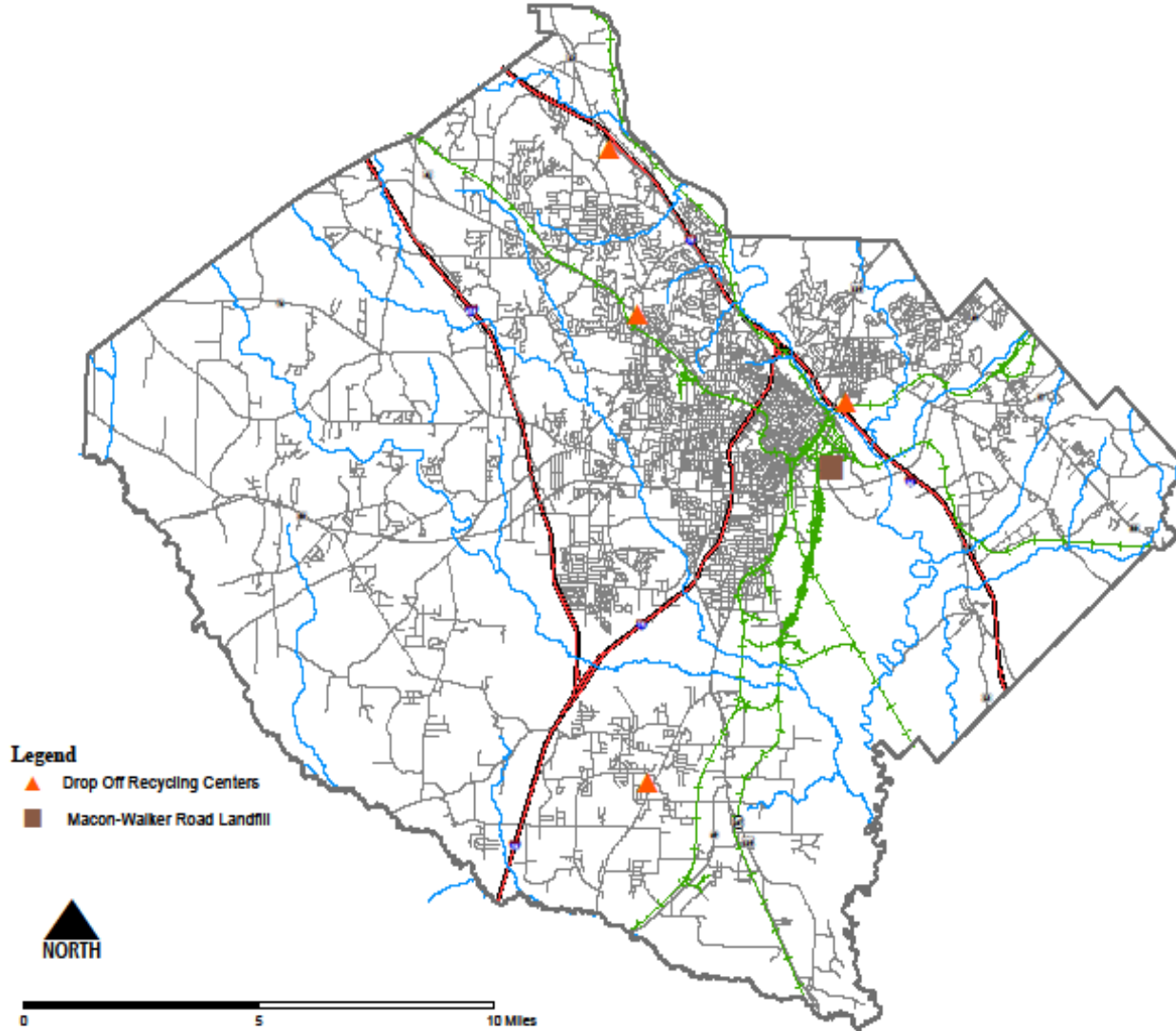


Figure 2-4
Location of County Drop-Off Centers and Landfill

2.3 COLLECTION

The Department collects or arranges for solid waste collection from all residential properties with four or fewer units. For the most part, businesses and institutions contract with a private collector directly for solid waste collection. These arrangements are described in more detail below.

2.3.1 Residential Collection

The Department collects garbage, yard trimmings, and bulky items (in addition to recyclables as described above) at the curb from 26,000 households located within the area formerly within the City of Macon. Each of these households is provided a 96 gallon roll-cart for garbage and are instructed to place yard trimmings in bags. Garbage and bagged yard trimmings are collected on the same routes and delivered to the Macon-Walker Road landfill. Residents can request a pick-up for bulky items (furniture, appliances, etc.) by phone or through the County's *SeeClickFix* online request program. These materials are collected with a knuckle boom and are either recycled or delivered to the County's landfill depending on the type of items collected.

The County contracts for curbside collection of garbage weekly and yard trimmings (and recyclables as described above) biweekly from the 19,800 households in the area formerly in the unincorporated County. The contractor provides residents with 96 gallon roll-carts and delivers collected solid waste to the landfill of its choice. The current contractor primarily delivers residential MSW it collects to Wolf Creek landfill in Twiggs County. Residents served by the contractor can also request bulky item pick-up at rates set by the contractor. The current contract for collection services, which is included as Appendix A, has been extended through June 30, 2017.

The County bills all households quarterly for collection service in the former City and former unincorporated County and pays the contractor directly for the services it provides to residents in the former unincorporated County. Residents in the former City, who receive weekly collection of yard trimmings and recyclables, are charged \$45 per quarter. Residents in the former unincorporated County, who receive weekly collection of yard trimmings and recyclables, are charged \$38.25 per quarter. The quarterly fee is considered a component of the property tax which allows the County to place a lien on property for non-payment. Table 2-6 summarizes the collection programs offered to residents in Macon-Bibb County.

The County collects tires, scrap metal, appliances, and bulky items from residents at the Macon-Walker Road landfill. The landfill charges a fee for tires delivered to the landfill where a vendor provides a trailer. The vendor picks up loaded trailers for recycling or proper disposal. Approximately 116 tons of tires were sent to the vendor by the County in Fiscal Year 2014.

Table 2-6
Summary of Residential Curbside Collection Programs

	Area within the former City of Macon	Area within the former unincorporated Bibb County
Number of Households	26,000	19,800
Service Provider	Solid Waste Department	Contractor
Frequency of solid waste collection	Weekly	Weekly
Frequency of yard trimmings collection	Weekly	Biweekly
Frequency of recyclables collection	Paper collected weekly Single-stream collected biweekly from 2,000 households (pilot)	Paper, aluminum, steel, plastic and glass containers collected biweekly
Frequency of bulky item collection	On call	On call
Fee paid by residents	\$15 per month billed quarterly	\$12.75 per month billed quarterly

2.3.2 Commercial Collection

Most businesses and institutions in the County, including multi-family properties with more than four units, arrange for collection and disposal independently with one of the haulers operating in the County. No data or information about commercial or institutional collection arrangements with private haulers or data about tons collected is currently provided to the County. The Department currently collects solid waste from a few commercial customers using roll-off containers and a compactor.

2.3.3 Addressing Illegal Disposal

Three County departments, Solid Waste, Public Works, and Parks and Beautification work with the Keep Macon-Bibb Beautiful Commission to prevent and address illegal dumping in Macon-Bibb County. Together, these organizations support neighborhood clean-up events by providing trash bags, safety vests, gloves and by placing and picking up a dumpster for disposal of collected materials. Residents are encouraged to report illegal dumps and piles of debris through the SeeClickFix program or by contacting the County's customer service line. From July 1, 2014 through January 31, 2015 alone, 139 issues related to illegal dumps were reported to Macon-Bibb County through the SeeClickFix reporting system, including 80 reports of illegal dumping, 18 reports of debris piles, and 41 reports of tire piles. The Solid Waste, Public Works, and Parks and Beautification Department also work together to clean up reported illegal disposal sites. In a February 2015 clean-up, 8.64 tons of solid waste and 868 scrap tires were removed.

2.4 DISPOSAL

There is currently one operating MSW landfill in the County, the Macon-Walker Road landfill (EPD permit number 011-017D (SL)), owned and operated by the Macon-Bibb County government.⁵ This unlined facility, located at 920 11th Street in Macon (as shown on Figure 2-4) received 72,577 tons of MSW, yard

⁵ Another MSW landfill, the Swift Creek Environmental Landfill owned and operated by Republic Industries, closed in recent years.

trimmings, and construction and demolition debris from Macon-Bibb County in 2013.⁶ The tipping fee at the Macon-Walker Road landfill is \$27.75 per ton which does not fully cover the cost of operating the landfill. Residents can deliver one load to the landfill per month (weighing less than 500 pounds) free of charge.

According to the remaining MSW Capacity Report submitted to the Georgia EPD, as of June 30, 2013, the Macon-Walker Road landfill had less than one million cubic yards of remaining capacity. At current fill rates, the remaining capacity at the landfill was expected to last through the end of 2020.

Each local government is required to demonstrate ten years of disposal capacity in its Solid Waste Management Plan. Macon-Bibb County plans to dispose of the MSW that it collects at the Macon-Walker Road landfill until it reaches capacity. After that time, Macon-Bibb County will deliver its MSW to a landfill outside of Bibb-County.

Although the landfill(s) to be used over the ten year planning period (including for residential MSW collected by Macon-Bibb County) will be finalized at a later time (as described in Section 3 of this Plan) based on the comparative costs of transfer, haul and disposal at each potential site, Macon-Bibb County has included letters from the Houston County Solid Waste Disposal Facility, the Wolf Creek landfill in Twiggs County (owned and operated by Advanced Disposal) and the Taylor County landfill (owned and operated by Waste Industries) in Appendix B to demonstrate that more than ten years of disposal capacity is available for Macon-Bibb County's solid waste at these landfills.

2.5 LAND LIMITATION

This section identifies the geographic areas of Macon-Bibb County that are unacceptable for a landfill or other type of solid waste handling facility. It also describes the process Macon-Bibb County will follow to determine whether a proposed facility is consistent with the current Solid Waste and Materials Management Plan. EPD considers this determination of consistency when it reviews a permit application for a solid waste handling facility.

2.5.1 Exclusions and Restrictions for Siting Solid Waste Handling Facilities

The following exclusions apply to siting landfills and other types of solid waste handling facilities in Macon-Bibb County as a result of federal or state requirements or local ordinances.

- *Proximity to airport runways.* Georgia DNR Rule 391-3-4-.05 (1)(c) states that new MSW landfill units or lateral expansions of existing units cannot be located within 10,000 feet of the end of an airport runway used by turbojet aircraft or within 5,000 feet of the end of an airport runway used by piston-type aircraft. Areas excluded due to proximity to airport runways are shown on Map 1 of Appendix C.
- *Local, state, and federal land.* Landfill development is prohibited on certain local, state, and federal land. The map of the areas in Macon-Bibb County covered by this exclusion are shown on Map 2 of Appendix C.

⁶ Most of the MSW from Macon-Bibb County was delivered to the Wolf Creek landfill in Twiggs County, as shown in Figure 2-1.

- *Wetlands.* Georgia DNR Rule 391-3-4-.05 (1)(e) prohibits the development of a solid waste handling facility in a wetland (as defined by the U.S. Corps of Engineers) unless evidence is provided to the EPD Director that use of such wetlands has been permitted or otherwise authorized under all other applicable state and federal laws and rules. Section 31.08 of the Macon-Bibb County code also excludes the siting of a landfill in an area designated as a wetland. The area excluded due to the wetlands is indicated on Map 3 of Appendix C.
- *River Corridors.* DNR rules prohibit the development of a new landfill within a protected river corridor as does Section 22B.05 of the Macon-Bibb County code. The Ocmulgee River Corridor, in which landfills are excluded, is shown on Map 3 of Appendix C.
- *Floodplains.* Georgia DNR Rule 391-3-4-.05 (1)(d) states that a solid waste handling facility located in the 100-year floodplain must not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in a washout of solid waste so as to pose a hazard to human health and the environment. As a result, generally, a solid waste handling facility should not be sited in a 100-year floodplain. These areas also are indicated in Map 3 of Appendix C.
- *Local land use and zoning.* A solid waste handling facility may only be sited in an area that conforms to all local land use and zoning requirements. If a proposed site meets all other federal, state, and local requirements, sanitary landfills are a permitted use in an M-3 (heavy industrial) zone and a conditional use in M-2 (heavy industrial) and A (agricultural) zones in Macon-Bibb County. Map 4 in Appendix C indicates the areas in which a sanitary landfill is excluded by these zoning requirements.

Other factors restrict (but don't fully exclude) where solid waste handling facilities can be sited in Macon-Bibb County. They include the following.

- *Steep slopes and shallow rock.* Steep slopes and shallow rock make it a challenge to design and operate a solid waste facility in an environmentally sound way. Map 5 in Appendix C indicates where steep slopes would limit facility development in Macon-Bibb County.
- *Groundwater recharge areas.* Georgia DNR Rule 391-3-4-.05 (1)(j) requires that new landfills or landfill expansions that are located within two miles of the significant groundwater recharge area, shown on Map 6 in Appendix C, have liners and leachate collection systems. If the landfill accepts waste generated from outside the county in which it is located, it cannot be located within two miles of the groundwater recharge area.
- *Public water supplies.* Georgia DNR Rule 391-3-4-.05 (1)(k) requires that all landfills within two miles upgradient from public water supplies have liners and leachate collection systems. Map 7 in Appendix C shows the areas in Macon-Bibb County that fall within this limit.

Figure 2-5 shows all areas in Macon-Bibb County where solid waste handling facilities are excluded or restricted as a result of one or more of the factors described above.

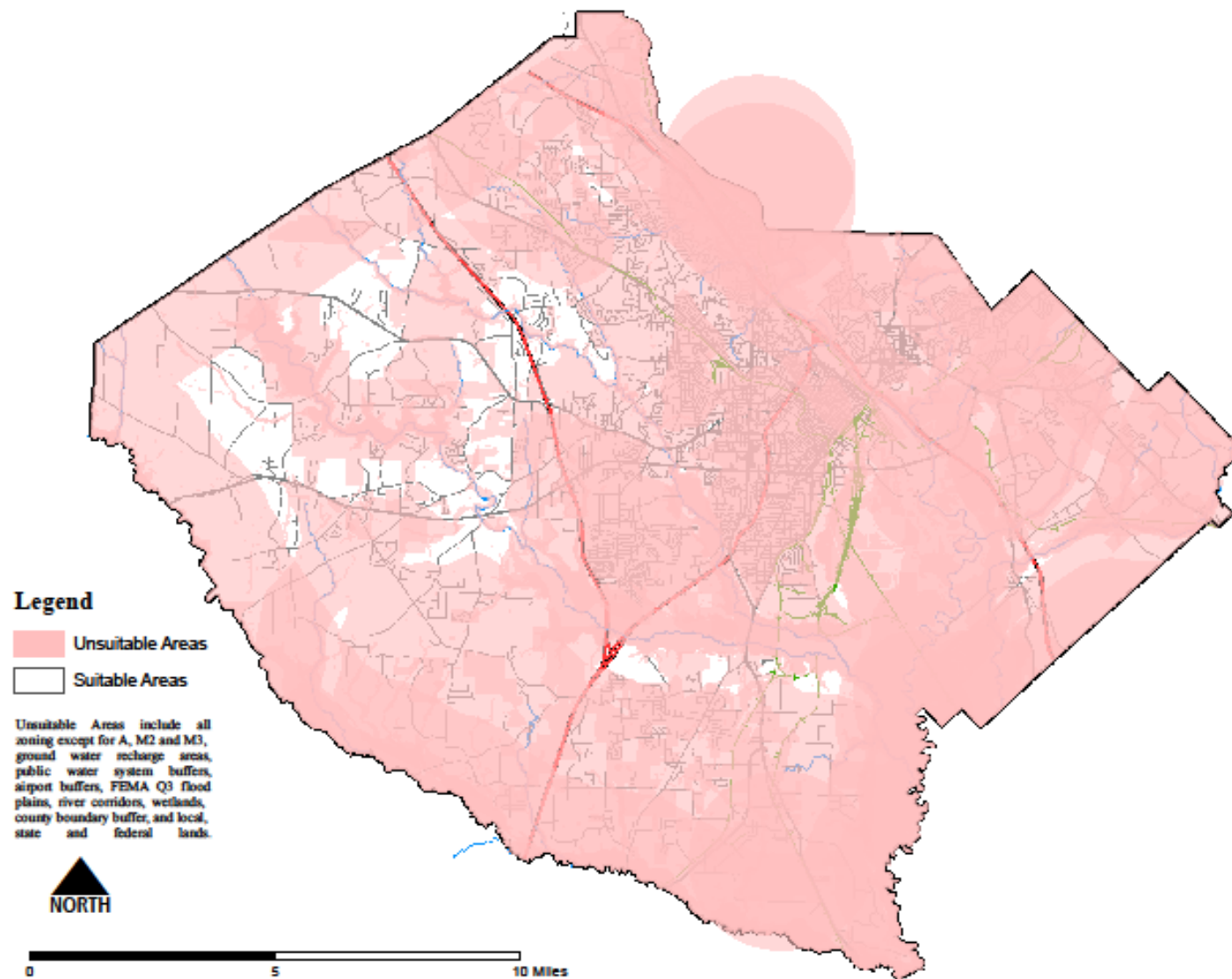


Figure 2-5
Excluded and Restricted Areas for Solid Waste Handling Facilities

2.5.2 Procedure for Determining Consistency of Proposed Facility with Solid Waste Management Plan

In order for EPD to issue a permit for a solid waste handling facility (new or expanded), it requires a letter from the local government where the facility will be located documenting that the proposed facility is consistent with the local Solid Waste Management Plan. For Macon-Bibb County to consider whether a proposed facility is consistent with this Solid Waste and Materials Management Plan, the permit applicant must file a request for determination of consistency with the County Clerk. To make this determination, Macon-Bibb County staff will evaluate the impact of the proposed facility on existing waste management facilities, collection and disposal capability, and achievement of the waste reduction goals set forth in this Plan and prepare a report for consideration by the County Commission. The report will address the following questions.

