FINAL DRAFT

West Chatham Solid Waste Management Plan

2008 - 2018

Prepared for:

City of Bloomingdale
City of Pooler
City of Port Wentworth

August 2008

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1 INTRODUCTION

In an effort to adhere to the rules and requirement of the Georgia Department of Community Affairs (DCA), Minimum Planning Standards and Procedures for Solid Waste Management, the Cities of Bloomingdale, Pooler and Port Wentworth have elected to complete a multi-jurisdictional Solid Waste Management Plan. This "West Chatham" multi-jurisdictional plan is defined by the city limit boundaries of each participating jurisdiction and is illustrated in Figure 1 below.

The jurisdictions within Chatham County are scheduled to have completed their Comprehensive Plan updates in October 2008. The following Solid Waste Management Plan for the West Chatham area is being completed in conjunction with ongoing planning efforts and covers the years 2008 – 2018. One goal of the West Chatham Plan is to demonstrate each jurisdiction's dedication to the DCA's Quality Community Objectives as it applies to the Intergovernmental Coordination and Regional Solutions criteria. That being said, this plan will ultimately lead to better working relationships between local governments and collaboration with regard to shared objectives.

The Minimum Planning Standards and Procedures have been broken down into five core elements as listed below:

- Waste Reduction
- Collection
- Disposal
- Land Limitation
- Education & Public Involvement

Each element will be assessed for each jurisdiction as well as for the West Chatham planning area as a whole. A waste disposal stream analysis and an implementation plan are also included within the contents of this Plan.

1.1 PERSON(S) RESPONSIBLE FOR THE PLAN

Table 1 shows the persons responsible for the West Chatham Solid Waste Management Plan update:

Table 1. Jurisdiction Contacts Responsible for the Plan

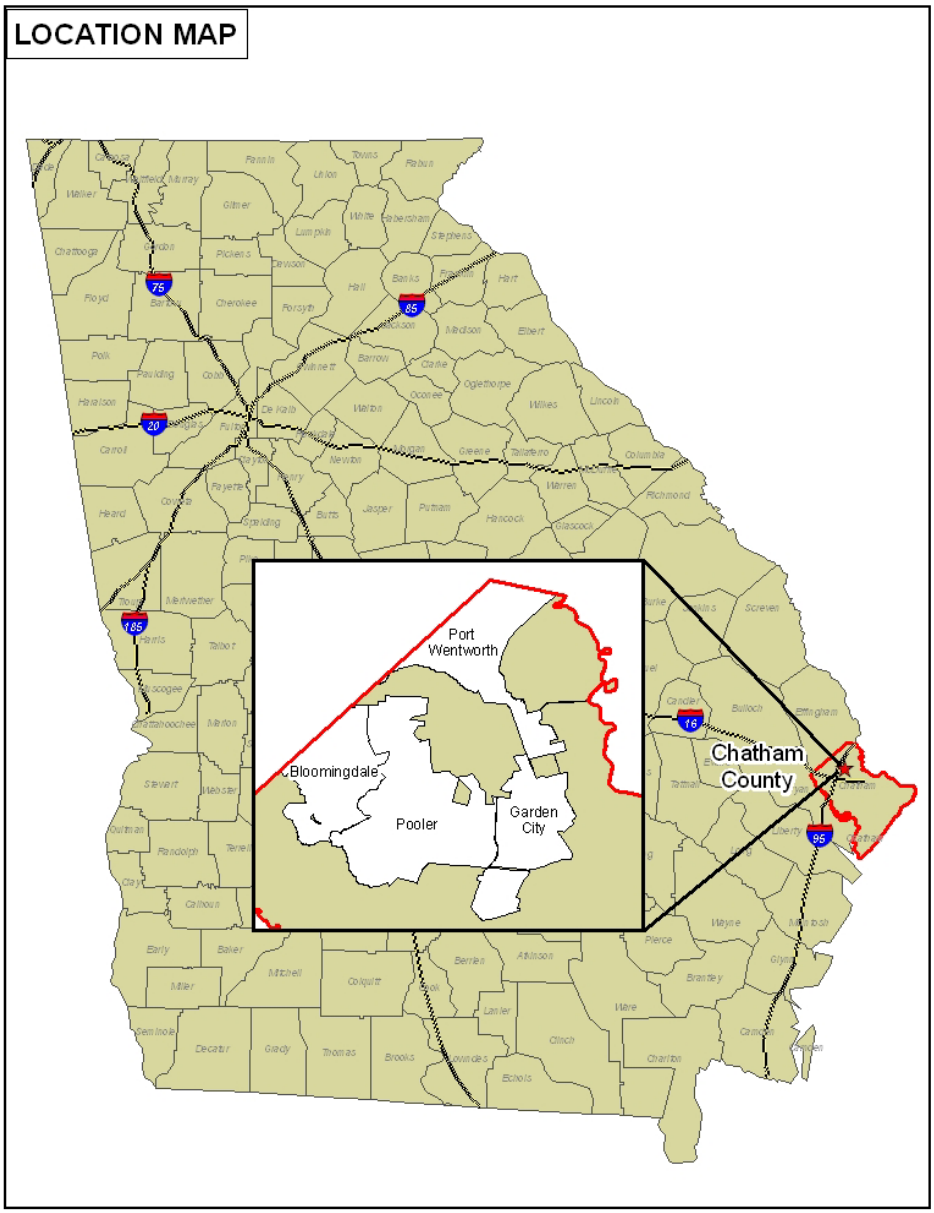
	City of Bloomingdale	City of Pooler	City of Port Wentworth
Contact	Public Works Director	Public Works Director	City Administrator
Address	8 West US Hwy 80	100 SW US Hwy 80	305 South Coastal Hwy
	Bloomingdale, GA 31302	Pooler, GA 31322	Port Wentworth, GA 31407
Phone	912-748-0907	912-748-4800	912-964-4379
Fax	912-748-1005	912-748-6777	912-966-7429

Any questions related to the contents of this plan or to request additional information should be directed to the people listed in the table above.