- How will the proposed facility meet the needs identified in the Solid Waste and Materials Management Plan?
- What are the operational and financial impacts of the proposed facility on existing solid waste management facilities and programs?
- How will the proposed facility provide a higher level of service to the citizens of the County than the existing facilities?
- What existing deficiencies in collection and disposal capabilities are addressed by the proposed facility?
- How will the proposed facilities provide better collection and disposal capability than would otherwise be provided by existing facilities?
- How will the proposed facility help Macon-Bibb County achieve the waste reduction goals established in the Solid Waste and Materials Management Plan?

Within 60 days of receiving the request from an applicant for a determination of consistency with the Macon-Bibb Solid Waste and Materials Management Plan, the County Commission will conduct a public hearing. The procedure that the Macon-Bibb County Commission will follow to gather public input and to ultimately determine whether a proposed facility is consistent with this Plan is described in more detail in Appendix D.

2.6 PUBLIC EDUCATION AND OUTREACH

Section 22-1(b) of the Macon-Bibb code states that it is “the policy of Macon-Bibb County to educate and encourage generators and handlers of all solid waste to reduce and minimize to the greatest extent possible the amount of solid waste which requires collection, treatment, or disposal through source reduction, reuse, composting, recycling, and other methods...” This education is carried out by the Solid Waste Department through its administrators, landfill operators, and collection crews. However, the lead entity for educating the citizens of Macon-Bibb County about waste reduction, recycling, litter prevention, and associated beautification topics is the Keep Macon-Bibb Beautiful Commission (KMBBC). The KMBBC is comprised of a member appointed Board of Commissioners representing all areas of the County. An affiliate of Keep America Beautiful and Keep Georgia Beautiful, this 501(c)1 designated non-profit organization works in partnership with Macon-Bibb County government, state and federal litter enforcement, green space maintenance agencies, private industry and local community groups to “improve the quality of life in the Macon-Bibb County community through increased education, litter

prevention, recycling, and beautification.” Some of KMBCC’s key initiatives with regard to solid waste and materials management are described below. A report on the activities of KMBBC in fiscal years 2013 and 2014 is included as Appendix E.

- *School education programs.* The KMBBC conducts one recycling lesson and one litter prevention lesson in every second grade classroom in the public schools and is currently expanding the lessons into private schools throughout the County. As part of this program, the KMBBC hosts a culminating event (the Jack Golden Show) for these students. The KMBBC also has a program in which it collects, sorts, and weighs solid waste with selected 5th grade classes.
- *Online resources and social media:* The KMBBC website (kmbbc.org) currently contains the most comprehensive online source of information about recycling in Macon-Bibb County. The website includes a description of material accepted in all recycling programs and maps to drop-off locations. The KMBBC also has a Facebook® (Keep Macon-Bibb Beautiful) page, a Twitter® account (@BeautifulMacon), and an Instagram® account (@KMBBC).
- *School recycling programs:* Partnering with individual schools and Advanced Disposal Services, the KMBBC is working to ensure all public elementary schools have in-house recycling programs by the end of the 2014-2015 school year and that all public middle and high schools have recycling programs in place in school year 2015-2016. The KMBBC also works with private schools in the County to establish recycling programs.
- *Drop-off centers at fire stations.* The KMBBC collaborates with the Department and Advanced Disposal to operate and promote newspaper and magazine recycling at four fire stations (as described in Section 2.2). A map of the drop-off center locations and the materials accepted appears on the KMBBC website.
- *Recycling events:* The KMBBC organizes annual collection events to collect materials for recycling. For example, in 2013, it hosted a “Wesleyan Market Drive-Thru Event” at which it collected 7,600 pounds of electronics as well as aluminum, paper, plastic, and glass and “Bring One for the Chipper”, a Christmas tree collection and mulching event. For America Recycles Day 2014, the KMBBC conducted a shoe collection event in which an estimated 2,000 pairs of shoes were collected at schools and businesses over a two-month period. Many volunteers assist with these events that not only offer additional opportunities for recycling but also provide general education about waste reduction and recycling.
- *Print educational materials:* In 2014, the KMBBC used grant funds to prepare and send a brochure about available recycling programs to 1,500 households in one neighborhood of the County describing the benefit of recycling, what can be put into recycling container, etc.
- *Outreach through the media and presentations to community organizations:* The KMBBC promotes recycling, including the why and how of recycling in Macon-Bibb County, in print, television, and radio media and in talks to organizations such as garden clubs, homeowner associations, Kiwanis Club, and other civic organizations.

- *Adopt a Spot program:* The KMBBC coordinates groups of volunteers to adopt a two-mile area that they are then responsible for cleaning up and maintaining. The KMBBC provides tools, safety vests, gloves, and garbage bags for clean-up events. Collected material is either recycled or properly disposed.
- *Community clean-ups:* The KMBBC coordinates volunteers to participate in the Great American Clean-Up (which KMBBC promotes through public service announcements on TV and radio, billboards, etc.) and neighborhood clean-up events that are part of the Mayor's 5 x 5 program to address blighted areas.

The KMBBC annual budget is currently \$125,000, with about two-thirds of this funding coming directly from Macon-Bibb County and the remainder from private and not-for-profit sources. The KMBBC employs one full time staff person and draws on hundreds of volunteers to conduct its programs.

Other County departments, agencies, and programs have public education and outreach efforts that are related to solid waste and materials management. The County's *SeeClickFix* program allows residents to report issues online where they can be addressed by the appropriate department in a timely manner. Many of the reported issues are related to solid waste and recycling.

The Solid Waste Department also has two inspectors (one of the two positions is vacant at the time of this writing) that address litter, illegal dumping, and related issues. Although they have the authority to issue citations, much of their time is spent on educating violators about the laws and potential penalties associated with illegal dumping and encouraging them to clean-up these sites. The Macon-Bibb County Economic and Community Development Department also addresses illegal dumping when it is located on private property, rather than the right-of-way, as part of its responsibility for mitigating "blighted housing".

3 GOALS AND STRATEGIES

3.1 WASTE REDUCTION AND RECYCLING

Section 22-1 of the Macon-Bibb County code states that “The Macon-Bibb County Commission declares it to be the policy of the consolidated government to the extent feasible and practical, make maximum utilization of the resources contained in solid waste”. This Section describes how Macon-Bibb County plans to accomplish this in the next ten years.

3.1.1 Goals

Macon-Bibb County has established two waste reduction and recycling goals for this planning period. The first goal is to *reduce by 25 percent the amount disposed (per person) in MSW landfills by 2025*. This goal can be accomplished by reducing all types of solid waste disposed at MSW landfills (whether or not the solid waste meets the regulatory definition of MSW) through source reduction, reuse, recycling, composting, and thermal technologies. Any activity that reduces the amount of solid waste currently disposed in an MSW landfill would count as progress toward Waste Reduction and Recycling Goal #1.

Waste Reduction and Recycling Goal #1

Reduce by 25 percent the amount disposed (per person) in MSW landfills by 2025

Waste Reduction and Recycling Goal #2

Divert 30 percent of the materials collected from residents through recycling and composting by 2025

The second waste reduction and recycling goal is to *divert 30 percent of the materials collected from residents through recycling and composting*. This is the MSW for which the County currently has the most control since it currently collects or contracts for collection of residentially generated MSW. Achievement of Waste Reduction and Recycling Goal #2 would contribute toward achievement of Waste Reduction and Recycling Goal #1.

Macon-Bibb County may want to revisit these quantitative goals throughout the planning period. For example, if Macon-Bibb County exercises more oversight for the management of commercial and institutional recyclables and solid waste, either through collection of some of this material with County forces, establishing recycling requirements in franchise agreements for collection, or simply offering commercial generators a convenient place to deliver recyclables, the County may want to incorporate waste reduction or recycling goals specific to commercial and institutional MSW in the waste reduction and recycling goals.

3.1.2 Strategies to Achieve Goals

Macon-Bibb County will implement five strategies to achieve waste reduction and recycling goals. Each of these strategies are described below.

Waste Reduction and Recycling Strategy #1

Develop a Recovered Materials Processing Facility to process and market recyclables collected in the region.

To achieve waste reduction goals, Macon-Bibb County needs a convenient location to deliver recyclables for processing and shipping to end users. A Recovered Materials Processing Facility (RMPF) in Macon-Bibb County would take source separated and single-stream recyclables (all recyclables collected together) from residential collection routes as well as from businesses and institutions in the County and potentially, from other sources in the middle Georgia region. An RMPF could be co-located with other recycling and solid waste handling facilities that would address other strategies in this Solid Waste and Materials Management Plan. For example, the same site could be used for an education and training center or a transfer station or compost facility.

Some of the questions that would need to be answered before proceeding with development of an RMPF and approaches that may be used to address these questions are described below.

- What type of materials would be handled at the RMPF? How much? From whom? And in what form?
 - Conduct a waste characterization study to estimate the amount and type of recyclable materials from each source
 - Meet with businesses and other communities in the region to determine their interest in delivering materials to the facility
 - Meet with potential markets for materials and facility partners to gather input on how materials should be received and processed
- What would be the respective role of the County and private partners?
 - Look at public/private partnership models from other communities
 - Meet with potential private partners to evaluate what services they may be best suited to provide
 - Issue Request for Letters of Interest and/or Request for Proposals to evaluate options and costs
- How would the capital cost of an RMPF be supported?
 - Estimate costs by referencing similar facilities, identifying likely site(s) and preparing conceptual designs
 - Determine potential options for private funding (i.e. in some cases, a material market will provide processing equipment in exchange for guaranteed material supply)
 - Consider incorporating the capital cost into the Special Purpose Local Option Sales Tax proposal on referendum in 2016

Waste Reduction and Recycling Strategy #2

Collect single-stream recyclables from all residents in Macon-Bibb County.

Once a single-stream RMPF is operating in the County, the single-stream curbside collection program, currently offered in the former unincorporated County and to several neighborhoods in the former City will be expanded to include all households. At that time, all residents will be offered identical services, including collection of the same materials in the same form, with the same frequency, from the same county-provided carts, and at the same cost. The County will determine whether it will collect recyclables throughout the County using its own staff and vehicles or whether it will contract

with a private company to collect single-stream recyclables from some or all residents for delivery to the Macon-Bibb County RMPF.

When the single-stream RMPF is operating and convenient single-stream collection is offered to all residents in the County Macon-Bibb County will require residents to participate in the recycling program. Higher participation will lead to higher tonnages for recycling and result in less material to be disposed. This will maximize the value of the investment in recycling infrastructure and reduce the cost to transfer and dispose of MSW at a distant landfill. Residents will receive extensive education and outreach on how and why to participate in the single-stream curbside program and those that do not participate will receive a series of warnings (focused on educating residents on how to participate) before being penalized for non-compliance.

The City of Griffin, Georgia passed a mandatory recycling ordinance in 2007 when its single-stream RMPF opened and the curbside program was offered city-wide. Section 74-76 of the County Code states that "It shall be the responsibility of all residential solid waste customers of the city to dispose of recyclable materials in an approved recycling container. No item that has been classified as recyclable material shall be disposed in a customer's solid waste container."

Waste Reduction and Recycling Strategy #3

Continue to offer drop-off sites and collection events for recyclable items.

The County will continue to provide permanent drop-off centers and periodic collection events for recyclables. The existing drop-off centers at the fire stations will continue to accept paper and containers from residents who still want to use the drop-off centers. When the County RMPF begins operation, the County will expand the materials accepted at the drop-off centers to reflect what the RMPF accepts.

The RMPF will host an additional, more comprehensive drop-off point for recyclables including some that are not collected in the curbside program. The type of materials accepted at the RMPF drop-off point will expand as markets are identified and any necessary processing capability (and funding) is secured. It is anticipated that electronics will be accepted at the RMPF when it opens. In addition, certain items like glass containers and certain types of plastics (e.g., film plastic, polystyrene, large durable plastic items, etc.) that may not be cost-effectively collected with the single-stream materials will be collected here. Other items that may be added over time include tires, paint, textiles, mattresses, batteries, grease, and fluorescent bulbs.

Macon-Bibb County will collaborate with retailers throughout the County to accept recyclable material that they sell or use for packaging at their retail locations. For example, the Solid Waste Department and the KMBBC will work with grocery stores and other retailers to expand collection locations for plastic bags and to promote the availability of these locations to customers. Similarly, the Department and the KMBBC will encourage electronics retailers to continue (or expand) programs to take back used electronics, batteries, and other products.

When the RMPF opens, the Solid Waste Department will work with other Macon-Bibb County departments to expand collection of recyclables at public locations. For example, the Solid Waste Department will work with Macon-Bibb County Parks and Beautification to offer single-stream recycling at all county parks and with the Urban Development Authority to offer single-stream recycling containers in high traffic pedestrian areas in the Central Business District. The Solid Waste Department will identify the opportunities for collecting recyclables in public areas and identify potential partners (other County departments, private businesses, etc.) and purchase containers (possibly with financial assistance from private sources). The Department will collect recyclable materials from these locations and deliver them to the RMPF, collaborating with the KMBBC to ensure that those using the containers are educated about the type of materials that can be recycled to minimize contamination.

The Solid Waste Department, in collaboration with the KMBBC and other County departments, also will collect recyclables at special events, such as the Cherry Blossom festival, and host periodic collection days for materials that are not collected at the curb. This will include electronics collection events, household hazardous waste collection events, and annual Christmas tree chipping events ("Bring One for the Chipper") among others.

Waste Reduction and Recycling Strategy #4

Work with haulers and with businesses and institutions throughout the County to increase commercial and institutional recycling.

Macon-Bibb County will offer recycling services for all materials accepted at the RMPF to all its commercial and institutional solid waste collection accounts and will institute a commercial fee structure for these customers that incentivizes recycling and waste reduction. Macon-Bibb County will require its franchised haulers to do the same. Franchise agreements will specify a minimum level of recycling service that haulers must provide to their commercial and institutional customers. These franchised haulers will have the option of delivering the recyclables collected from businesses and institutions to the Macon-Bibb County RMPF.