1.2 PLANNING AREA

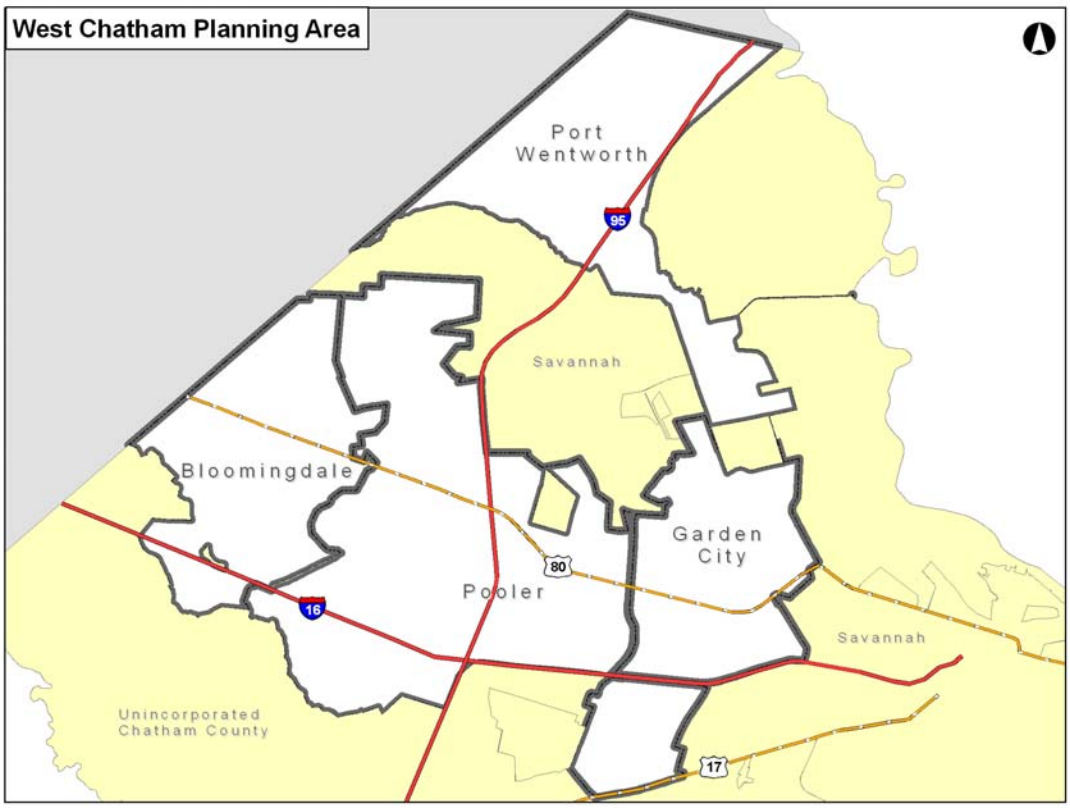
Figure 1 illustrates the location of the West Chatham planning area within the State of Georgia. It lies in the western portion of Chatham County, one of 5 coastal counties on the Atlantic Ocean. The West Chatham planning area is proximate to the Savannah River to the north and, consequently, the State boundary with South Carolina.

Figure 1. Location Map



The West Chatham planning area is illustrated in closer detail in Figure 2.

Figure 2. Planning Area



The West Chatham Solid Waste Management Plan comprises the combined area of the three participating jurisdictions defined as the city limits of each City. It covers an area of roughly 37,619 acres or 59 square miles and consists of three of the nine incorporated areas located in Chatham County. As a result, the West Chatham planning area accounts for approximately 15% of the total land area in the County. Table 2 shows the acreage of each participating City and the percentage each City comprises of the total planning area.

Table 2. Jurisdiction Acres & Percent of Planning Area

Jurisdiction	Acres	Percent of Planning Area
Bloomingdale	8,901	24%
Pooler	18,027	48%
Port Wentworth	10,691	28%
West Chatham	**37,619**	**100%**

1.2 NATURAL RESOURCES

Bloomingdale

The City of Bloomingdale is approximately 14 square miles or 8,896 acres and contains a variety of different natural resources. A significant portion of the City (48%) falls within the FEMA 100-year flood zone. The City also contains approximately 4,800 acres of wetlands, which accounts for roughly 54% of the total area in the City. Streams and other waterways total about 30 miles within the City.

Pooler

The City of Pooler is approximately 28 square miles or 18,048 acres and contains a range of different natural resources. A considerable portion of the City (45%) falls within the FEMA 100-year flood zone. The City also contains approximately 8,000 acres of wetlands, which accounts for roughly 44% of the total area in the City. Streams and other waterways in the City total about 53 miles.

Port Wentworth

The City of Port Wentworth is approximately 17 square miles or 10,691 acres and contains a variety of different natural resources. A significant portion of the City (38%) falls within the FEMA 100-year flood zone. The City also contains approximately 3,500 acres of wetlands, which accounts for roughly 33% of the total area in the City. The City is adjacent to the Savannah River, with streams and other waterways that total about 57 miles within the City.

West Chatham

The West Chatham planning area lies within the 11-county purview of the Georgia Costal Management Program and as a result benefits from the many programs administered by the Georgia Coastal Resources Division. Many environmental features found within this area are unique to the coast. Table 3 summarizes the natural resources features found in each city.

Table 3. Natural Resources Summary

Jurisdiction	Square Miles	Total Acres	100-Year Floodplain (Acres)	100-Year Floodplain (% of Total)	Wetlands (Acres)	Wetlands (% of Total)	Streams & Waterways (River Miles)
Bloomingdale	14	8,896	4,270	48%	4,800	54%	30
Pooler	28	18,048	8,122	45%	8,000	44%	53
Port Wentworth	17	10,691	4,063	38%	3,500	33%	57
West Chatham Planning Area	**59**	**37,635**	**16,455**	**44%**	**16,300**	**43%**	**140**

The presence of these topographic and natural resource features in high percentages relative to total area is uniquely characteristic of Georgia Coastal communities. Note that there is overlap between the areas characterized as 100-year floodplain and wetlands. It would be misleading to consider that the area or percentages of these features are distinct. These natural resource

features, however, may affect solid waste management by limiting the area suitable for potentially siting solid waste facilities. Figure 4 in the Land Limitation Element illustrates the natural resources within the West Chatham planning area and discusses these and other limiting factors.

1.3 POPULATION

Population in the West Chatham planning area has rapidly grown in recent years and is a driving factor behind many of the issues and policies outlined in this plan. Since 1990, population has increased at an accelerated rate in the West Chatham planning area, a trend that is expected to continue throughout the planning period.

The West Chatham planning area is becoming a focal point for new development and an affordable alternative to living within the City limits of Savannah. Table 4 compares growth trends for the jurisdictions within the West Chatham planning area to illustrate its rapid growth rate. The 2005 numbers for Port Wentworth was obtained from the City's Comprehensive Plan (due to be adopted in October 2008). The numbers for Bloomingdale and Pooler were taken from the Savannah-Chatham County Metropolitan Planning Commission's Comprehensive Plan, adopted in the fall of 2006.

Table 4. Population Comparisons

Jurisdiction	1980	1990	2000	2005	Increase 1980 - 1990	Increase 1990 - 2000	Increase 2000 - 2005
Bloomingdale	1,855	2,271	2,665	3,328	22.4%	17.3%	24.9%
Pooler	2,543	4,453	6,239	10,312	75.1%	40.1%	65.3%
Port Wentworth**	3,947	4,012	3,276	3,657	1.6%	-18.3%	11.6%
West Chatham Planning Area	**8,345**	**10,736**	**12,180**	**17,297**	**28.7%**	**13.5%**	**42.0%**

Source: Department of Community Affairs (DCA), US Census Bureau
* City of Port Wentworth Comprehensive Plan

Table 5 shows population projections for the planning jurisdictions over the planning period of the West Chatham Solid Waste Management Plan. To calculate population projections, the accurate 2005 population numbers in Table 4 were used as the basis. The 2008 population projections were calculated by taking the number of Certificates of Occupancy (COs) issued in 2006 and 2007 and multiplying that number by the average household size for each City. That number was added to the 2005 population figures as the starting point for the projections that were, likewise, annually extended to 2018.