The County will work with the Urban Development Authority to implement a model recycling program for businesses and multi-family properties in the Central Business District as part of the revitalization of the downtown area. As the County streamlines solid waste collection in the Central Business District (see Section 3.2), it will provide recycling containers to all downtown properties that are at least as convenient as the garbage containers. All downtown properties will pay for recycling containers whether or not they recycle. Their garbage disposal rates will be based on the amount disposed (container size, number of pulls, tons collected, etc.) so that total fees are lower when businesses recycle. The Solid Waste Department will work with the Urban Development Authority to provide solid waste and recycling containers and to offer technical assistance and promotional materials to property owners and tenants. The Department will arrange for collection and processing of recyclables through a contractor or by the Department itself. Initially, the Central Business District recycling initiative will be voluntary. Once instituted, this model for commercial and institutional recycling may be expanded to other areas in Macon-Bibb County.

Waste Reduction and Recycling Strategy #5

Maximize cost-effective diversion of organics from residential and commercial sources.

When the Macon Walker Road landfill closes, Macon-Bibb County will begin to collect yard trimmings separately from residential garbage and deliver it to the County's proposed yard trimmings and construction and demolition debris management facility rather than to an MSW transfer station (see Section 3.3). The County will establish an organics diversion operation on this site. The technology used and materials to be diverted will be determined at that time based on technology available to handle the material generated, local markets for material/energy produced, estimated costs, and the ability to secure funding. At a minimum, Macon-Bibb County will mulch or grind yard trimmings and wood waste meeting established specifications that are delivered to the site. The County will evaluate the potential of developing a composting or anaerobic digestion process to handle a broader range of materials, potentially to include sludge and/or food residuals.

In addition, Macon-Bibb County will work with commercial and institutional generators to manage organics on site in small anaerobic digesters where this makes sense operationally and financially. When evaluating how best to streamline solid waste and recyclable collection in the Downtown Business District, Macon-Bibb County will consider where on-site diversion of organic material may make sense.

3.2 COLLECTION

The state requires local government solid waste management plans to demonstrate ten years of "collection capability". The goals and strategies in this Section are intended to address this requirement as well as to provide Macon-Bibb County with more consistency and control over the way solid waste is collected throughout the County.

3.2.1 Goals

Macon-Bibb County has established two collection goals for this planning period. Collection Goal #1 is to *ensure convenient and adequate collection of solid waste from all generators*. This can be achieved by providing collection service with Solid Waste Department forces and/or by providing closer oversight of those that do provide the service.

Collection Goal #2 is to *offer the same solid waste collection service to all residents*. This goal is consistent with Macon-Bibb County's goal to equalize service in the former City of Macon and Bibb County. Currently, collection services offered to residents in these two areas are slightly different as described in Section 2 and the fees charged are slightly different, accordingly.

Collection Goal #1

Ensure convenient and adequate collection of solid waste from all generators.

Collection Goal #2

Offer the same solid waste collection service to all residents.

3.2.2 Strategies to Achieve Goals

Macon-Bibb County will implement three strategies to achieve these collection goals. Each of these strategies are described below.

Collection Strategy #1

Standardize collection days, items collected, containers provided, fee for service, and billing for all residents in city-county.

Macon-Bibb County will continue to manage collection of solid waste, yard trimmings, bulky items, and recyclables (as described in Section 3.1) from all residents in the County. This encompasses all properties with four or fewer units. When the current collection contract in the former unincorporated County expires, Macon-Bibb County will evaluate whether the Solid Waste Department or a contractor will provide residential collection throughout the County. The decision between public and private service will be based on cost but will also ensure that the County has the ability to resume collection county-wide if needed in the future. If the County chooses to contract for residential collection services in all or part of the County, the contract term will be for five years and the relative allocation of publicly and privately provided services will be considered at the end of each term.

Whether the Department or a contractor provides collection to residents, the service to be provided will be the same for all residents. Residents in the former unincorporated County that currently receive collection of yard trimmings and recyclables every other week will begin to receive weekly collection of these items like the residents in the former City limits. Similarly, fees for solid waste collection and disposal will be equalized, more accurately reflect actual collection costs, and be billed annually rather than quarterly to save billing costs.

The County will also continue to make sure that collection of scrap tires remains readily available to citizens of Macon-Bibb County to minimize illegal disposal. The County will continue to collect scrap tires at its landfill until it closes and provide a trailer for scrap tires at the future transfer location. Macon-Bibb County will continue to arrange with a vendor to haul, process, recycle or properly dispose of the scrap tires collected. The County will pursue funding from the state to enforce the requirements of the State of Georgia's Scrap Tire Management Act to ensure that haulers and processors of tires operating in the County are properly registered and to clean up scrap tire piles that do develop in the County.

Collection Strategy #2

Update franchise provisions and enforce requirement that private haulers operating in the City-County to apply for a franchise annually.

Section 22-8 of the Macon-Bibb County code allows the County to collect all solid waste in the County or to issue written “permits” or franchise agreements to allow another “person” to do so. The County will offer commercial and institutional collection through its Solid Waste Department or a contractor. The County will also issue franchise agreements for commercial and institutional collection annually.

Sec. 22-8. (c) of the Macon-Bibb County states that the County can “collect and dispose of solid waste and trash either through its own employees or by contract with a person engaged in the business of garbage waste and trash collection and disposal.” It goes on to state that “No person except the duly authorized employees of the department of solid waste shall empty garbage and trash cans and receptacles or convey or transport garbage, trash, brush or other refuse on the streets, alleys and public thoroughfares of Macon-Bibb County without a written permit granted and issued by the director of the division of solid waste.”

The County will establish minimum requirements for private haulers receiving franchise agreements to operate in the County. The Macon-Bibb County Solid Waste Department will meet these minimum requirements of the franchise agreements for all of its commercial and institutional customers as well. Once the County RMPF is operating, franchisees will be required to offer commercial and institutional customers a specified level of recycling service. Franchisees will have the option of delivering the recyclables collected from their commercial customers to the County RMPF or a market of their choice. Franchisees will also be required to report tons recycled and to disseminate educational materials, provided by the County, to encourage recycling. Macon-Bibb County will revise its ordinances, as needed, to establish any franchise requirements necessary to achieve the goals identified in this Plan. Private haulers that receive a franchise agreement to operate in the County will pay a franchisee fee, the amount and basis of which the County will determine early in the planning period.

Collection Strategy #3

Streamline solid waste collection in the Central Business District as part of revitalization effort.

As part of the revitalization of the Central Business District, the Solid Waste Department will work with the Urban Development Authority and downtown property owners to organize a single solid waste and recyclable collection system in the Central Business District. Based on an assessment of the type and amount of solid waste and material generated, current collection locations and arrangement, who uses the services provided, and projected growth patterns, the Department and the Urban Development Authority will develop and implement a single collection system in the area. The Solid Waste Department will provide containers and either collect solid waste with its own employees or through a contractor. Collection of recyclables will be offered to all properties in the Central Business District once the RMPF is operational.

3.3 DISPOSAL

The state requires local government solid waste management plans to demonstrate ten years of disposal capacity. The federal and state government have regulations regarding how solid waste handling facilities are managed. The goals and strategies in this Section are intended to address these requirements as well

as to ensure that Macon-Bibb County continues to have cost-effective disposal options once its own MSW landfill closes.

3.3.1 Goals

Macon-Bibb County has established two disposal goals for this planning period. Disposal Goal #1 is to *ensure disposal capacity is available and accessible to handle all MSW from Macon-Bibb County for ten years*. Although the Macon Walker Road landfill only receives about 30 percent of the solid waste disposed from Macon-Bibb County, it remains the County's responsibility to ensure that all solid waste generated from the County has a place to be disposed. Disposal Goal #2 is to *ensure that all solid waste handling facilities are managed in a way that protects public health and the environment*.

Disposal Goal #1

Ensure disposal capacity is available and accessible to handle all MSW from Macon-Bibb County for ten years.

Disposal Goal #2

Ensure solid waste handling facilities are managed in a way that protects public health and the environment.

3.3.2 Strategies to Achieve Goals

Macon-Bibb County will implement four strategies to achieve these disposal goals. Each of these strategies are described below

Disposal Strategy #1

Operate and close the Macon-Walker Road landfill in a way that complies with federal, state, and local regulations and policy.

Macon-Bibb County will continue to follow the approved development and operation plan for the Macon-Walker Road landfill until it closes, currently anticipated to be in 2020. At that time, Macon-Bibb County will close the landfill in compliance with state and federal regulations and then monitor and maintain the site as required by regulations.

Currently, the two greatest challenges to fulfilling this strategy are 1) securing sufficient dirt to meet cover and closure requirements and 2) ensuring that funds are available to close and provide post-closure care for the landfill. To meet the first challenge, Macon-Bibb County will purchase cover dirt or purchase property from which cover dirt can be excavated. If Macon-Bibb County is not able to acquire sufficient dirt in a cost-effective way, it will apply for a permit to use an alternative daily cover in lieu of dirt. Regarding the second challenge, although Macon-Bibb County has accrued some funds for closure and the required post-closure care, it is likely that additional capital will be required. The Solid Waste Department proposes that the additional capital cost be funded either through a general obligation bond or be included as a project to be funded by the Special Purpose Local Option Sales Tax that will be included on the 2016 ballot.

Disposal Strategy #2

Construct a transfer station and secure disposal agreement for MSW.

When the Macon Walker Road landfill closes, Macon-Bibb County will develop and operate a transfer station to handle MSW generated in the County. A transfer station (where solid waste from collection routes is tipped and put into large trailers for hauling to a disposal facility) will allow Macon-Bibb County to cost effectively access more distant landfills. A transfer station also will provide flexibility regarding where transferred solid waste is delivered. This flexibility is likely to result in more competition to receive Macon-Bibb County's solid waste which in turn, should lower prices. In short, a transfer station will allow the County to control its own destiny when it comes to solid waste disposal and to achieve its two disposal goals of ensuring disposal capacity is available and accessible and ensuring MSW is disposed at solid waste handling facilities that are operated in a way that protects public health and the environment.

The County will work with private haulers and surrounding communities to determine whether they would be interested in sending solid waste through the Macon-Bibb County transfer station. Based on these discussions, the County will determine the appropriate size of the facility. A smaller facility could be designed to handle only the MSW collected by the Solid Waste Department and its contractor (approximately 90,000 tons in 2013), leaving the franchised haulers to fend for themselves. Alternatively, the transfer station could be sized to handle some or all of the solid waste collected by franchised haulers in the County and/or outside Macon-Bibb County. The cost per ton of a larger facility tends to be lower than for a smaller one. However, the capital cost to build a larger facility is higher and so the County will need some assurance of the solid waste it would receive before building a facility that handles more than its own. Also, based on the point or origin of solid waste that may come to the transfer station, Macon-Bibb County may consider developing more than one transfer station to improve access for collection vehicles to reach the transfer stations or to decrease the distance to landfills where solid waste will be disposed. The capital cost of a transfer station could be included as a project in the proposed 2017 Special Purpose Local Option Sales Tax or funded through a General Obligation Bond.

Ideally a transfer station could be co-located with a RMPF (see Section 3.1) if a site with sufficient space is available. Co-locating the two facilities would reduce costs since the two facilities could share some equipment and utilities (i.e., scales being one costly item that could be shared). This would also reduce the cost to transport residue from the RMPF to a transfer point for disposal. Similarly, recoverable items delivered to the transfer station could be easily diverted to the adjacent RMPF if co-located.

The City of Phoenix, Arizona has two transfer stations co-located with single-stream material recovery facilities. City staff operate the transfer station while a private company operates the material recovery facilities. Recyclable materials are sometimes pulled off of the transfer station tipping floor and directed to the RMPF for recovery. Similarly, residue from the RMPF is easily directed to the trailers at the transfer station.

Macon-Bibb County will enter into a contract for disposal of solid waste received at the transfer station (and possibly for solid waste direct hauled if more cost-effective from some locations). The County will initiate the procurement process approximately one year before the Macon Walker Road landfill is scheduled to close. At that point, the County will know whether it will be securing disposal for all the solid waste generated in the County, only the MSW that the Solid Waste Department or its contractor collects, or some amount in between. In addition, the County will know at that point where the transfer station(s) will be located so that it can evaluate the total cost of hauling to and disposal at each potential landfill. Depending on the bids received, the County will enter into one or more disposal agreements. It is anticipated that disposal contracts will be rebid every five years.

Disposal Strategy #3

Construct and operate a recovery and disposal facility for construction and demolition debris.

Before the Macon Walker Road landfill closes, the County will develop a site where construction and demolition debris (C&D) can be processed, recycled, and disposed. The ability to manage C&D within the County offers the following benefits.

- It will provide an opportunity to divert recoverable materials from construction and demolition debris, helping Macon-Bibb County achieve its waste reduction goal.
- It will avoid the need to transport often heavy construction and demolition debris to a distant landfill or handle unwieldy material at the Macon-Bibb County transfer station.
- It will provide Macon-Bibb County a place to cost-effectively process and dispose of the anticipated spike in construction and demolition debris as abandoned and substandard structures are dismantled as part of the County's initiative to address blight.

The County will secure and permit a site for a C&D management facility and begin development. The County will consider options for equipment and/or contracts for processing materials in C&D for recovery on site. These materials are likely to include scrap metal, which can be diverted to market, and certain wood and aggregate materials, which could be processed and possibly used on site. The C&D management facility will be permitted as a disposal site so that all material that cannot be cost-effectively recovered can be disposed here avoiding hauling costs for C&D which tends to be heavy and difficult to load and transport.

Disposal Strategy #4

Require franchisees to dispose of MSW at facilities designated by Macon-Bibb County.

Once Macon-Bibb County has a network of facilities to maximize recovery and manage MSW (through the transfer station) and C&D (through the C&D management facility) generated in the County, franchised haulers will be required to deliver solid waste to a solid waste handling facility that is designated by Macon-Bibb County.⁷ These facilities could include the Macon-Bibb transfer station and C&D management facility but also may include other facilities that have demonstrated that they have capacity to receive Macon-Bibb County's solid waste and that they meet the County's goal of managing solid waste in a way that protects public health and the environment. Franchised haulers will be required to indicate the designated facilities to which they intend to take solid waste collected in Macon-Bibb County as part of the annual franchise agreement.

⁷ The County will not designate facilities where recovered materials must be delivered as franchisees can deliver these materials to the facility of their choice.

3.4 LAND LIMITATION

3.4.1 Goals

The State of Georgia requires that local governments “identify those sites which are not suitable for solid waste handling facilities based on environmental and land use factors” in their Solid Waste Management Plans. Land Limitation Goal #1, to *ensure that solid waste handling facilities are only sited in locations appropriate for this purpose*, is aimed to fulfill this requirement.

Land Limitation Goal #1

Ensure that solid waste handling facilities are only sited in locations appropriate for this purpose.

Land Limitation Goal #2

Ensure solid waste handling facilities are consistent with this Solid Waste and Materials Management Plan.

The State of Georgia requires that a permit application for a solid waste handling facility in the State be accompanied by a letter from the host local government indicating whether the proposed facility is consistent with its Solid Waste Management Plan. Land Limitation Goal #2 is to *ensure solid waste handling facilities are consistent with this Solid Waste and Materials Management Plan*.

3.4.2 Strategies to Achieve Goals

Macon-Bibb County has identified the following two strategies to meet the goals for Land Limitation.

Land Limitation Strategy #1

Limit consideration of permits to solid waste handling facilities/expansions that are not sited in excluded areas and, if sited in restricted areas, have complied with design and operating requirements.

Section 2.5.1 describes excluded or restricted areas for the development of solid waste handling facilities (Appendix C shows maps for each exclusion/restriction criteria). Macon-Bibb County will continue to update these maps when environmental regulations or zoning/land uses change and refer to them when a request for a permit in the County is received.

The process that the Macon-Bibb County Planning and Zoning Commission will follow to review a permit for a solid waste handling facility located in the County is summarized below and described in more detail in Appendix D.

- When it receives a permit application, the Macon-Bibb County Planning and Zoning Department will verify that the proposed facility is located in Zoning District M-3 (where it is a permitted use), or Zoning District M-2 or A (where it is a conditional use). If the proposed facility is not located in one of these Districts, the Macon-Bibb County Planning Commission will deny the permit.
- If the proposed facility is located in one of these Districts, then the Macon-Bibb County Planning and Zoning staff will verify that the permit applicant has certified that the site meets all the environmental and land use requirements for that particular district (described in Appendix D). If any of these requirements cannot be certified by the applicant and verified by the Macon-Bibb

County Planning and Zoning Department, then the Macon-Bibb County Planning Commission will deny the permit.