Table 5. Population Projections

Year	Pooler	Bloomingdale	Port Wentworth	West Chatham Planning Area
2008	13,210	3,690	4,867	**21,767**
2009	14,531	3,801	5,354	**23,686**
2010	15,984	3,910	5,890	**25,784**
2011	17,263	4,008	6,066	**27,337**

2012	18,471	4,108	6,248	**28,827**
2013	19,025	4,211	6,436	**29,672**
2014	19,406	4,316	6,629	**30,351**
2015	19,794	4,424	6,828	**31,045**
2016	20,190	4,534	7,033	**31,757**
2017	20,594	4,648	7,244	**32,485**
2018	21,006	4,764	7,461	**33,230**

Accelerated population growth is an issue for all Cities within the planning area and the projected 52% total growth in the West Chatham planning area will be significant over the 10-year planning period report (2008 to 2018). Based on current and planned developments, the Cities of Port Wentworth and Pooler are expected to experience the most dramatic growth in population.

1.4 SEASONAL POPULATION VARIATION

The St. Patrick's Day parade in Savannah is the City's largest celebration and one of the largest St. Patrick's Day events in the United States. The event draws roughly 400,000 visitors each year to the Savannah area. While the St. Patrick's Day event takes place in downtown Savannah, the large draw of visitors does have a slight effect on the West Chatham planning area. Hotels in the West Chatham planning area are generally full for the St. Patrick's Day celebration.

The seasonal tourism industry also has the potential for a population increase in the West Chatham planning area.

1.5 NUMBER OF HOUSEHOLDS

According to the U.S. Census, there were 8,512 households in West Chatham planning area in the year 2000. The number of households increased11.6% from 2000 to 2005. Table 6 compares the number of households in each plan jurisdiction, and the number in the planning area with Chatham County as a whole, from 2000 to2005. The rate of increase in the West Chatham planning area (11.6%) is more than double that of the entire county (5.2%) illustrating the concentrated growth pressures in the West Chatham planning area as compared to Chatham County as a whole.

Table 6. Number of Households

Jurisdiction	2000	2005	Percent Change
Bloomingdale	1,001	1,101	10.0%
Pooler	2,245	2,603	15.9%
Port Wentworth	1,285	1,438	11.9%
West Chatham Planning Area	**4,531**	**5,142**	**13.5%**
Chatham County	89,865	94,501	5.2%

Source: Department of Community Affairs (DCA), US Census Bureau, City Comprehensive Plans

1.6 ECONOMIC ACTIVITY

Table 7 provides a classification of employment in the West Chatham planning area by type of industry. The percentage is calculated by the number of people employed by a particular industry versus the total civilian employed population. As the table demonstrates, the economy that makes up the West Chatham planning area, as determined through the 2000 Census, is not dependant on any particular industry type and would therefore be less subject to economic downturns in a single industry. The major employers in the West Chatham planning area include: manufacturing; retail trade; education, health and social services; and construction. These industries collectively account for over half (56%) of the employed civilian population.

Table 7. Types of Industries

	2000				
	Bloomingdale	Pooler	Port Wentworth	**West Chatham Planning Area**	**Percent of West Chatham Planning Area**
Total Employed Civilian Population	1,401	3,088	1,556	6,045	
Agriculture, Forestry, Fishing, Hunting & Mining	11	5	7	23	0.4%
Construction	197	346	118	661	10.9%
Manufacturing	265	637	357	1,259	20.8%
Wholesale Trade	57	137	20	214	3.5%
Retail Trade	206	457	218	881	14.6%
Transportation, Warehousing & Utilities	167	241	171	579	9.6%
Information	18	55	18	91	1.5%
Finance, Insurance & Real Estate	56	109	59	224	3.7%
Professional, Scientific, Management, Administrative & And Waste Management Services	68	182	134	384	6.4%
Educational, Health & Social Services	157	435	238	830	13.7%
Arts, Entertainment, Recreation, Accommodation & Food Services	72	167	52	291	4.8%
Other Services	75	120	61	256	4.2%
Public Administration	52	197	103	352	5.8%

Source: Department of Community Affairs (DCA), US Census Bureau, City Comprehensive Plan

1.7 PUBLIC INVOLVEMENT DURING THE PLANNING PROCESS

The West Chatham planning area jurisdictions held an introductory meeting at the beginning of the planning process in April 2008 to introduce the Plan, field questions about the process and solicit community input. In addition, each city held two public hearings, for a total of 6 hearings in the West Chatham planning area. The first rounds of public hearings were held in June 2008 where the findings of the draft plan were presented to each City Council and the public and comments were solicited.

Comments centered on two primary areas of interest. First, citizens were concerned about the siting of future landfill facilities in the planning area. Secondly, citizens and elected officials expressed interest in increased recycling opportunities with the accompanying concern of impacts to utility bills. The single most frequent comment received was a request for information on a menu of potential recycling services, drop-off to curbside collection, and costs.

The final public hearings were held in August 2008 to ask the City Councils to adopt a resolution authorizing the submittal of the draft plan. In addition, the Cities used a number of other avenues to inform residents about the Plan throughout the process.

- Website. Each City's website contains a page dedicated to the Solid Waste Management Plan. The page was updated on a regular basis and contains the draft plan and corresponding maps.
- Handouts. Each City also produced a handout (available at City Hall) that provided general information about the Solid Waste Management Plan. The handout was also available at the public meetings.
- Advertising. Advertising for the public meetings was done in accordance with the City's policy for public meetings. Meeting agendas were made available to the public at least one week prior to the meetings.
- Press Release. An article about the West Chatham Solid Waste Management Plan was published in a local publication named "*The Spirit*." The article described the planning requirements for Solid Waste Management Plans and discussed how the jurisdictions were working together on the West Chatham plan.

A sample of public education materials, article from *The Spirit*, and the agendas for each public hearing is included in Appendix A.

2 WASTE DISPOSAL STREAM ANALYSIS

2.1 AMOUNT OF WASTE DISPOSED

Table 8 estimates the total amount of waste disposed by sector for the West Chatham planning area and the participating jurisdictions.

The methodology used to generate the total tonnage of waste for both Municipal Solid Waste (MSW) and Construction and Demolition (C&D) landfills is based on the numbers used in the Georgia Statewide Solid Waste Management Plan for 2005. The statewide tonnage from this plan was used to determine the percent by sector. This number was then applied to the four jurisdictions that comprise the West Chatham planning area on a per capita basis.