- If it has been certified by the applicant and verified by the Macon-Bibb Planning and Zoning Department that the environmental and land use requirements have been met; the proposed facility and site meets all other laws, rules, and regulations of county, state, and federal government; and the facility has received a determination of consistency with the Solid Waste and Materials Management Plan (see below); then the application will be placed on the agenda for consideration by the Macon-Bibb Planning and Zoning Commission as prescribed by the procedures set forth in the Comprehensive Land Development Resolution.
- The Planning and Zoning Commission will review the application and the report of its staff and determine whether to issue a permit.

The details of this process, including the siting requirements and appeals process for a denied application, are detailed in Appendix D.

Land Limitation Strategy #2

Continue to follow procedures to determine whether proposed solid waste handling facility (or expansion of existing facility) is consistent with the Solid Waste and Materials Management Plan.

In order for EPD to issue a permit for a solid waste handling facility (new or expanded), a local government must document the consistency of the proposed facility with the local Solid Waste Management Plan. For Macon-Bibb County to consider whether a proposed facility is consistent with this Solid Waste and Materials Management Plan, the permit applicant must file a request for determination of consistency with the County Clerk. To make this determination, Macon-Bibb County staff evaluates the impact of the proposed facility on existing waste management facilities, collection and disposal capability, and achievement of the waste reduction goals set forth in this Plan and prepare a report for consideration by the County Commission. The existing procedures for determining whether a proposed solid waste handling facility is consistent with this Solid Waste and Materials Management Plan are described in detail Section 2.5.2. Macon-Bibb County will continue to following these procedures.

3.5 PUBLIC EDUCATION AND OUTREACH

3.5.1 Goals

Few of the solid waste goals in the previous sections can be successful without the support and participation of residents and businesses in Macon-Bibb County. Thus, this Section identifies goals and strategies that will enlist this support and participation. Public education and outreach Goal #1 is to *ensure that every resident and business has*

Public Education and Outreach Goal #1

Ensure that every resident and business has access to information about why and how to reduce and recycle.

Public Education and Outreach Goal #2

Work with the KMBBC to educate youth and adults about solid waste and materials management using a variety of avenues.

access to information about why and how to reduce and recycle. Goal #2 is to work with the KMBBC to educate youth and adults about solid waste and materials management using a variety of avenues.

3.5.2 Strategies to Achieve Goals

Macon-Bibb County will employ the following six strategies to achieve its public education and outreach goals.

Public Education and Outreach Strategy #1

Continue to contract with Keep Macon-Bibb Beautiful Commission to lead ongoing public education and outreach efforts on recycling and litter prevention.

The Macon-Bibb Solid Waste Department will continue to contract with the KMBBC to achieve the goals for Public education and outreach. Although all Department employees, from the Director to the collectors on residential garbage and recycling routes will play a role in educating citizens about why and how to recycle, the County will continue to contract with the KMBBC to lead public education and outreach efforts in the schools, run public education and outreach programs and recycling collection at community events, and make presentations to community organizations. The County and KMBBC will enter into a contract annually that identifies the number and type of activities to be conducted that year that may include (but not be limited to) the following:

- Create and maintain website and communicate regularly via social media on waste reduction and recycling;
- Provide specific public education and outreach content on the KMBBC web site and link to the County's web site (depending on the activities to be conducted in a given year);
- Create and distribute brochures or other printed material (the content of which will be determined based on activities to be conducted in a given year);
- Make a specified number of presentations in schools;
- Make a specified number of presentations to neighborhood associations and community groups;
- Conduct collection events for particular materials (electronics, textiles, pharmaceuticals etc.);
- Host waste reduction and recycling related events for America Recycles Day and Earth Day;
- Coordinate neighborhood clean-up events; and
- Assist with a specified number of media activities and press releases.

The list of activities to be performed in a given year will be developed by KMBBC with input from the Solid Waste Department. The amount that the County will provide to KMBBC for these services will be identified in the contract and the KMBBC will continue to solicit additional funds from other sources. When the RMPF opens, a designated portion of the revenue from the sale of materials processed at the RMPF will be used to cover the cost of education and outreach provided by the KMBBC. In addition, the County will consider a generator assessment (see Appendix F on potential funding sources) to fund public education and outreach initiatives and these funds may also be used to support the activities of KMBBC.

Public Education and Outreach Strategy #2

Expand the use of the internet and social media to provide updated, specific and consistent information about solid waste and materials management in Macon-Bibb County.

The County will work with KMBBC to provide eye-catching, interactive, and updated information about waste reduction and recycling on the KMBBC website with a seamless link between the KMBBC and the Macon-Bibb County web sites. This information will be prepared in a visually appealing way with an easily identified theme that reinforces the goals, strategies and activities identified in this Plan.

The information provided on the KMBBC and Macon-Bibb County websites will be specific to Macon-Bibb County's waste reduction and recycling programs and ideally incorporate some interactive features. For example, the KMBBC envisions that its website allows residents to enter their address to access information specific to that address about garbage and recyclable collection days, the materials that can be recycled, and even the tons recycled by their neighborhood. Additionally, there could be a link to the County's *SeeClickFix* online request program for questions about recycling, missed pick-ups, to request a cart etc. A robust, interactive web site will make the transition to county-wide single-stream collection (and all new programs) smoother as well as provide a way for the County and KMBBC to report progress to residents and businesses. In addition to the web site, the County and KMBBC will continue to utilize a variety of social media to reach a broader audience, including Facebook, Twitter, Instagram, etc.

Public Education and Outreach Strategy #3

Increase participation and decrease contamination with ongoing public education and outreach, punctuated with an information "blitz" with each program improvement.

A successful waste reduction and recycling public education and outreach program needs two components. It needs to continually encourage proper participation in existing programs by getting current participants to keep participating; get participants who are not participating to do so; and get those who are participating incorrectly (i.e., placing non-recyclable materials in recycling carts) to participate correctly. This will be achieved with ongoing outreach through the avenues described in other strategies in this Section. The Solid Waste Department and KMBBC will also measure and report performance (i.e. participation, tonnage, etc.) to participants. Collectors and inspectors that are in the field on a regular basis will educate residents and businesses about ways to increase recycling and decrease contamination

In addition to ongoing education and outreach, the Department and KMBBC will conduct an information "blitz" with each change in waste reduction and recycling programs throughout the ten year planning period. When new garbage and recycling carts are delivered, when single-stream recycling goes county-wide, when the Central Business District recycling program begins, when recycling becomes mandatory, the Solid Waste Department and KMBBC will conduct an information blitz to inform residents and businesses affected by these changes what is changing, exactly what they need to do, and how the changes will benefit Macon-Bibb County. These campaigns will use print materials, presentations to students and adults, door to door information, internet and social media, and traditional media to reach a wide audience.

Public Education and Outreach Strategy #4

Expand education programs in schools through Keep Macon-Bibb Beautiful Commission.

The KMBBC will continue offering waste reduction/recycling and litter prevention educational programs in all second grade classrooms in public schools and expand to all private schools. As the recycling program evolves in Macon-Bibb County, the standard program will incorporate more information about single-stream collection and other program changes. The Solid Waste Department and the KMBBC will also expand educational programs in upper grades, when the curriculum allows and at institutions of higher education in the County.

Public Education and Outreach Strategy #5

Incorporate an education and training center at the RMPF.

The new Macon-Bibb County single stream RMPF will incorporate an education and training center where students and adults can come to learn about waste reduction and recycling and other sustainability topics. The training center will include a view of the recycling process, interactive exhibits about the benefits of recycling and samples of the final products made from materials collected for recycling in Macon-Bibb County.

The Columbus (Georgia) Consolidated Government opened a 54,000 square foot, \$8.5 million single-stream Recycling Facility and Sustainability Center in 2013. The facility includes a large educational center including a large viewing area of the processing floor, interactive exhibits and learning stations, and meeting and classroom space. The building's "green" design demonstrates sustainable construction, including the use of recycled content

Public Education and Outreach Strategy #6

Offer outreach and technical assistance programs to expand business and institutional recycling in Macon-Bibb County.

Currently, public education and outreach conducted by the KMBBC is primarily directed at students and residents. However, as recycling programs expand to more comprehensively involve businesses in the county, public education and outreach will be directed to them as well. Much of this education will be in the form of technical assistance. The Solid Waste Department and the KMBBC will coordinate a peer to peer information exchange between businesses that recycle and those that want to begin or expand their program. The Department and the KMBBC will offer waste audits to advise businesses on what can be recycled as well as offer reviews of current contracts for disposal to make sure savings are realized by recycling and reduction efforts. When the RMPF opens, the Department and the KMBBC will reach out to businesses to encourage them to collect and arrange for delivery of the materials that are accepted here.

A robust education campaign will accompany the recycling and solid waste collection program in the Central Business District. The Department will offer an incentive for businesses to recycle and will widely promote the collection and processing available as well as the incentives when the downtown collection

program begins. The County will provide guidance and technical assistance to individual businesses in the Central Business District on an as-needed basis to make sure they are maximizing recycling and minimizing contamination.

3.6 PLANNING AND REPORTING

3.6.1 Goals

The County will monitor progress toward the goals in the Plan and determine whether strategies are fulfilled and activities implemented with the anticipated outcome. This information will be shared with the public. Thus, planning and reporting Goal #1 is to *gather and disseminate information about how Macon-Bibb County is progressing toward goals*.

Planning and Reporting Goal #1
Gather and disseminate information about how Macon-Bibb County is progressing toward goals.

As conditions change, which they undoubtedly will, this Plan will be updated accordingly. Thus, planning and reporting Goal #2 is to *keep this Solid Waste and Materials Management Plan updated to serve as a roadmap for decision-makers and staff*.

Planning and Reporting Goal #2
Keep this Solid Waste and Materials Management Plan updated to serve as a roadmap for decision-makers and staff.

3.6.2 Strategy to Achieve Goals

Macon-Bibb County has identified three strategies to meet the planning and reporting goals.

Planning and Reporting Strategy #1
Measure and report progress toward waste reduction and recycling goals.

On an annual basis, the Solid Waste Department will evaluate its progress toward the quantitative goals in this Plan. It will draw on reports from franchised haulers, its collection contractor, and its own scale receipts to determine progress toward the waste reduction goal and calculate the residential recycling rate. For recycling, set-out rates and contamination also will be evaluated periodically and public education and outreach efforts will be focused on the issues and in the areas that most need addressing. Macon-Bibb County will report annually to citizens on the progress toward waste reduction and recycling goals through the media, social media sites, websites, and press releases.

Planning and Reporting Strategy #2
Assess whether other goals and strategies are achieved, report to public, and adjust accordingly.

For the less quantitative goals, the County will review the progress on strategies and the completion of activities contained in the implementation schedule contained in Section 4. For those strategies that have not been achieved or activities that were not performed on the anticipated schedule, the Solid Waste Department has several options depending on the cause. It can redouble efforts with the resources it has, identify funding or other resource needs to complete these strategies, or revise the activities or schedule accordingly. The Solid Waste Department will report annually on the progress on goals, strategies, and activities included in this Plan.

Planning and Reporting Strategy #3

Reference and update Solid Waste and Materials Management Plan.

Although the previous strategies are likely to require Macon-Bibb County to adjust the implementation schedule in Section 4 on an as-needed basis, the County will do a wholesale review of the goals, strategies and activities scheduled for the second half of this planning period (2021 through 2025) to ensure they are still relevant. The goals and strategies and implementation schedule will be updated as needed at that time so that the Plan, and particularly the implementation schedule, will continue to serve as a roadmap for decisions makers and staff throughout the ten year planning process. The entire plan will be revisited for the 2026 through 2035.

4 IMPLEMENTATION SCHEDULE

This Section of the Solid Waste and Materials Management Plan details the activities that the Solid Waste Department and its partners will take to achieve the goals and strategies included in Section 3 of the Plan. Table 4-1 shows the activities that will be undertaken in each of the next ten years to achieve the goals and strategies presented in Section 3 for each of six components of a successful Solid Waste and Materials Management system. These components include:

- Waste Reduction and Recycling;
- Collection;
- Disposal;
- Land Limitation and Plan Consistency;
- Public Education and Outreach; and
- Planning and Reporting.

The detailed implementation schedule will be updated periodically. The activities identified in the earlier years are more likely to be implemented than those in the later years which will be updated as time goes along.

Table 4-1
Implementation Schedule, 2016-2025

Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
WASTE REDUCTION AND RECYCLING										
RMPF DEVELOPMENT										
Conduct waste characterization study and market study to determine the type and amount of materials to be delivered to RMPF										
Quantify potential types and amounts of recyclable materials anticipated from within and outside Macon-Bibb County and work with generators to determine interest in participating in RMPF project										
Identify potential activities to occur on site where RMPF will be located										
Identify potential sites for a RMPF										
Prepare conceptual design and cost estimates for RMPF										
Incorporate estimated cost of RMPF into proposed referendum for SPLOST										
Determine role of City-County and contractor in designing, constructing, owning, and operating RMPF										
Issue Request for Proposals for services to be provided by private contractor at RMPF (and possibly co-located facilities depending on timing)										
Select contractor(s) and negotiate contract for RMPF services										
Complete construction of RMPF										
Operate RMPF										
RESIDENTIAL CURBSIDE RECYCLING										
Continue to collect paper for recycling from 26,000 households in the former City										
Continue to contract for collection of recyclables from 19,800 households in the former unincorporated County										
Expand pilot single-stream recycling (providing roll-out carts) in former City as long as existing infrastructure is able to collect and process the material										
Determine whether County or contractor will collect recyclables county-wide when current contract expires										
If County is to provide collection of recyclables county-wide, secure equipment and staff										

Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
If contractor to continue collection county-wide, procure services										
Secure funding for recycling carts for all residents										
Provide all residents with County roll-out cart for recycling										
Offer consistent level of recycling service county-wide, collecting the same materials with the same frequency from all households										
Pass ordinance requiring residents to participate in recycling when RMPF begins operation										
Educate residents about new recycling programs and requirements, first educate and then enforce ongoing violations										
RESIDENTIAL DROP-OFF RECYCLING										
Continue to operate drop-off centers at fire stations										
Expand type of materials collected at existing drop-off centers to include all those accepted at RMPF										
Incorporate drop-off center for RMPF for a broader range of materials										
Increase the type of “hard-to-recycle” materials accepted at RMPF drop-off as markets are identified and resources become available										
Identify and broadly promote existing drop-off sites at retailer locations and work to expand										
Expand collection of recyclables accepted at RMPF in public venues (parks, pedestrian areas in Central Business District)										
Continue periodic collection events for materials that are not collected at curbside or at fire-station drop-off centers (e.g. electronics, Christmas trees, etc.)										
COMMERCIAL AND INSTITUTIONAL RECYCLING										
Offer recycling to all commercial and institutional accounts with financial incentive to participate										
Require all franchised haulers to offer recycling service equal to that offered by County (allowing them to deliver collected recyclables to County RMPF)										
Research solid waste collection arrangements in the Central Business District										
Collect or contract for collection of recyclables from businesses and residents in the Central Business District										
Operate C&D recovery operation at County C&D management facility										

Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ORGANICS DIVERSION										
Collect residential yard trimmings in separate carts and vehicles from residential MSW										
Develop mulching/grinding capability for yard trimmings and selected wood waste at new C&D management facility										
Evaluate technology to divert broader range of organics on C&D management facility site										
Secure funding for organics/C&D diversion equipment										
Develop expanded organics/C&D diversion facility at C&D management facility										
Work with commercial and institutional generators to deliver organics to organics diversion facility or to manage on-site in small anaerobic digesters as technology develops										
COLLECTION										
RESIDENTIAL GARBAGE, YARD TRIMMINGS AND BULKY ITEMS										
Continue to collect garbage, yard trimmings, and bulky items from 26,000 households in the former City limits										
Continue to contract for collection of garbage, yard trimmings, and bulky items from 19,800 households in the former unincorporated County										
Establish consistent level of service and fees to all residents county-wide, shifting to annual payment schedule of fees										
Determine who will collect when current contract extension expires										
If County is to provide all collection, secure funding, purchase equipment, and hire or reassign staff										
If contractor to continue collection in former unincorporated County, procure services										
Provide all residents with new County roll-out carts for solid waste										
Evaluate full cost of service and adjust fees as needed										
Continue to collect scrap tires from citizens at solid waste handling facilities										
COMMERCIAL AND INSTITUTIONAL										
Expand collection services offered to businesses, multi-family properties, schools and other institutions										

Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ensure that all haulers annually renew permits/franchise agreements and charge franchise fee accordingly										
Offer specified level of recycling services and associated education to all commercial and institutional customers served by County or contractor										
Require franchisees to offer same specified level of recycling/education as County, offering RMPF as outlet for collected material										
Require franchisees to report to County about recycling services and tonnages										
Revise ordinance as required to establish other franchisee requirements to meet goals of Plan										
Collect or contract for collection of solid waste from businesses and multi-family residences in the Central Business District										
Offer collection of recyclables from all properties in Central Business District										
Continue to operate and expand recycling programs in all schools, providing technical assistance and access to collection, processing, and markets as needed										
ILLEGAL DISPOSAL										
Continue to provide equipment, dumpsters, etc. for neighborhood clean-ups										
Continue to clean-up illegal disposal sites throughout County										
Continue to encourage citizens to report illegal disposal sites, debris or tire piles, etc.										
DISPOSAL										
MSW DISPOSAL										
Continue to operate the Macon Walker Road MSW landfill										
Ensure sufficient funds are available for closure and post-closure care of landfill, potentially incorporating cost into SPLOST referendum or bond issue										
Close the Macon Walker Road MSW landfill										
Conduct activities related to post-closure care of the Macon Walker Road landfill										
Solicit bids for disposal										
Enter into contract for disposal										
Send collected and transferred MSW to contracted disposal facility(ies)										
TRANSFER STATION										

Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Meet with commercial and institutional generators, other local governments in region for interest in delivering to transfer station										
Prepare conceptual design and cost estimates for transfer station										
Select site for transfer station (ideally co-located with RMPF)										
Secure funds for transfer station										
Permit transfer station										
Complete construction of transfer station										
Operate transfer station										
C&D MANAGEMENT										
Site, permit, and develop a C&D recovery and disposal facility										
Purchase equipment/enter into contracts for processing and markets for recovered C&D										
Begin operation of C&D management facility										
OTHER FACILITIES										
Pass ordinance to require franchised haulers to deliver solid waste to designated facilities										
Identify designated facilities, reviewing requests and updating list as consistent with this Plan										
Require franchised haulers to deliver solid waste collected in County only to designated facilities and to demonstrate annually										
LAND LIMITATION										
Continue to update land limitation maps to reflect changes to zoning and land use										
Determine whether to grant or deny permit for solid waste handling facilities based on environmental and land use criteria and process established in this Plan										
Review consistency of any proposed facility using procedures documented in this Plan and notify EPD of decision accordingly										
PUBLIC EDUCATION AND OUTREACH										

Fiscal Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Contract with Keep Macon-Bibb Beautiful Commission to lead public education and outreach activities to increase waste reduction and recycling and address litter and illegal dumping										
Shift public education and outreach funding to fees or revenues associated with recycling (i.e. RMPF revenue, education and outreach fee to generators, etc.)										
Update, expand, and organize recycling education and resources on KMBBC and Department websites and incorporate interactive features										
Use multiple social media sites to provide updated recycling information to diverse audiences										
Encourage residents to use <i>SeeClickFix</i> and for questions about recycling, to report littering and illegal dumping and missed pick-ups, to request a cart etc.										
Inform residents about set-out rates, tonnage, and contamination by neighborhood using inspectors, collectors, social media, website, print materials on an ongoing basis										
Invest in education and outreach blitz when changes in programs necessitate changes by residents and/or businesses (i.e. when county-wide residential single-stream starts)										
Continue and expand waste reduction, recycling, and litter education programs in schools										
Incorporate education and training center at RMPF										
Conduct training, outreach, and education programs for students and adults at RMPF										
Provide technical assistance and recognition program for businesses and institutions to encourage and reward recycling and reduction										
Conduct broad outreach campaign to businesses in Central Business District when consolidating collection and thereafter										
PLANNING AND REPORTING										
Gather and promote data on tonnage and contamination of recyclables material by neighborhood/route										
Assess and report progress toward all goals in Plan										
Update Solid Waste and Materials Management Plan, at a minimum revisiting planned activities for 2021 through 2025										

APPENDIX A

RESIDENTIAL SOLID WASTE COLLECTION CONTRACT

**SECOND EXTENSION AGREEMENT FOR
WASTE COLLECTION, DISPOSAL, AND RECYCLING SERVICES**

This extension agreement made and entered into this 8 day of January, 2015 by and between MACON-BIBB COUNTY, GEORGIA, a public body created under the laws of the State of Georgia (hereinafter referred to as "the County") and ADVANCED DISPOSAL SERVICES MACON LLC, a Georgia limited liability company (hereinafter referred to as "Contractor").

WHEREAS, Contractor did on the 15th day of July, 2009, enter into a contract with Bibb County (assigned to Contractor May 23, 2011, by Southland Waste Systems of Georgia-Macon) to provide all residential solid waste and recyclable materials collection and disposal services in the previously unincorporated area of Bibb County for a five-year period beginning on July 1, 2009 and ending on June 30, 2014, and

WHEREAS, said contract was extended on or about August 8, 2013, and set to expire on June 30, 2014, and

WHEREAS, said contract extension is set to expire on December 31, 2014, and

WHEREAS, Macon-Bibb County is the successor in interest to the former Bibb County, and

WHEREAS, Contractor has performed the services contracted for diligently and in a manner satisfactory to the County, and

WHEREAS, Contractor has agreed to extend the rates set forth in Year 5 of the original contract for the second extension of the contract, and

WHEREAS, County and Contractor have agreed to amend the original service agreement to provide for a more efficient service delivery throughout the County, and

WHEREAS, the amended services are outlined in 'Appendix A' of this contract extension agreement, and

WHEREAS, the County has determined that the rate proposed by Contractor for extension of the contract and the satisfactory manner in which Contractor has performed the services to date, make it in the best interest of the citizens of Bibb County to extend the original contract as amended.

NOW THEREFORE, for and in consideration of the premises hereof and the mutual covenants and promises contained herein, the County and Contractor hereby agree to amend and extend the original contract under the same terms and conditions except as set forth on Appendix A attached hereto and incorporated herein by this reference which such terms and conditions shall prevail for an additional 30 month period beginning on January 1, 2015 and ending on June 30, 2017.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals as of the day and year first above written.

MACON-BIBB COUNTY

BY: Robert A. B. Reichert
Robert A. B. Reichert, Mayor

ATTEST: Jean S. Howard
Jean S. Howard, Interim Clerk of Commission

ADVANCED DISPOSAL SERVICES MACON,
LLC

BY: Charlie Ins
TITLE: RVP

ATTEST: ATC
Secretary

STATE OF)
COUNTY OF)

The foregoing instrument was acknowledged before me this _____ day of _____, 2014 by _____ on behalf of ADVANCED DISPOSAL SERVICES MACON, LLC, a Georgia limited liability company. He/She is personally known to me or has produced a _____ driver's license as identification.

NOTARY SEAL



Notary: *Caren Chaffin*
Print Name: *Caren Chaffin*
Notary Public, State of *GA*

CONTRACT
FOR
SOLID WASTE AND RECYCLABLE
MATERIALS COLLECTION

BETWEEN
BIBB COUNTY GOVERNMENT
AND
REPUBLIC SERVICES OF GEORGIA, LIMITED PARTNERSHIP,
d/b/a SOUTHLAND WASTE SYSTEMS OF GEORGIA - MACON

TERM: JULY 1, 2009 THROUGH JUNE 30, 2014

* CONTRACT ASSIGNED 5-23-11
TO ADVANCED DISPOSAL SERVICES

Macon-Bibb County Solid Waste and Materials Management Plan
2016-2025

CONTRACT

THIS CONTRACT, made and entered into this 30th day of June, 2009, by and between the County of Bibb, a Political Subdivision of the State of Georgia, (hereinafter called the "County"), and Republic Services of Georgia, Limited Partnership, d/b/a Southland Waste Systems of Georgia-Macon (hereinafter called "Contractor").

WITNESSETH:

WHEREAS, the Contractor did on the 23rd day of April, 2009 submit a Bid to provide for all residential solid waste and recyclable materials collection and disposal in the unincorporated areas of Bibb County for a five (5) year period beginning on July 1, 2009 and ending on June 30, 2014, subject to certain terms and conditions as set forth herein, and to perform such work as may be incidental thereto.

NOW THEREFORE, in consideration of the following mutual agreements and covenants, it is understood and agreed by and between the parties hereto as follows:

1. The Contractor is hereby granted a franchise, license and privilege within the unincorporated areas of the County and shall furnish all personnel, labor, equipment, trucks and all other items necessary to provide solid waste and recyclable materials collection, removal and disposal services as specified and to perform all of the work called for and described in the Contract Documents.
2. The Contract Documents shall include the following documents and this Contract does hereby incorporate the same herein as fully as if set forth verbatim in this Contract:
 - a) The Invitation for Bids
 - b) The Instructions to Bidders
 - c) The Contractor's Bid
 - d) The General Specifications
 - e) The Performance Bond
 - f) This instrument
 - g) Insurance Policies
 - h) Any addenda or changes to the foregoing documents agreed to by the parties hereto.
3. All provisions of the Contract Documents shall be strictly complied with and conformed to by the Contractor, and no amendment to this Contract shall be made except upon the written consent of the parties, which consent shall not be unreasonably withheld. No amendment shall be construed to release either party from any obligation of the Contract Documents except as specifically provided for in such amendment.
4. This Contract is entered into subject to the following conditions:
 - a) The Contractor shall procure and keep in full force and effect throughout the term of this Contract all of the insurance policies specified in, and required by the Contractor Documents.
 - b) Neither the Contractor nor the County shall be liable for the failure to perform their duties if such failure is caused by a catastrophe, riot, war, governmental order or regulation, strike, fire, accident, act of God or other similar or different contingency beyond the reasonable control of the Contractor.
 - c) If either party shall default in the performance of its duties hereunder, and the other party shall give written notice of such default to the defaulting party and if the default is not cured within fifteen (15) days after the giving of notice, or if it is a default which cannot be cured within such period, and it is not cured within a reasonable time, then and in such event, the notifying party may terminate this Agreement.
 - d) The Contract will be automatically renewed at the end of each calendar year of the period stated hereinabove, unless positive action is taken by the County to terminate the Contract. To prevent renewal and terminate the contract, the County will provide to the Contractor a notice of termination in writing either by hand delivery, mail or facsimile at the Contractor's address set

Macon-Bibb County Solid Waste and Materials Management Plan
2016-2025

forth herein, on or before December 1st of the then current calendar year. This Contract shall terminate absolutely and without further obligation on the part of the County at the close of the calendar year in which the notice of termination is given to the contractor. The County shall have no obligation for any succeeding calendar year(s) for which this contract is not renewed.

- c) Notwithstanding any other provision contained herein, this contract shall terminate immediately and absolutely at such time as appropriated and otherwise un-obligated funds are no longer available to satisfy the obligations of the County under this contract.
- f) The total obligation of the County for the calendar year of execution of the contract and for each calendar year, in which the contract may be renewed, is set forth below based upon the following monthly unit prices.

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	07/2009 thru 12/2009	01/2010 thru 06/2010	07/2010 thru 12/2010	01/2011 thru 06/2011	07/2011 thru 12/2011	01/2012 thru 06/2012	07/2012 thru 12/2012	01/2013 thru 06/2013	07/2013 thru 12/2013	01/2014 thru 06/2014
Solid Waste	\$ 7.41	\$ 7.41	\$ 7.64	\$ 7.64	\$ 7.87	\$ 7.87	\$ 8.10	\$ 8.10	\$ 8.34	\$ 8.34
Yard Rubbish	\$ 1.17	\$ 1.17	\$ 1.21	\$ 1.21	\$ 1.25	\$ 1.25	\$ 1.28	\$ 1.28	\$ 1.32	\$ 1.32
Recyclables	\$ 1.56	\$ 1.56	\$ 1.60	\$ 1.60	\$ 1.65	\$ 1.65	\$ 1.70	\$ 1.70	\$ 1.75	\$ 1.75
2 cu yd containers	\$31.18	\$31.18	\$32.12	\$32.12	\$33.08	\$33.08	\$34.07	\$34.07	\$35.09	\$35.09
4 cu yd containers	\$62.35	\$62.35	\$64.22	\$64.22	\$66.15	\$66.15	\$68.13	\$68.13	\$70.17	\$70.17
8 cu yd containers	\$90.76	\$90.76	\$93.48	\$93.48	\$96.28	\$96.28	\$99.17	\$99.17	\$102.15	\$102.15
30-yd compactor	\$985.00	\$985.00	\$1,014.55	\$1,014.55	\$1,044.99	\$1,044.99	\$1,076.34	\$1,076.34	\$1,108.63	\$1,108.63

These costs shall remain firm for the term of the contract. However, if designation of a particular disposal site by the County solely results in an increase to the Contractor as provided in Section VI, paragraph J of the Invitation for Bids, the per residential unit serviced by the Contractor may be increased or decreased proportionately. In no event shall the County's annual obligation exceed the amounts set forth above.

IN WITNESS WHEREOF, we, the contracting parties, by our duly authorized agents, hereto affix our signature and seals at Macon, Georgia

as of this 15th day of July, 2009 A.D.

COUNTY OF BIBB

REPUBLIC SERVICES OF GEORGIA,
LIMITED PARTNERSHIP d/b/a
SOUTHLAND WASTE SYSTEMS OF GEORGIA-MACON

BY: Samuel F. Hart, Sr.
Samuel F. Hart, Sr., Chairman
Bibb County Board of Commissioners

BY: [Signature]

Attested by:
Shelia Thurmond
Shelia Thurmond, Clerk to the Board

Attested by:
[Signature]

APPENDIX B

LANDFILL CAPACITY ASSURANCE LETTERS



HOUSTON COUNTY COMMISSIONERS

Serving All of Houston County

DIRECT

327 Lower Poplar St.
Macon, Georgia, GA 31201
TEL: 478-546-1000
FAX: 478-546-1001

COMMISSIONERS

COMMISSIONER
Chairman

HOUSTON COUNTY COMMISSIONERS
CALL TO ACTION
TERRY DIETSCH
MURRAY GRIFFIN

March 30, 2015

Mr. Kevin Barkley
Director Solid Waste Department
Macon-Bibb County
327 Lower Poplar St.
Macon, GA 31201

Dear Mr. Barkley:

This letter serves as disposal capacity assurance for solid waste generated by Macon-Bibb County at the Houston County SR 247 Klondike MSW Landfill contingent upon approval of expansion application APL 0762 currently under review by the Georgia Environmental Protection Division.

With approval of expansion application APL 0762, the Houston County SR 247 Klondike MSW Landfill will have an estimated net remaining waste capacity of approximately 40,000,000 cubic yards and an expected life of 140 years. Thus, with this expansion, the Houston County Landfill will have sufficient capacity to handle some or all of the estimated 250,000 to 260,000 tons per year of MSW to be disposed over the next ten years from Macon-Bibb County.

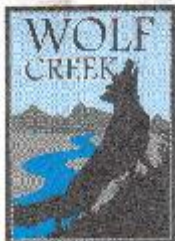
The address for the Houston County Landfill is 2080 Hwy 247 S Mile Marker 2, Kathleen, GA 31047. The Georgia EPD permit number is 076-0200 (SL).

Sincerely,

A handwritten signature in cursive script, reading "Tommy Stalnaker".

Tommy Stalnaker, Chairman
Houston County Board of Commissioners

Cc: Mayor Robert Belcher, Macon-Bibb County
Steve Layson, Asst. County Manager, Macon-Bibb County
Robbie Dunbar, Director of Operations, Houston County
Terry Dietsch, Superintendent, Houston County Solid Waste Disposal
Murray Griffin, Atlantic Coast Consulting, Inc.