Table 8. Waste Disposed by Sector (Tons Per Year), 2005

	Sector	Tons to MSW Landfill		Tons to C&D Landfill	Total Tons	
West Chatham	Residential	12,721	39.3%		12,721	29%
	Commercial	8,836	27.3%		8,836	20%
	Industrial	4,532	14.0%		4,532	10%
	C&D	3,981	12.3%	11,347	15,328	35%
	Sludge & Biosolids	2,298	7.1%		2298	5%
	Total	**32,368**	**100.0%**		**43,715**	**100%**
Bloomingdale	Residential	1,525	39.3%		1,525	29%
	Commercial	1,060	27.3%		1,060	20%
	Industrial	543	14.0%		543	10%
	C&D	477	12.3%	1,360	1,837	35%
	Sludge & Biosolids	276	7.1%		276	5%
	Total	**3,881**	**100.0%**		**5,241**	**100%**
Pooler	Residential	4,726	39.3%		4,726	29%
	Commercial	3,283	27.3%		3,283	20%
	Industrial	1,684	14.0%		1,684	10%
	C&D	1,479	12.3%	4,216	5,695	35%
	Sludge & Biosolids	854	7.1%		854	5%
	Total	**12,026**	**100.0%**		**16,242**	**100%**
Port Wentworth	Residential	1,676	39.3%		1,676	29%
	Commercial	1,164	27.3%		1,164	20%
	Industrial	597	14.0%		597	10%
	C&D	525	12.3%	1,495	2,020	35%
	Sludge & Biosolids	303	7.1%		303	5%
	Total	**4,265**	**100.0%**		**5,760**	**100%**

Source: Georgia Statewide Solid Waste Management Plan, 2005

Using these calculations, it is estimated that approximately 40% of the waste delivered to MSW landfills is generated by the residential sector of the West Chatham planning area. The second largest waste contribution to MSW landfills is the West Chatham planning area commercial sector, which accounts for roughly 27% of the total. Industrial, C&D, and Sludge and Biosolids account for approximately 14%, 12%, and 7%, respectively. The methodology used to generate the total tonnage delivered to MSW and C&D landfills is discussed in greater detail below.

2.2 WASTE CHARACTERIZATION

The Georgia Statewide Waste Characterization Study conducted by R.W. Beck for the DCA in 2005 projects the type of material disposed in MSW landfills by percentage for the area covered by Coastal Georgia Regional Development Center (CGRDC), which includes the West Chatham planning area. The percentages developed in the Statewide Waste Characterization Study for the CGRDC were applied to the West Chatham planning area's 2005 waste disposal tonnage to determine the estimated tons of each type of material likely to be disposed at MSW landfills from the West Chatham planning area. Table 9 shows the results of this waste composition characterization.

Table 9. Waste Composition Characterization of MSW Disposed

Material	Average Percentage	Tons 2005 West Chatham Planning Area	Bloomingdale	Pooler	Port Wentworth
Paper	39.0%	7,866.82	1,513.60	4,689.98	1,663.23
Plastic	15.9%	3,207.24	617.08	1,912.07	678.09
Glass	3.5%	706.00	135.84	420.90	149.26
Metal	4.3%	867.37	166.88	517.10	183.38
Organics	28.2%	5,688.31	1,094.45	3,391.22	1,202.65
C&D	6.5%	1,311.14	252.27	781.66	277.21
Inorganics	2.6%	524.45	100.91	312.67	110.88
TOTAL	**100.0%**	20,171.33	**3,881.03**	**12,025.60**	**4,264.70**

Source: Statewide Waste Characterization Study, 2005

This analysis begins to illustrate specific opportunities to target recycling programs for MSW disposal reductions. For instance, paper comprises almost 40% of the waste stream, while plastics represent nearly 16%. Both are commonly recyclable materials that if diverted could reduce the MSW waste stream in half, by 50% combined. Organics represent another large percent of the MSW waste stream, nearly 30%, which can be diverted through composting initiatives.

2.3 UNIQUE CONDITIONS AND/OR SEASONAL VARIATIONS

The months during spring and summer typically result in an increase in yard trimmings and leaves that are disposed in local landfills. In an effort to address this issue, all jurisdictions within the planning area conduct some type of yard waste collection.

2.4 WASTE GENERATING DISASTER

A major disaster has the potential to result in a significant increase in the amount of annual waste disposed. However, it is difficult to project the additional amount of waste that would be generated should such a disaster occur. The types of disasters most likely to occur within the West Chatham planning area are hurricanes, tornados, and major rain events. The procedures for collection and disposal of waste resulting from these types of disasters are addressed in the Collection Element and Disposal Element, respectively.

2.5 DISPOSAL RATE

Table 10 presents the estimated disposal rates for the West Chatham planning area, the four jurisdictions and the State of Georgia as a whole. The West Chatham planning jurisdiction calculated disposal rates based on statewide trends. These disposal rates are offered in ton per year and per capita figures.

The per capita disposal rate for Georgia of 6.39 pounds per day per person was calculated in the Georgia Solid Waste Management Plan, adopted 2006. The adjusted annual tonnage of waste in the state was multiplied by 2000 to convert the tonnage to pounds. The resulting number was then divided by the statewide population and then by 365 to determine the per capita (pounds per day per person) number. Lacking a better accounting for local disposal patterns , the West Chatham planning area has elected to use this per capita disposal rate (6.39 lbs per day) as the basis of calculating the MSW disposal rates and the waste disposal projections.

Table 10. MSW Disposal Rates

Jurisdiction	Tons Per Year	Population	Per Capita (pounds per day)
State of Georgia	10,282,942	8,817,666	6.39
West Chatham Planning Area	20,171	17,297	**6.39**
Bloomingdale	3,881	3,328	6.39
Pooler	12,026	10,312	6.39
Port Wentworth	4,265	3,657	6.39

Source: Georgia Statewide Solid Waste Management Plan, 2005

Using the 6.39 per capita disposal rate and the plan jurisdictions' 2005 population numbers from Table 3, the annual disposal tonnages were calculated. Annual disposal tonnages for the West Chatham planning area and the plan jurisdictions were calculated by multiplying the per capita disposal rate (6.39) by 365 to determine pounds per person per year. These numbers were multiplied by the 2005 population figures and then divided by 2000 to convert pounds to tons.

The Cities believe the statewide per capita number is consistent with the regional trends and is a good number to use for the basis of the waste projections in this report. It is difficult to determine an exact annual disposal tonnage for the West Chatham planning area because waste collection in each City is different. For instance, collection services in Pooler are contracted to Waste Management. Collection in Bloomingdale is conducted by Republic, and Port Wentworth conducts the collection themselves. When dealing with contracted haulers, loads are generally

not differentiated based on jurisdictional boundaries. In many cases, disposal loads contain waste from more than one jurisdiction. As a result, the jurisdictions in West Chatham opted to use the statewide estimate as the base annual disposal rate for the purposes of this report.

The same methodology discussed above was used to determine the disposal rate at C&D landfills, presented in Table 11. Based on this methodology, an average of 2.24 pounds per person per day of waste is disposed at C&D landfills in the planning area.

Table 11. C&D Disposal Rates

Area	Tons Per Year	Population	Per Capita (pounds per day)
Total Tonnage in Georgia	3,604,049.00	8,817,666	2.24
West Chatham Planning Area	7,071	17,297	**2.24**
Bloomingdale	1,360	3,328	2.24
Pooler	4,216	10,312	2.24
Port Wentworth	1,495	3,657	2.24

Source: Georgia Statewide Solid Waste Management Plan, 2005

It is possible that a higher C&D disposal rate exists in the West Chatham planning area because recent growth trends suggest a significant amount of development. However, the statewide average will be accepted because no accurate datasets are available to indicate a higher per capita rate.