November 18, 2014

**Kevin Barkley
Director of Solid Waste Department
Macon Bibb Consolidated Government
478-803-0525**

Kevin Barkley:

This letter serves as a disposal capacity assurance for waste generated by Bibb County. The Georgia EPD permit number for this facility is 143-008D (SL). This assurance is based upon the facility's remaining capacity of 9,375,782 CY and 14.15 years. The Address for this facility is 911 landfill Road, Dry Branch Georgia 31020.

Thus, the wolf creek landfill has more than the required 10 years capacity assurance to receive and properly dispose of the municipal solid waste from Macon/ Bibb County.

We thank Macon Bibb Consolidated for this business partnership and look forward to providing environmentally sound waste disposal options for the foreseeable future.

Sincerely,


**Virginia Villatoro, GM
Wolf Creek Landfill**

February 11, 2015

Kevin Barkley, Director
Macon-Bibb Solid Waste Department
327 Lower Poplar Street
Macon, Georgia 31201

Re: Remaining Capacity
Waste Industries - Taylor County Landfill

Dear Mr. Barkley:

As per your request, please let this letter serve as our statement of remaining capacity at the Taylor County Landfill located at 208 Southern States Road, Mauk, Georgia 31508. The EPD permit number for this facility is 133-003D (SL).

The Taylor County Landfill, owned and operated by Waste Industries, has a remaining capacity of approximately 40 million cubic yards for Municipal Solid Waste with a projected final closure date of October 1, 2080. This facility has more than the required 10 years of capacity assurance for all of the waste generated, collected and delivered for disposal in the Macon-Bibb community. The attached report submitted to Georgia EPD, by our consulting engineer further demonstrates our long term capacity.

If you have any questions or need additional information, please do not hesitate to call.

Sincerely,



Don Collins
Government Contracts Manager

cc: Jeff Browne, P.E.



DATA ENTRY _____

RETURN TO:
REMAINING CAPACITY REPORT
ENVIRONMENTAL PROTECTION DIVISION
LAND PROTECTION BRANCH
4244 INTERNATIONAL PARKWAY, SUITE 104
ATLANTA, GEORGIA 30354
FOR ASSISTANCE CALL: (404) 362-2692

REMAINING CAPACITY REPORT

Permit Holder: Waste Industries USA
Address: 208 Southern States Road; Mauck, Georgia 31508
Telephone No.: 478-862-2504
Site Name: Taylor County Landfill
EPD Permit Number: 133-003D (SL)

		CALCULATED	
I. SURVEY DATA			
A.	Date of topographic survey	<u>March 14, 2014</u>	
B.	Remaining Volume (Available Fill Volume Based on Survey)	<u>45,111,446</u>	cy
C.	Estimated Percent by Volume of Total Used by Cover Soil	<u>10</u>	%
D.	Net Remaining Waste Volume (Line B Reduced by Line C)	→ <u>40,600,301</u>	cy
II. AMOUNT OF SOLID WASTE DISPOSED			
E.	Tons Per Day Received for Disposal	<u>1,743</u>	tons/day
F.	Total Operational Days Per Year	<u>280</u>	days
G.	Total Estimated Annual Tons Disposed	→ <u>487,983</u>	tons
III. WASTE PLACEMENT			
H.	Estimated Waste Compaction Density	<u>1,600</u>	lbs/cy
I.	Estimated Waste Compaction Density	<u>0.80</u>	tons/cy
J.	Net Volume Used Per Day (Line F Divided by Line I)	→ <u>2,178</u>	cy/day
K.	Net Volume Used Per Year (Line G Divided by Line I)	<u>609,979</u>	cy/yr
IV. REMAINING CAPACITY (SITE LIFE)			
L.	Remaining Capacity (Line D Divided by Line J)	<u>18,637</u>	days
M.	Remaining Capacity (Line D Divided by Line K)	<u>66.6</u>	years
N.	Estimated Date of Completion for Facility	→ <u>October 1, 2080</u>	
ADDITIONAL INFORMATION			

I hereby certify the above determinations were performed under my direct supervision.

Registered Professional Engineer
Georgia Registration No. 23707
September 22, 2014
Date

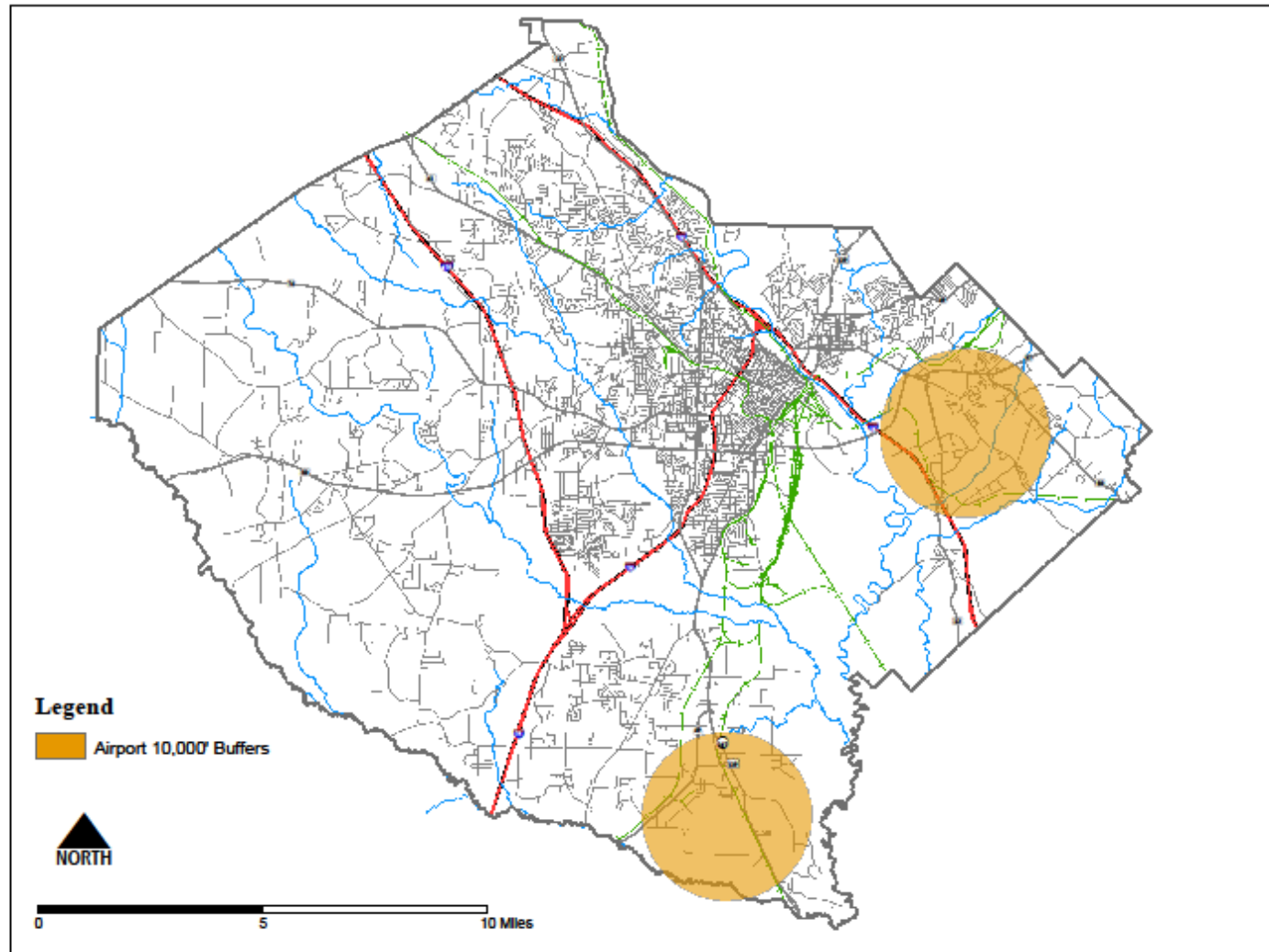


Ray Nelson
Permit Holder
23 Sept 14
Date

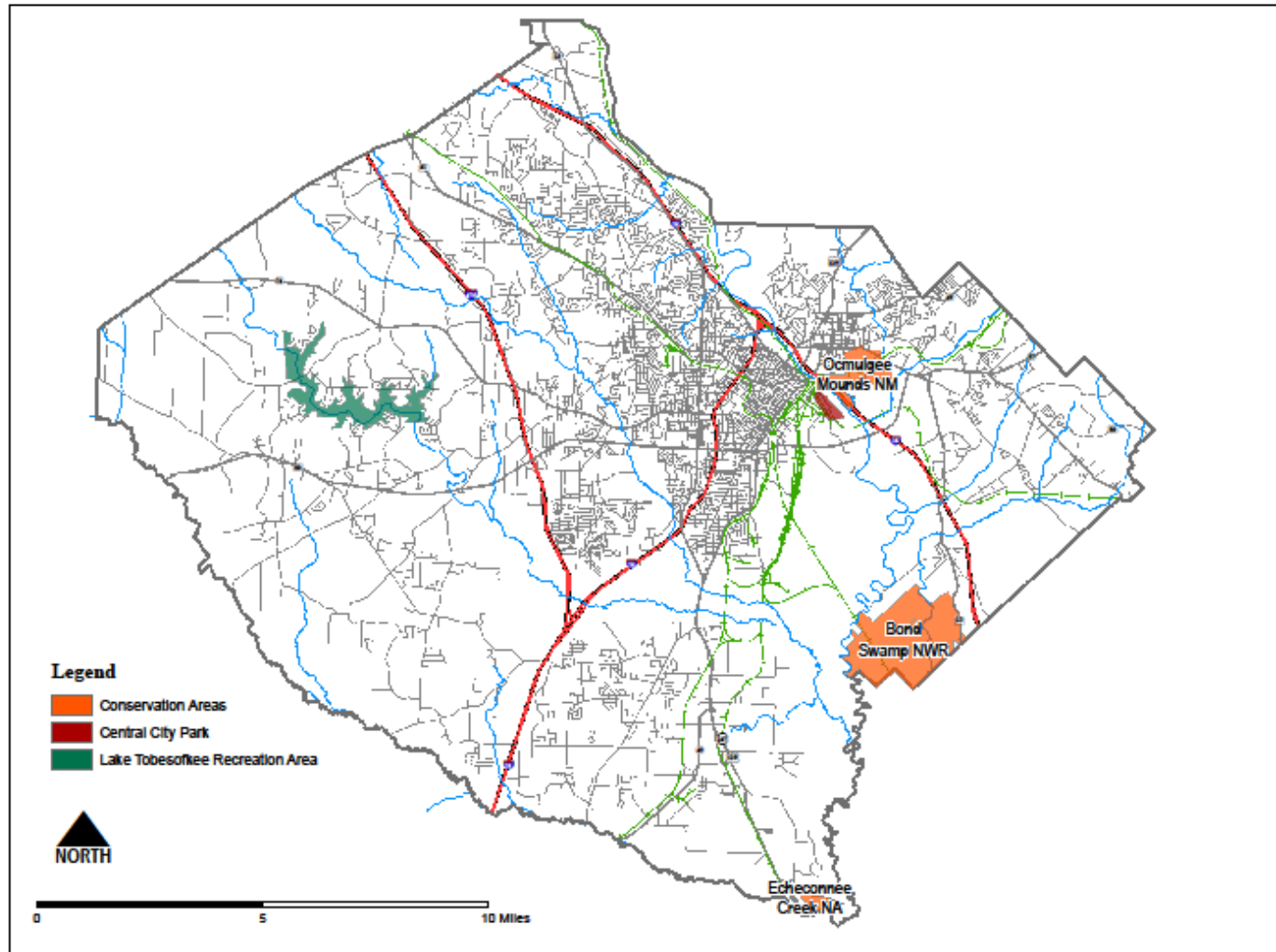
APPENDIX C

LAND LIMITATION MAPS

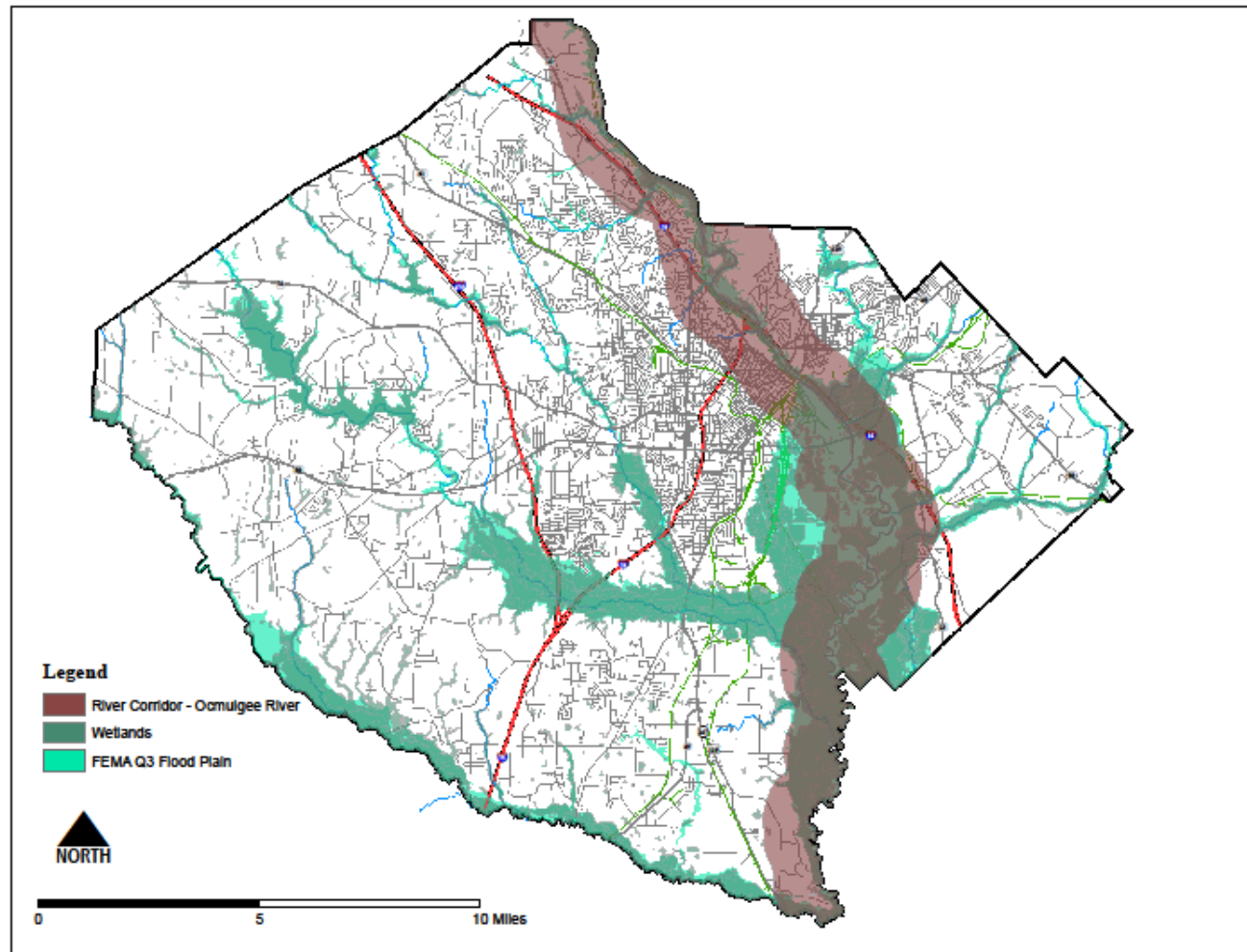
Map 1 – Proximity to Airport Runways



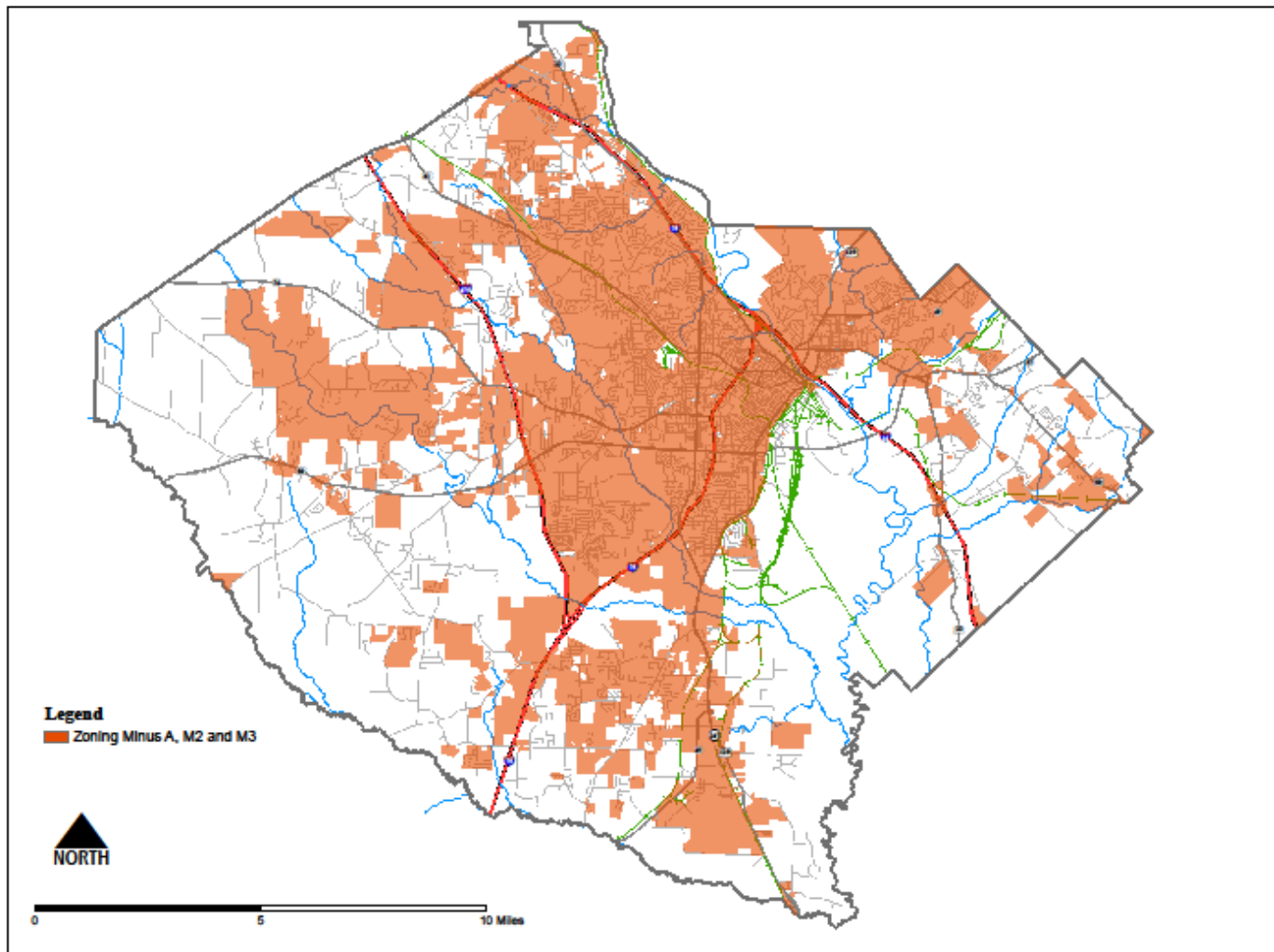
Map 2 – Local, State, and Federal Land



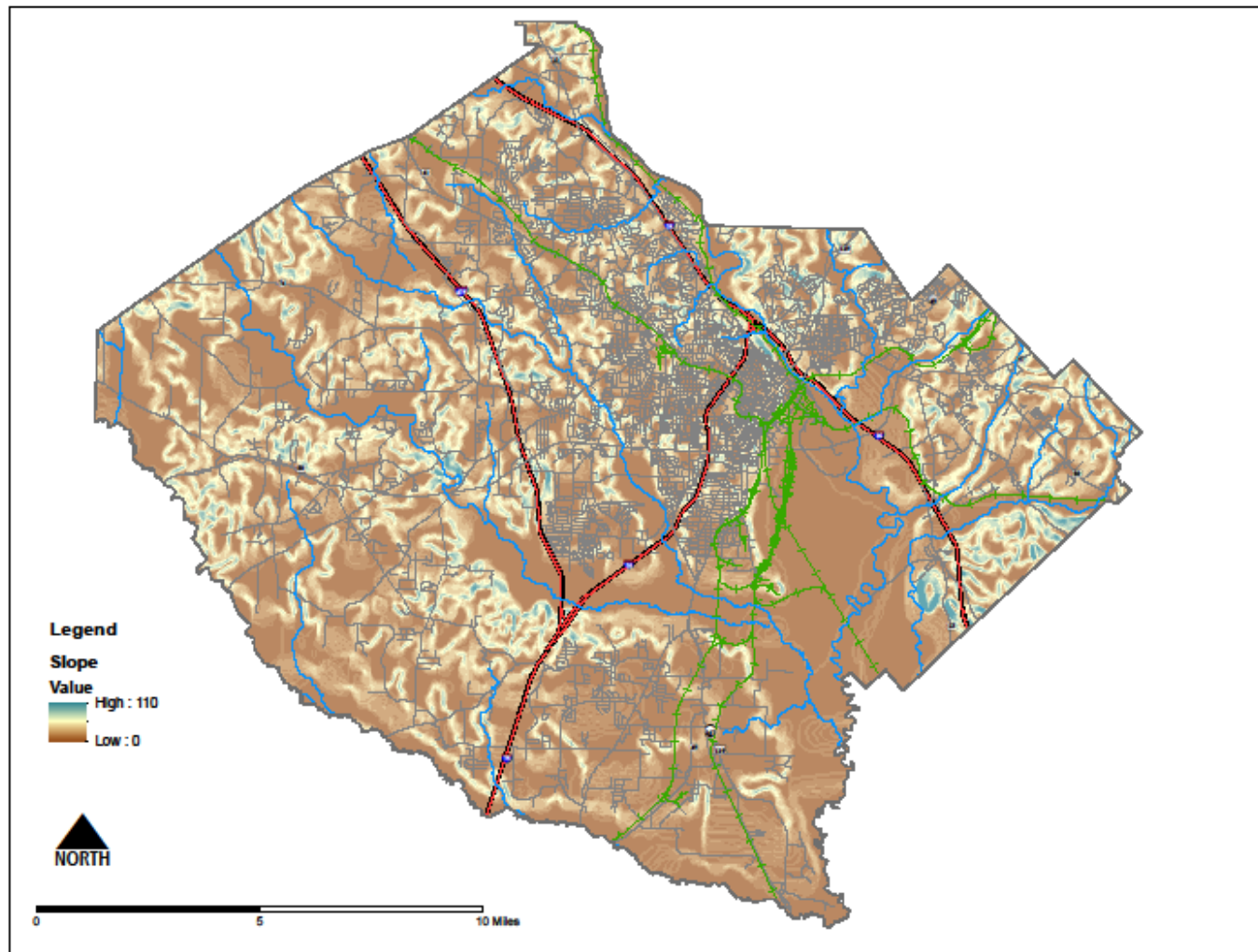
Map 3 – Wetlands, River Corridors, and Floodplains



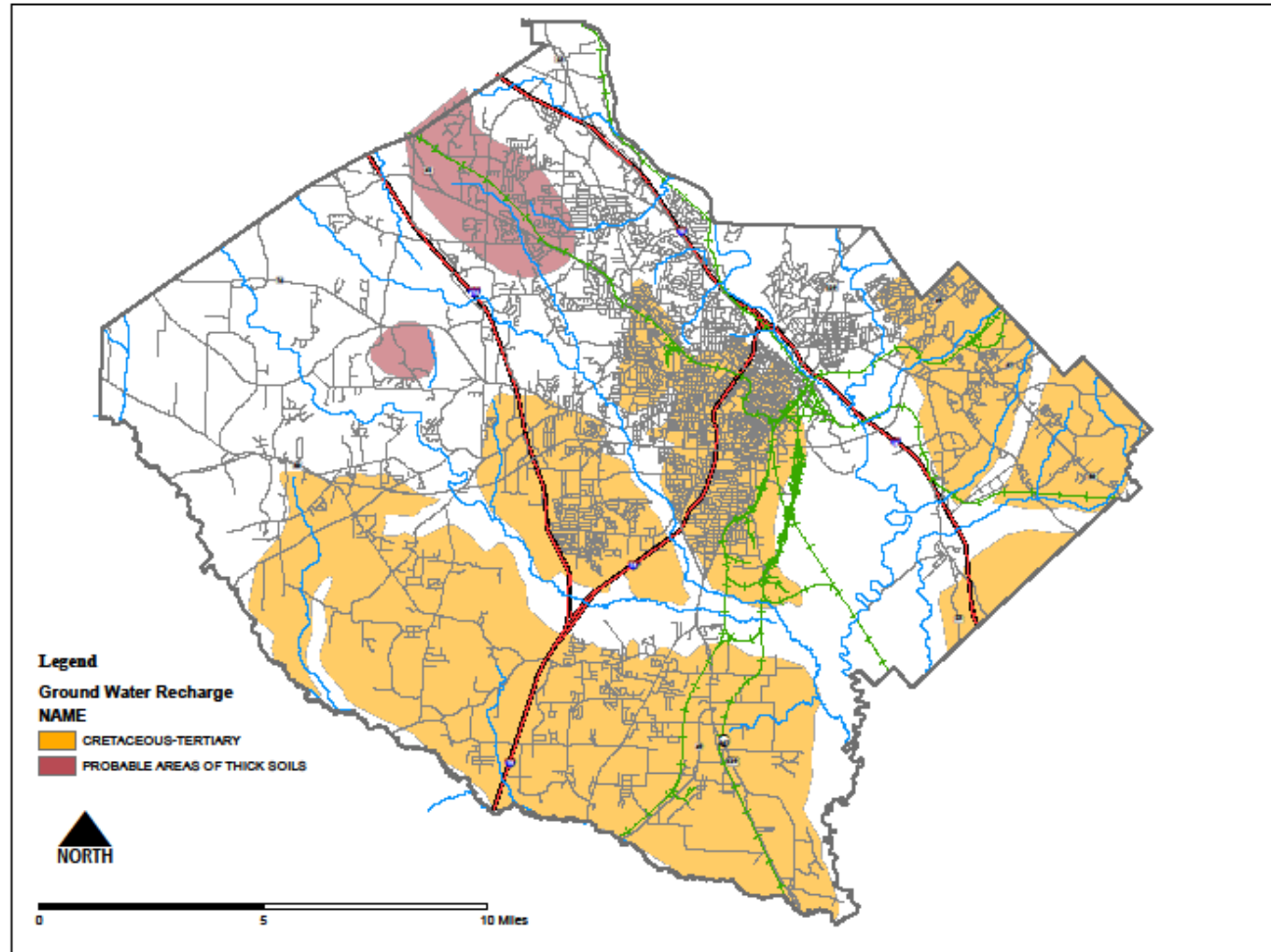
Map 4 –Local Zoning Districts



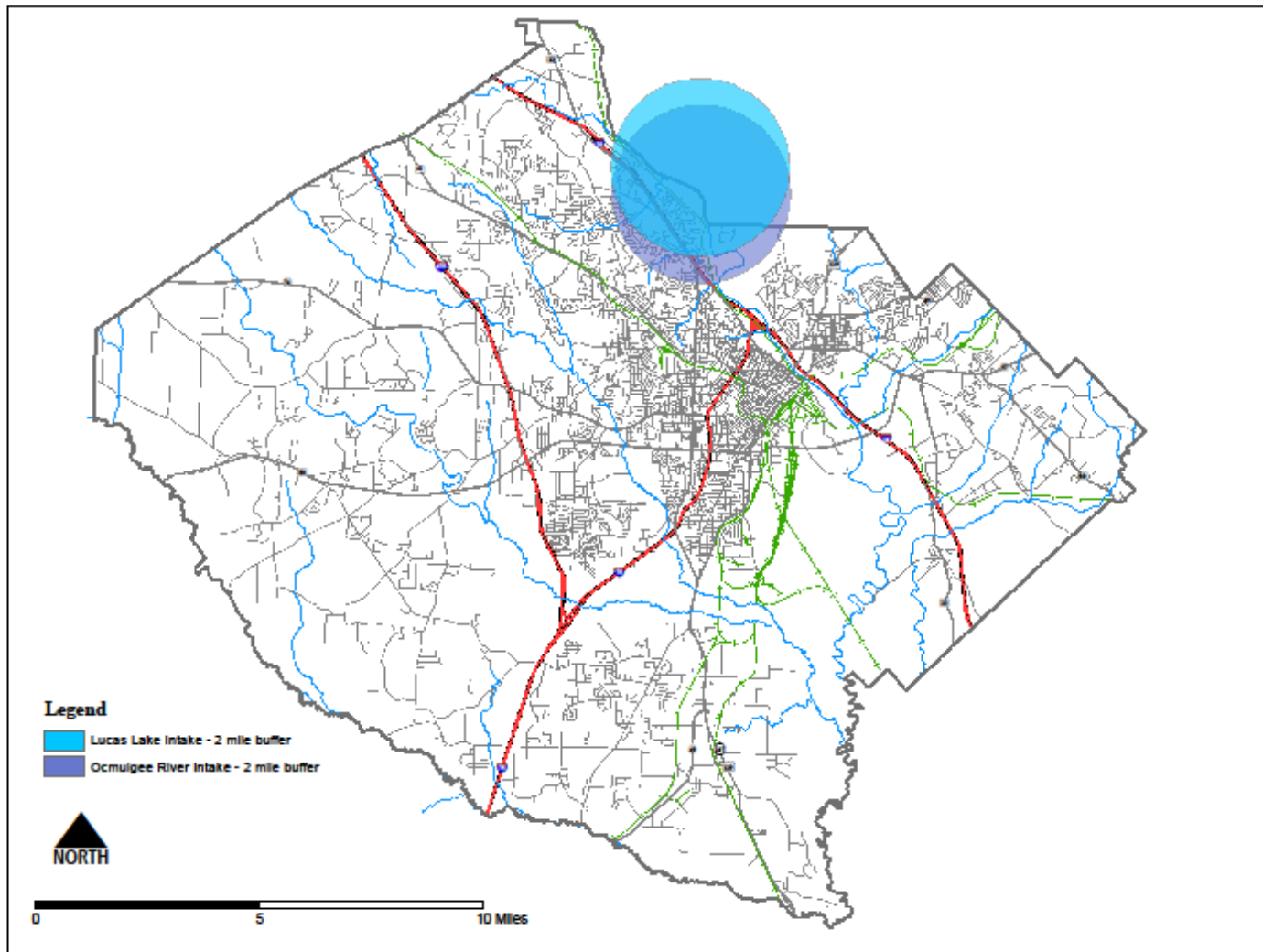
Map 5 –Steep Slopes



Map 6 – Groundwater Recharge Areas



Map 7 – Public Water Supply Sources



APPENDIX D

PROCEDURES TO DEMONSTRATE CONSISTENCY OF PROPOSED SOLID WASTE HANDLING FACILITIES WITH SOLID WASTE AND MATERIALS MANAGEMENT PLAN

These procedures will be followed to determine whether a proposed facility (or proposed expansion of a solid waste handling facility) is consistent with this Solid Waste and Materials Management Plan.