2.6 WASTE DISPOSAL PROJECTIONS WITH PER CAPITA REDUCTIONS

The jurisdictions within the West Chatham planning area have established a waste disposal reduction goal of 10% over the next ten years. The focus of reduction efforts during the planning period will be recycling.

Table 12 shows the MSW disposal projections with per capita reductions for the planning period, 2008-2018. The estimated 6.39 per capita MSW disposal rate was used to project the total tonnage of waste to be disposed over the 10-year planning period. It was multiplied by the 2008 population projections from Table 4 to establish the 2008 projected MSW disposal tons as the base year for each planning jurisdiction and the West Chatham planning area.

The jurisdictions in the planning area intend to achieve the 10% waste disposal reduction goal by reducing total waste disposed per capita by 1% per year, which equates to 0.064 pounds per person per day. This per capita reduction calculation was applied to the annual disposal tonnages and rates.

Table 12. MSW Disposal Projections With Per Capita Reductions

	p o sa – R	Pooler	Bloomingdale	Port Wentworth	West Chatham

		Population	Projected Tonnage	Population	Projected Tonnage	Population	Projected Tonnage	Population	Projected Tonnage
2008	6.39	13,210	15,405	3,690	4,303	4,867	5,676	**21,767**	**25,385**
2009	6.33	14,531	16,776	3,801	4,388	5,354	6,182	**23,686**	**27,346**
2010	6.26	15,984	18,269	3,910	4,469	5,890	6,732	**25,784**	**29,470**
2011	6.20	17,263	19,534	4,008	4,535	6,066	6,864	**27,337**	**30,933**
2012	6.14	18,471	20,692	4,108	4,602	6,248	7,000	**28,827**	**32,293**
2013	6.08	19,025	21,100	4,211	4,670	6,436	7,137	**29,672**	**32,907**
2014	6.02	19,406	21,306	4,316	4,739	6,629	7,278	**30,351**	**33,323**
2015	5.96	19,794	21,515	4,424	4,808	6,828	7,421	**31,045**	**33,745**
2016	5.90	20,190	21,726	4,534	4,879	7,033	7,568	**31,757**	**34,173**
2017	5.84	20,594	21,939	4,648	4,951	7,244	7,717	**32,485**	**34,607**
2018	5.78	21,006	22,154	4,764	5,024	7,461	7,869	**33,230**	**35,047**
TOTAL			**220,416**		**51,369**		**77,443**		**349,228**

Source: Census Bureau & City Datasets

It is estimated that 349,228 tons of waste from the West Chatham planning area will be disposed in MSW landfills over the next ten years and that, if the reduction goal is reached, the per capita disposal rate will drop to 5.78 pounds per day by 2018.

3 WASTE REDUCTION ELEMENT

3.1 INVENTORY OF WASTE REDUCTION PROGRAMS

This section provides an inventory of all current waste reduction programs, both public and private, in the West Chatham planning area and immediate surroundings. The inventory is followed by an assessment of the effectiveness of these programs to achieve waste disposal reduction. The final section presents the waste disposal reduction goal and identifies strategies needed to meet that goal.

Source Reduction Programs

Source reduction refers to the actions and programs that reduce the generation of waste. All Cities in the West Chatham planning area encourage source reduction through various educational programs targeting residents.

Bloomingdale

The City of Bloomingdale produces a quarterly newsletter that encourages residents to reduce waste and recycle. The City also has informational handouts to residents and produces a packet of information that is given to new City residents that discusses source reduction as well as other programs the City offers in terms of recycling and disposal.

Pooler

The City of Pooler encourages source reduction through education in elementary schools. Information is also posted to the City's website, included in newsletters, and available at City Hall. The City also discusses source reduction and what the City is doing to reduce waste at City Council Meetings.

Port Wentworth

The City of Port Wentworth encourages source reduction by producing informational handouts to residents. In addition, the City produces a newsletter, posts information to the City's website, includes source reduction information on utility bill inserts, and uses door hangers as a means to educate the public. The City's Comprehensive Plan is also promoting adaptive reuse of vacant buildings and infill development versus demolition and new development.

Recycling Programs & Facilities

There are a number of publicly and privately owned/operated facilities in the county that accept recyclables. These facilities, available to all residents in the county, are listed in Table 13. The facilities are also illustrated on Figure 3, which can be found in the Disposal Element. There are no curbside recyclable collection services offered in the West Chatham planning area.

Table 13. Recycling Facilities / Drop Off Sites

Facility Name	Type	Address	Materials Accepted
Pooler Recycling Center	Drop-off Facility	1095 S. Rogers Street	Newspaper, Aluminum, Plastic, Office Paper, Glass, Cardboard
Southeast Paper Recycling Company	Drop-off Facility	10 Hoss Street	Newspaper, Office Paper, Cardboard
Hunter Army Airfield	Drop-off Facility	1412 Blanton Street	Newspaper, Aluminum, Plastic, Office Paper, Glass, Cardboard
Southern Paper Recover, Inc.	Drop-off Facility	1926 West Gwinnett Street	Newspaper, Aluminum, Plastic, Office Paper, Glass, Cardboard
Wilmington Island Landfill	Drop-off Facility	6900 Concord Road	Newspaper, Aluminum, Glass, Cardboard
Savannah Processing, Inc.	Drop-off Facility	190 Gulf Stream Road	Aluminum
FortJen Recycling	Drop-off Facility	102 North Gamble Street	Aluminum
Jarrell's Iron and Metal	Drop-off Facility	400 Magazine Road	Aluminum
Savannah Metal Recycling	Drop-off Facility	4520 Tremont Road	Aluminum
City Lot	Drop-off Site	Sallie Mood / Eisenhower	Newspaper
Charvins Market	Drop-off Site	2002 Waters Avenue	Newspaper
Lake Mayer	Drop-off Site	Sallie Mood / Montgomery Crossing Road	Newspaper

Bloomingdale

Currently, the City of Bloomingdale offers a number of different options for recycling to City residents. There is a drop-off location across the street from City Hall that accepts aluminum and newspaper. A bin is also located at the school, which recycles newspapers dropped off by City residents. The City has an office paper recycling program for all public buildings where office paper is picked up by a shredding company. There are also drop-off locations and other recycling facilities in Chatham County available to residents of Bloomingdale.

Pooler

The City of Pooler has a recycling facility available to residents. The Pooler Recycling Center is located at 1095 South Rogers Street and accepts plastics, glass, paper, cardboard, metal, yard trimmings, white goods, etc. There is also a bin located at the Fire Department, at which aluminum is collected and recycled for charity.

Port Wentworth

The City of Port Wentworth does not offer any type of formal recycling service to residents or businesses in the community. However, there are a number of drop-off locations in the City for residents to recycle aluminum and paper. Fire Station 1 contains bins where residents can drop

off aluminum, paper, and newspaper. The Bonnybridge Baptist Church also contains a drop-off bin for newspaper. A drop-off site is also located at the corner of Appleby and Crossgate for the recycling of aluminum. All proceeds from recycling efforts in the City of Port Wentworth go to the Georgia Burn Center. There are also drop-off locations and other recycling facilities in Chatham County available to residents of Port Wentworth.

Yard Trimmings Programs & Facilities

The types of yard trimmings collected, the collection arrangements and materials disposition are address in the Collection Element. Bloomingdale and Pooler divert yard trimmings from landfill disposal through mulching programs at the Public Works site and the Pooler Recycling Center, respectively. Yard trimmings from Port Wentworth are disposed at the Savannah Regional Industrial Landfill.

Special Materials Recycling

Bloomingdale

The City of Bloomingdale offers curbside collection of special materials such as motor oil, metals, and appliances. Residents may also drop off these materials at the Public Works facility. The Public Works facility contains a waste drum for oil and a bin for scrap metal. The City participates in an E-Recycling Program with the Chatham County; an annual event that collects and recycles electronics from residents and businesses in the greater Savannah area.

The City also participates in an annual Amnesty Day for hazardous household materials for all citizens of Chatham County, coordinated by the County's Local Emergency Planning Committee. Materials accepted include paint, used oil, batteries, old computers, Goodwill items, cans, glass, aluminum, cell phones, newspaper, etc. All materials collected are recycled or disposed of properly.

Pooler

The City of Pooler accepts white goods and electronics at the recycling center, but does not provide curbside services to residents. The City participates in the annual E-Recycling Program with the Chatham County that collects and recycles electronics from residents and businesses in the greater Savannah area.

The City also participates in an annual “amnesty day” for hazardous household materials for all citizens of Chatham County, coordinated by the County's Local Emergency Planning Committee. Materials accepted include paint, used oil, batteries, old computers, Goodwill items, cans, glass, aluminum, cell phones, newspaper, etc. All materials collected are recycled or disposed of properly.

Port Wentworth

The City of Port Wentworth participates in the E-Recycling Program that annually collects and recycles electronics from residents and businesses in the greater Savannah area. The City

collects white goods and steel from residents, which are taken to a reclamation facility for recycling and disposal.

The City also participates in an annual “amnesty day” for hazardous household materials for all citizens of Chatham County, coordinated by the County's Local Emergency Planning Committee. Materials accepted include paint, used oil, batteries, old computers, Goodwill items, cans, glass, aluminum, cell phones, newspaper, etc. All materials collected are recycled or disposed of properly.

Disaster Debris Waste Reduction Strategy

Disaster debris management is discussed in the Collection Element.

3.2 ASSESSMENT OF WASTE REDUCTION & RECYCLING PROGRAMS

Bloomingdale

The main components of Bloomingdale’s reduction efforts are in the City’s yard trimmings/ mulching program and special materials recycling. While these programs contribute greatly to overall waste reduction in the City, the expansion of these programs as well as increased recycling options to residents will be essential if the City is to meet the 10% reduction goal. It will also be important for the City to take a more proactive approach to public education.

Pooler

The City of Pooler has placed recycling at the forefront of their waste reduction agenda. The City-run recycling facility offers residents a convenient drop-off location for recycling, yard trimmings, and white goods. The City also provides for curb side collection of yard waste and offers free mulch to residents. The expansion of existing services and exploring the potential for a curbside recycling collections program will ensure that the City achieves the 10% reduction goal.

Port Wentworth

The City of Port Wentworth has a number of opportunities to improve source/waste reduction in the City. Currently, minimal opportunities for recycling are available to City residents. The yard trimmings collected by the City are being disposed of at a local landfill versus being recycled and reused in the City in the form of mulch. The City offers some public education with regard to source reduction, but will need to expand on all of these elements in order to achieve the West Chatham Solid Waste Management Plan’s 10% reduction goal. If the City does not take a more proactive approach to waste reduction, it is likely that per capita numbers will increase over the planning period of this report.

The majority of the existing waste reduction efforts target the residential sector. The residential sector represents the single largest contributor to the waste disposal stream, nearly 40%, as shown in Table 8. As the industrial sector contributes the next largest amount to the waste disposal stream, nearly 30%, there may be opportunities to target education programs to the West Chatham planning area industries and businesses.

Although there appears to be adequate opportunities for residents to recycle using public and private drop-off locations and facilities, the West Chatham planning area may achieve its waste reduction goals best through exploring other types of recycling services. Based on comments received in the public involvement process (described in the Introduction), there is a high level of interest in exploring curbside recycling options.

Investigations made for the Waste Reduction Assessment determined that including specific information on curbside recyclable collection services (i.e., cost, frequency of service and type of materials collected, potential private haulers and disposition of materials) in the plan is impractical. The service factors (cost, frequency of service, type of materials collected, potential private haulers, disposition of materials, contractual arrangements, billing arrangements, customer satisfaction provisions, etc.) are too location, time, vender and negotiations specific.

For instance, if all planning jurisdictions were to engage in a multi-jurisdictional arrangement for curbside recyclable collection with a private vendor, the Cities would capture a better rate than if each were to contract separately. Likewise, the number of vendors offering service in any particular location will affect the type of service offer and make the cost more competitive.

However, investigation did determine that Pratt Industries has entered a contract with the City of Savannah to build and manage a single stream recycling facility. It will be located at 101 Kahn Industrial Court in Savannah and is scheduled to begin curbside recycling services by January 1, 2009. Single stream recycling depends on new technology that does not require recyclable materials to be separated at the curb. This makes recycling easier and more attractive to residents and business.

The Pratt recycling facility will accept the following recyclables: newspaper; cardboard; magazines; catalogues; plastics #1, #2 and #3-#7; aluminum cans; steel and tin cans; mixed paper; and glass. In addition, it will accept commercial cardboard, a significant single material contributor to the waste stream. This new facility offers a tremendous opportunity to the West Chatham planning jurisdictions to engage in increased recycling services and achieve their waste reduction goal.

3.3 NEEDS & GOALS

The waste reduction goal is to achieve a 10% per capita waste disposal reduction goal over the planning period, 2008 - 2018. Accomplishing this goal will require addressing the following needs:

- Work with haulers to track and keep a better record of waste being generated in each City.
- Promote and advertise current programs related to recycling, yard trimmings, and composting.
- Encourage source reduction through continued public and increased business education.
- Encourage diversion of yard trimmings and organics through home composting education.

- Continue to financially support and maintain existing recycling and drop-off locations.
- Continue the office paper recycling program in Bloomingdale.
- Pursue grants related to solid waste reduction by applying for the GEFA recycling and waste reduction grant.
- Explore purchasing composting bins.
- Expand available drop-off locations for recyclables and/or bulk items.
- Explore potential for recycling bins to be placed at the City of Port Wentworth Public Works site.
- Explore the economic feasibility and impact of curbside recycling collections for residents and businesses by taking advantage of regional recycling opportunities.
- Request the Department of Community Affairs to provide a regional single stream recycling hub workshop to learn more about how the cities can provide cost-effective recycling services.
- Issue a Request for Proposals (RFP) to regional recycling vendors to compare costs and determine service levels for curbside recycling.
- Consider entering a West Chatham planning area service area comprised of all planning jurisdictions when issuing the RFP to determine the most cost effective curbside recycling collection options.