- The County Commission will conduct a public hearing on the consistency of the proposed facility with the Plan within 60 days of receiving a request.
- The public hearing will be advertised with a legal notice in the legal organ no more than 30 days and no less than 15 days prior to the public hearing.
- A sign will be placed on the property identifying the purpose, date, time, and location of the public hearing no less than 45 days prior to the public hearing.
- Affected parties, including the following, will be notified no less than 30 days prior to the public hearing.
 - Local governments contiguous to Macon-Bibb County and any other local governments likely to be affected by the proposed facility;
 - Any local authorities, special districts, or other entities that are likely to be affected by the proposed facility;
 - Middle Georgia Regional Commission and other regional commissions that are likely to be affected by the proposed facility; and
 - State agencies that are likely to be affected by the proposed facility.
- Both the applicant's and the County staff's reports will be available for public inspection no less than 15 days before the public hearing.
- The County will have copies at the hearing of the standards that will be used to make a plan consistency determination and the procedures for conducting the public hearing.
- At the public hearing, the applicant will have 10 minutes to present his/her arguments for plan consistency; others in the audience supporting plan consistency will have 10 minutes in total to present their arguments, those in the audience opposed to plan consistency will have 10 minute total to present their arguments and then the applicant will have 5 minutes for rebuttal.
- After hearing all the arguments for and against plan consistency and taking into consideration the reports from the applicant and from staff, the County Commission will vote either for or against plan consistency. The vote will take place at the next regularly scheduled meeting after the public hearing.
- The applicant will be notified by mail no later than 3 business days after the decision is rendered of the County Commission's decision.
- If the governing body has determined that the proposed facility is consistent with the Solid Waste and Materials Management Plan, the Chief Elected Officer of Macon-Bibb County will send a letter to the Director of EPD notifying him/her of the governing body's decision.

- If the governing body has determined that the proposed facility is not consistent with the Solid Waste and Materials Management Plan then the applicant will have the right to request an appeal of the decision. The request for an appeal must be received in the County Clerk's office not later than 15 days after receiving written notification of the governing body's decision. The request for appeal must state the reason that the appeal should be granted.
- If the request for appeal is not received within the 15-day period, the Chief Elected Officer of Macon-Bibb County will send a letter to the Director of EPD notifying him/her of the governing body's decision.
- The request for appeal will be placed on the agenda of the next regularly scheduled meeting provided this meeting is at least ten days after the date the appeal was filed.
- If the decision is made to deny the appeal, then no further action by the governing body will be required.
- If the decision is made to approve the appeal, then the application will be placed on the agenda for the next regularly scheduled meetings. There will be no public hearing prior to rendering a decision; the County Commission will follow its normal meeting procedures. The County Commission will consider any new information that was not presented at the initial public hearing.
- The decision of the County Commission will be final. There will be no other appeals to the County Commission.
- The Chief Elected Officer of Macon-Bibb County will send a letter to the Director of EPD notifying him/her of the governing body's decision.

If a proposed solid waste handling facility is deemed to be consistent with the Solid Waste and Materials Management Plan, the following steps will be taken to ensure solid waste handling facilities are sited in suitable areas.

- The Macon-Bibb County Planning Commission will determine that the proposed site is in zoning district M-2, M-3, or A, the applicant will certify and the Macon-Bibb County Planning Commission will verify that:
 - The proposed location is not within the area excluded due to its proximity to airport runways.
 - The proposed location is not in a 100-year floodplain, jurisdictional wetland, or river corridor.
 - The proposed location is not in one of the local, state, or federal lands where solid waste handling facilities are excluded.
 - The proposed location is not on steep slopes or shallow rock.
 - If the facility is a landfill and receiving waste from outside Bibb County, the proposed location is not within two miles of a significant groundwater recharge area;

- If the facility is a landfill only serving Bibb County and it is located within two miles of significant groundwater recharge area, the proposed facility will have a liner and leachate collection system.
- The Development of Regional Impact process has been completed by the Middle Georgia Regional Commission and the comments considered.
- If any of the above cannot be certified by the applicant and verified by the Macon-Bibb County Planning and Zoning staff, then the permit application is denied.

For solid waste handling facilities in the M-3 zoning district:

- If the has been certified by the applicant and verified by the Macon-Bibb Planning and Zoning Commission not to be in an unsuitable area as described above; meets all other laws, rules, and regulations of Macon-Bibb County, State, and federal government, including completion of the DRI process; and has received a determination of consistency with the Solid Waste and Materials Management Plan, then the permit is issued.

For solid waste handling facilities in the M-2 or A zoning district where it is considered a conditional use:

- If the facility has been certified by the applicant and verified by the Macon-Bibb Planning and Zoning Commission not to be in an unsuitable area as described above; meets all other laws, rules, and regulations of Macon-Bibb County, State, and federal government; and has received a determination of consistency with the Solid Waste and Materials Management Plan, then the application will be placed on the agenda for review by the Macon-Bibb Planning and Zoning Commission as prescribed by the procedures set forth in the Comprehensive Land Development Resolution.
- The Planning and Zoning Commission will review and make a decision on the merit of the application based on the conditional use standards set forth in the resolution, the DRI review comments and findings, and other testimony presented.
- The applicant has the right to request an appeal of a denied application according to the procedures provided in the Resolution.
- Prior to issuing a conditional use permit for a solid waste handling facility, it must be documented by the applicant that the new facility has complied with all the laws, rules, and regulations of Macon-Bibb County and the State and federal government. In addition, all new solid waste handling facilities must meet the following performance standards and requirements:
 - Located not less than one mile from a residential zoning district, school, recreational area, or place of worship;
 - Maintain a 100-foot heavily vegetative buffer around the perimeter of the property in which no solid waste handling activity will occur;
 - Maintain a minimum four foot “red-page” wire fence and topped with two strands of barbed wire around the perimeter of the property;

- Entrances and exits shall only be through gates monitored by the solid waste handling facility operator;
- Construct and maintain an asphalt or concrete exit roadway from the right-of-way of the state or county highway on which egress from the landfill occurs back to the solid waste handling facility operation. The exit roadway shall be maintained in clean and good condition by the operator;
- Prepare a fire prevention control plan which shall be submitted and approved by the Macon-Bibb County engineer. The fire prevention plan shall demonstrate the procedures and safeguards implemented by the operator for preventing and controlling fires at the solid waste handling facility site;
- Submit an environmental protection plan that will:
 - Prevent scavenging and scattering of any windblown litter and keep the premises in good condition;
 - Prevent contamination in and around the facility site that includes the description and location of monitoring systems;
 - Capture any leachate or runoff from the waste feed areas (and ash storage areas for incineration facilities) and areas in which trucks, equipment, containers, and tools that have come into contact with the waste.
- Submit a site closure plan for the facility that includes:
 - Anticipated date of closure;
 - Estimated cost of closure;
 - Anticipated need for post-closure care;
 - Post-closure costs.
- Submit an emergency safety and security plan that includes:
 - Emergency safety and security procedures that will be in place at the facility;
 - Details on emergency assistance and emergency medical treatment that will be required from the area's medical facilities and fire departments.

Solid waste handling facilities that are owned by Macon-Bibb County or state government are exempt from local zoning procedures. It is recommended, however, that any new solid waste handling facility or expansion of an existing facility owned by Macon-Bibb County required to meet the same requirements and standards as set forth above.

APPENDIX E

KEEP MACON BIBB BEAUTIFUL COMMISSION ACTIVITY REPORT



OUR MISSION

The mission of the Keep Macon-Bibb Beautiful Commission (KMBBC) is to improve the quality of life in the Macon-Bibb County community through increased education, litter-prevention, recycling and beautification.

PURPOSE

The focus of this operations strategy is to convey to the Bibb County Board of Commissioners that the KMBBC is a viable organization that benefits the quality of life in the Macon-Bibb County community and, as such, should continue to receive the funding that has been provided by the Board of Commissioners since 1974.

WHO WE ARE

KMBBC was created by a joint ordinance of the city and county in 1974 and is governed by an appointed Board of Commissioners. The individuals who make up the commission are from the public and private sector in Macon and Bibb County, and are appointed and endorsed by the Bibb County Board of Commissioners and the City Council of Macon. KMBBC is recognized as the model program for the nation's first commission under the Keep America Beautiful, Inc. systems. KMBBC's success led to the creation of the first state Keep America Beautiful system – Keep Georgia Beautiful – in 1978.

KMBBC promotes public interest in the general improvement of the environment by implementing programs for litter control, recycling and beautification. Our focus on environmental education and community involvement programs motivates volunteers to clean-up, beautify, and improve their neighborhoods, creating safer and more livable community environments.

Because the KMBBC was formed by a resolution between Bibb County and the City of Macon in 1974, KMBBC is classified as a 501(c)(1) organization. This status, which identifies KMBBC as a governmental agency, hinders our ability to raise funds from some foundations, individuals, corporate partners and businesses. Contributions to KMBBC are tax-deductible when used for the "public good," however, this is not as familiar to donors as giving to a 501(c)(3) organization. As a result, our ability to become self-sustaining is hindered in both the short and long term.

GOALS & PERFORMANCE MEASUREMENTS

The KMBBC will work to continue the endeavor of increasing participation and awareness of our three major goals – education, recycling, beautification and litter prevention. Our objective is to accomplish these goals while remaining ever mindful of our responsibility to be good stewards of the community's financial assets and goodwill. Our programs and initiatives in each of these areas are outlined below:

EDUCATION: Continue educational efforts in Macon-Bibb County, focusing on student awareness by relating instructional learning goals and Georgia Performance Standards to KMBBC's local initiatives.

PROGRAM / INITIATIVE / EVENT:	FY 2013 07/01/12 - present (measured)	FY 2013 present - 06/30/13 (projected)	FY 2014 07/01/13 - 6/30/14 (projected)
School / Community / Civic Presentations:			
Waste in Place:			
<i>All 2nd grade students in BCPS receive 2 environmental lessons (litter-prevention & recycling)</i>			
Schools Visited:	27	-----	30 (public/private)
Number of Presentations:	54	-----	60
Number of Students:	approx. 2,000	-----	2,150
Number of Volunteers:	9	-----	12
Volunteer Hours (avg. 10 hr. / person):	94	-----	120
Value of Volunteer Hours (\$10.00/hr):	\$940	-----	\$1,200
Material(s) Cost (per student):	\$1.41 (\$=\$2,820)	-----	\$1.45 (\$=\$3,120)
Jack Golden Show (March 19-20, 2013):			
<i>Culminating activity for "Waste in Place" program on litter-prevention & recycling at Porter Auditorium, Wesleyan College</i>			
Number of Presentations:	-----	2	3
Number of Students:	-----	2,000+	2,150
Number of Volunteers:	-----	20	30
Volunteer Hours (avg. 3 hr. / person):	-----	60	90
Value of Volunteer Hours (\$10.00/hr):	-----	\$600	\$900
Recycle-Bowl (October 1 – November 30, 2012):			
<i>Students collect, sort and weigh recyclable poundage; One 5th-grade class – Sonny Carter Elementary</i>			
Number of Presentations:	2	-----	20
Hours of Instruction:	8	-----	80
Number of Students:	25	-----	250
Number of Volunteers (1 child; 1 parent):	50	-----	500
Volunteer Hours (7.5 hr. / person):	375	-----	3,750
Value of Volunteer Hours (\$10.00/hr):	\$3,750	-----	\$37,500
Total Pounds Recycled:	1,605	-----	10,000
Public Relations:			
Media (number of appearances):			
TV – Mix in the Morning – WPGA	4	6	12
TV – Fox Files – WGXA	1	2	4
TV – Eyewitness News – WMAZ	1	1	2
TV – Public Service Announcements	4	5	24
Radio – Mix in the Morning – 100.9 FM	4	6	12
Radio – Public Service Announcements	1	2	12
Print – The Telegraph	6	4	10
Print – Macon Magazine	1	1	2
Print – Public Service Announcements	4	4	10

Macon-Bibb County Solid Waste and Materials Management Plan
2016-2025

EDUCATION (continued):

PROGRAM / INITIATIVE / EVENT:	FY 2013 07/01/12 - present (measured)	FY 2013 present - 06/30/13 (projected)	FY 2014 07/01/13 - 6/30/14 (projected)
Public Relations:			
Social Media:			
Website - http://www.kmbbc.org :		ongoing	5,000 hits
Facebook® - Keep Macon-Bibb Beautiful (09/24/12):	14 Likes	100 Likes	500 Likes
Twitter® - @BeautifulMacon (est. 10/19/10):	63 followers	100 followers	250 followers
Instagram® - @KMBBC (est. 02/09/13):	6 followers	100 followers	250 followers
Promotional Materials:			
Recyclable Bags (2,000 @ \$1.39 + shipping):	-----	-----	\$2,828
Pencils (3,000 @ \$0.15 + shipping):	-----	-----	\$475
Koozies (2,500 @ \$0.22 + shipping)	-----	\$625	\$625
Notepads (150 @ \$0.95 + shipping):	\$150	-----	\$150
Stickers (2,000 @ \$0.19 + shipping):	-----	-----	\$398
TOTAL COST:	\$150	\$625	\$4,476
Brand Recognition Materials:			
Volunteer T-Shirts (250 @ \$6.25 + shipping):	-----	\$1,595	\$2,000
Commissioner Badges (\$10.00 each x 23):	\$230	-----	\$40
TOTAL COST:	\$230	\$1,595	\$2,040

*Fiscal Year 2012 projections and measured data, and Fiscal Year 2013 projections noted in addendum A; due to the conflicts and inaccuracies of this data, it is not included here.

RECYCLING: Reduce solid waste in Macon-Bibb County landfills through recycling programs.

PROGRAM / INITIATIVE / EVENT:	FY 2013 07/01/12 - present (measured)	FY 2013 present - 06/30/13 (projected)	FY 2014 07/01/13 - 6/30/14 (projected)
"Wesleyan Market Recycling Drive-Thru"			
October 13, 2012; recycling partnership with Wesleyan College; recycled electronics, aluminum, paper, plastic, cardboard & glass			
Electronics Recycled (poundage):	7,600	-----	7,800
Aluminum Recycled (poundage):	15	-----	18
Paper/Cardboard Recycled (poundage):	7,260	-----	7,300
Plastic Recycled (poundage):	21	-----	23
Glass Recycled (poundage):	27	-----	30
Volunteers:	37	-----	40
Volunteer Hours (4 hrs. / person):	148	-----	160
Value of Volunteer Hours (\$10.00/hr):	\$1,480	-----	\$1,600
"Bring One For The Chipper"			
January 5, 2013 (December 26 - January 5, 2013); annual Christmas tree recycling program			
Recycled Trees	358	-----	320
Mulch Given Away (poundage):	44,000	-----	40,000
Seedlings Given Away:	350	-----	325
Volunteers:	58	-----	55
Volunteer Hours (7.5 hrs. / person):	435	-----	400
Value of Volunteer Hours (\$10.00/hr):	\$4,350	-----	\$4,000

*Fiscal Year 2012 projections and measured data, and Fiscal Year 2013 projections noted in addendum A; due to the conflicts and inaccuracies of this data, it is not included here.

Macon-Bibb County Solid Waste and Materials Management Plan
2016-2025

GOALS & PERFORMANCE MEASUREMENTS – SUMMARY:

EDUCATION:	
LINE ITEM:	TOTAL:
FY2013 (year-to-date & projected):	
Volunteers:	79
Volunteers Hours:	204
Value of Volunteer Hours: (\$10.00 / hr.)	\$2,040
Expenditures (total – \$3200 YTD + \$1595 projected)	\$4,795
FY2014 (projected):	
Volunteers Needed:	542
Volunteers Hours Needed:	3,960
Value of Volunteer Hours Needed: (\$10.00 / hr.)	\$39,600
Expenditures:	\$9,636

NOTE – FY2013 used educational materials previously purchased; FY2014 includes replacement cost of materials & supplies

RECYCLING:	
LINE ITEM:	TOTAL:
FY2013:	
Total Poundage (biodegradable materials)	51,260
Total Poundage (non-biodegradable materials)	7,663
Total Poundage (year-to-date)	58,923

BEAUTIFICATION / LITTER-PREVENTION:	
LINE ITEM:	TOTAL:
FY2013 (year-to-date & projected):	
Volunteers:	983
Volunteer Hours:	3,546
Value of Volunteer Hours: (\$10.00 / hr.)	\$35,460
Bags of Trash Collected:	953 = 12,389 gal.
Expenditures:	\$7,595
FY2014 (projected):	
Volunteers Needed:	1,092
Volunteer Hours Needed:	3,873
Value of Volunteer Hours Needed: (\$10.00 / hr.)	\$38,730
Expenditures:	\$8,625

YEAR TO YEAR COMPARISON:			
LINE ITEM:	TOTAL – FY2013:	TOTAL – FY2014:	% Increase
Volunteers:	1,062	1,634	65 %
Volunteer Hours:	3,750	7,833	48 %
Value of Volunteer Hours: (\$10.00 / hr.)	\$37,500	\$78,330	48 %