4 COLLECTION ELEMENT

4.1 INVENTORY OF COLLECTION PROGRAMS

This section presents an inventory of all collection arrangements for MSW, C&D, yard trimmings and bulky items. Collection and management of recyclables were discussed in the Waste Reduction Element. This section addresses illegal dumping and littering issues in the planning area as well as a contingency strategy should collection services be temporarily disrupted and the collection and management of disaster debris. The final sections assess the adequacy of the plan jurisdictions' collection programs and identify a collection goal and strategies needed for its accomplishments.

MSW and C&D Collections

Bloomingdale

The City of Bloomingdale provides curbside MSW collection services to all residents within the City. This service is contracted to a private vendor and is conducted twice a week. Waste collection fees are subscribed to by residents in the City and included as part of the water utility bills. Residents may also utilize private transfer stations and drop-off locations located in the City and County. Bloomingdale is currently under contract with Republic Services Inc. for all residential curbside collection services.

The City of Bloomingdale arranges for commercial MSW collection services through a contract with Republic Services. Businesses within the City have the option to select the service that best suits their needs. Businesses have the option for a roll-out cart or a dumpster. Dumpsters are available in different sizes ranging from four to eight cubic yards. Pickup frequency also varies depending on the needs of the given customer.

C&D waste collection in the City is open competition where the resident, business or developer has the option to select their own hauler. Options for C&D waste are to self-haul waste to a transfer station/landfill or contract services from a private service.

Pooler

The City of Pooler provides curbside MSW collection services to all residents within the City. Collection services are contracted to a private hauler and conducted twice a week. Residents are billed for curbside collection services as part of the water utility bill. Residents are also able to utilize private transfer stations and drop-off locations available in the City and County. Pooler is currently under contract with Waste Management Inc. for all residential curbside collection services.

The City of Pooler arranges for commercial MSW collection services through a contract with Waste Management and charges businesses as part of the utility bill. Businesses within the City have the option to select the service that best suits their needs. Businesses have the option for a roll-out cart or a dumpster. Dumpsters are available in different sizes ranging from four to

twenty cubic yards. Pickup frequency also varies depending on the needs of the given customer. The frequency of pickups ranges from twice a week to daily pickups (five times a week).

C&D waste collection in the City is open competition where the resident, business or developer has the option to select their own hauler. Options for C&D waste are to self-haul waste to a transfer station/landfill or contract services from a private service.

Port Wentworth

The City of Port Wentworth provides curbside MSW collection services to all residents within the City. Collection services are provided by a City fleet that consists of two vehicles and is conducted twice a week. Residents are billed for curbside collection services as part of the water utility bill. Residents are also able to utilize private transfer stations and drop-off locations as available in the City and County.

The City of Port Wentworth arranges for commercial MSW collection services through a contract with Republic Services. Businesses within the City have the option to select the service that best suits their needs. Businesses have the option for a roll-out cart or a dumpster. Dumpsters are available in different sizes ranging from four to eight cubic yards. Pickup frequency also varies depending on the needs of the given customer. The frequency of pickups ranges from twice a week to daily pickups (five times a week).

C&D waste collection in the City is open competition where the resident, business or developer has the option to select their own hauler. Options for C&D waste are to self-haul waste to a transfer station/landfill or contract services from a private service.

Table 14. Curbside MSW Collection Programs

Jurisdiction	Collection Type	Name of Hauler	Sectors Served
Bloomingdale	Private Hauler	Republic Services, Inc	Residential & Commercial
Pooler	Private Hauler	Waste Management	Residential & Commercial
Port Wentworth	City	City of Port Wentworth	Residential & Commercial
	Private Hauler	Republic Services, Inc.	Commercial

Drop-off Locations & Transfer Stations

Residents in the West Chatham planning area may also choose to deliver solid waste to various transfer stations that operate in the County. Transfer stations and drop-off locations are discussed in greater detail in the Disposal Element.

Yard Trimmings & Bulk Item Collection

Bloomingdale

The City of Bloomingdale performs curbside collection of yard trimmings twice a month. Collection is done on the 1st and 3rd Thursday and Friday every month. Acceptable yard waste includes grass clippings, leaves, shrubs, brush, tree trimmings, and other vegetative materials generated from general maintenance of yards, lawns, and landscaping.

The City of Bloomingdale provides curbside collection of bulk items and appliances for residents of the City. White goods, appliances, and other bulk items will be collected by the City twice a month. Residents may also drop-off bulk items at the Public Works facility.

Pooler

The City of Pooler offers curbside collection of yard trimmings as well as a staffed drop-off location for residents. The city collects yard trimmings the last week of every month and has contracted with Waste Management to also provide curbside collection service for yard trimmings, which is conducted monthly. Residents pay for this service as part of the trash collection fee. Acceptable yard waste includes grass clippings, leaves, shrubs, brush, tree trimmings, and other vegetative materials generated from general maintenance of yards, lawns, and landscaping.

The City of Pooler accepts white goods, electronics, and other bulk items at the Pooler Recycling Center, but does not provide curbside services to residents.

Port Wentworth

Curbside collection of yard trimmings is conducted by the City of Port Wentworth twice a week and is available to all residents. A total of six fleet vehicles are used by the City for this collection effort. Yard trimmings that are bundled at the curb will be collected. Acceptable yard waste includes grass clippings, leaves, shrubs, brush, tree trimmings, and other vegetative materials generated from general maintenance of yards, lawns, and landscaping.

The City of Port Wentworth collects white goods and bulk items from residents on a weekly basis. Bulk items are picked up by the City and taken to the Savannah Regional Industrial Landfill for disposal. However, the City will not pick up construction debris or hazardous materials.

Table 15. Summary of Collection Programs

	Type of Collection	Method	Frequency	Name / Operator	Arrangement
Bloomingdale	Residential MSW Waste	Curbside	Twice a week	Republic Services	Residents charged as part of utility bill
	Commercial MSW Collection	Front loader / Container service	Determined by customer needs	Republic Services	Charged as part of utility bill
	Yard Trimmings	Curbside	Twice a month	City of Bloomingdale	Residents charged as part of utility bill
	Bulk Item	Curbside Drop-off	Twice a month N/A	City of Bloomingdale	Residents charged as part of utility bill

	Type of Collection	Method	Frequency	Name / Operator	Arrangement
Pooler	Residential MSW Waste	Curbside	Twice a weekly	Waste Management	Residents charged as part of utility bill
	Commercial MSW Waste	Front loader / Container service	Determined by customer needs	Waste Management	Charged as part of utility bill
	Yard Trimmings	Curbside	Monthly	Waste Management	Residents charged as part of utility bill
	Bulk Item	Drop-off	N/A	City Recycling Center	Residents charged as part of utility bill
Port Wentworth	Residential MSW Waste	Curbside	Twice a week	City of Port Wentworth	Residents charged as part of utility bill
	Commercial MSW Waste	Front loader / Container service	Determined by customer needs	Republic Services	Charged as part of utility bill
	Yard Trimmings	Curbside	Twice a week	City of Port Wentworth	Residents charged as part of utility bill
	Bulk Item	Curbside	Weekly	City of Port Wentworth	Residents charged as part of utility bill

Illegal Dumping / Littering

Bloomingdale

Illegal dumping is not considered a serious problem in the City of Bloomingdale. The City has an ordinance that prohibits illegal dumping, littering and junk vehicles and discusses the types of activities that constitute a violation and the associated penalties (Code of Ordinances, City of Bloomingdale; Chapter 34 Environment, Article II Nuisances, Section 34-32 (10)).

Littering in general is not perceived to be a major problem in the City. Public Works crews pick up litter along major arterials on a routine basis and also use community service groups to pick up litter throughout the City.

Pooler

Illegal dumping is not considered a serious problem in the City of Pooler. If a particular area becomes a hot spot for dumping, the City installs gates and fencing to prevent access by unauthorized people. The City also has a Litter Ordinance that prohibits illegal dumping and littering and discusses the types of activities that constitute a violation and the associated penalties.

Littering in general is not perceived to be a problem in the City. Public Works crews pick up litter along major arterials on a routine basis prior to mowing public right-of-ways. The City also conducts routine litter control measures along the Interstate 95 corridor and uses community service groups to pick up litter throughout the City.

Port Wentworth

The City of Port Wentworth has certain areas where illegal dumping occurs, typically in the form of bulk items such as couches, appliances, etc. This type of illegal dumping is generally found

on dirt and gravel roads in close proximity to large tracts of undeveloped land. Port Wentworth has an ordinance that prohibits illegal dumping and littering and defines the various types of violations, enforcement actions, and penalties (Code of Ordinances, City of Port Wentworth; Chapter 9 Garbage and Trash, Article I, Section 9-2).

Small scale littering in the more developed areas of the City is not perceived to be a significant concern. However, littering is an ongoing issue along major corridors (SR 21) and areas that experience heavy volumes of truck traffic. Periodic litter pickup along these corridors is performed by the City using Public Works employees and volunteer groups.

Contingency Strategy

There are a number of private haulers that operate and offer service to the jurisdictions in the West Chatham planning area. The jurisdictions would have the opportunity to immediately contract with one of these companies should a situation arise where existing collection arrangements (public or private) can no longer provide the same level of service either temporarily or long term. Options for establishing intergovernmental agreements also exist.

Disaster Debris Management

The plan jurisdictions do not currently have a disaster debris management strategy. It is recommended that each City explore the adoption of the Georgia Emergency Management Agency (GEMA) Debris Management Program, which provides assistance to local jurisdictions in the event of a declared disaster. In addition, this program encourages jurisdictions to evaluate current programs and develop a plan for potential situations that might otherwise catch the community by surprise. The GEMA Debris Management Plan would address debris collection and disposal and strategies for diverting material from the waste stream to prevent onerous impacts to the long-term waste reduction goal.

In a situation where collection service is interrupted for the entire West Chatham planning area, each City has fleet vehicles available. These vehicles would be used to remove debris from high priority areas such as roadways and areas where debris is posing an immediate threat to public health and safety. Each City would also use the fleet vehicles for routine collection until other arrangement could be made. An estimated 2-week timeframe has been established for implementing this type of action. If necessary, the Cities may hire additional private haulers on a temporary basis until the situation is under control. If a situation arises where not all jurisdictions are affected, the jurisdictions will aid and assist one another to minimize the disruption of collection services. Information will be posted to the City's website to educate residents with regard to the City's plan for handling the situation.

4.2 ASSESSMENT OF COLLECTION PROGRAMS

The West Chatham planning area, MSW and yard trimmings collection programs provide adequate services in a manner that is cost effective and resourceful. The collection programs ensure that sufficient services are provided throughout the course of this planning period.

The West Chatham jurisdictions are exploring ways to better identify the source of waste being collected and the methodology for which it is being reported. This may be a difficult task because it will take a great deal of cooperation from various waste haulers that service the planning area and may require them to alter the way waste gets reported at landfills.

C&D collection is managed through the free market, which is meeting current and near term needs for the foreseeable future. Collection of bulk items is adequately managed by each plan jurisdiction. However, residents have the additional option to use the Pooler Recycling Center for these items. All plan jurisdictions have programs that sufficiently manage the responsible collection of illegally dumped items and litter.

The West Chatham planning area jurisdictions have a strategy to address collection disruption contingencies and to develop a Plan to collect disaster debris, including public notification.

4.3 NEEDS & GOALS

The West Chatham planning area collection goal is to provide consistent and efficient collection services in all jurisdictions. In order to meet this goal, the following needs have been identified:

- Work with private haulers for the cities of Bloomingdale and Pooler to ensure reliable and efficient collection.
- Ensure the continuance of reliable and efficient collection in Port Wentworth.
- Develop and enforce reporting requirements for haulers contracted by the cities of Bloomingdale and Pooler to better track quantities of waste collected within the City.
- Develop and enforce reporting requirements for waste collected in the Port Wentworth.
- Continue current litter and illegal dumping clean-up activities and programs.
- Continue to enforce the litter, illegal dumping and junk car ordinances.
- Evaluate and revise city solid waste, litter, illegal dumping and junk car ordinances to ensure desires of community are expressly protected, consistency with West Chatham Solid Waste Management Plan, consistency among city zoning ordinances to support regional goals and to ensure penalties are consistent in meeting city goals.
- Evaluate and implement the GEMA Debris Management Plan for disaster planning as a multi-jurisdictional plan for the West Chatham planning area.
- Develop an intergovernmental agreement that defines the role of each jurisdiction in the event that one or more area has a disruption in collection services.
- Explore the potential for all jurisdictions to combine collection efforts for the West Chatham planning area.

5 DISPOSAL ELEMENT

5.1 INVENTORY OF DISPOSAL FACILITIES

This section provides an inventory of disposal facilities and transfer stations used for MSW and yard trimmings waste collected in the West Chatham plan area. The inventory is followed by an assessment of the capacity of the MSW disposal facilities to meet current needs and disposal needs for the plan duration. The section addresses a contingency strategy should MSW disposal services be temporarily disrupted and the disposal of disaster debris. This is followed by an assessment of the adequacy of the plan jurisdictions' disposal programs, the disposal goal and strategies needed to meet that goal.

5.1.1 Landfills

Bloomingdale

MSW collected in the City of Bloomingdale is transported to the Savannah Regional Industrial Landfill. This facility is located at 84 Clifton Road, Savannah, Georgia. This facility is privately owned and operated.

Pooler

MSW collected in the City of Pooler is transported to the Superior Landfill and Recycling Center located at 3001 Little Neck Road in Savannah, Georgia. This facility is privately owned and operated.

Port Wentworth

MSW collected in the City of Port Wentworth is transported to the Savannah Regional Industrial Landfill. This facility is located at 84 Clifton Road, Savannah, Georgia. This facility is privately owned and operated.

5.1.2 Yard Trimmings

Bloomingdale

Yard trimmings collected by the City are grinded and mulched at the Public Works site. The mulch is given away to residents.

Pooler

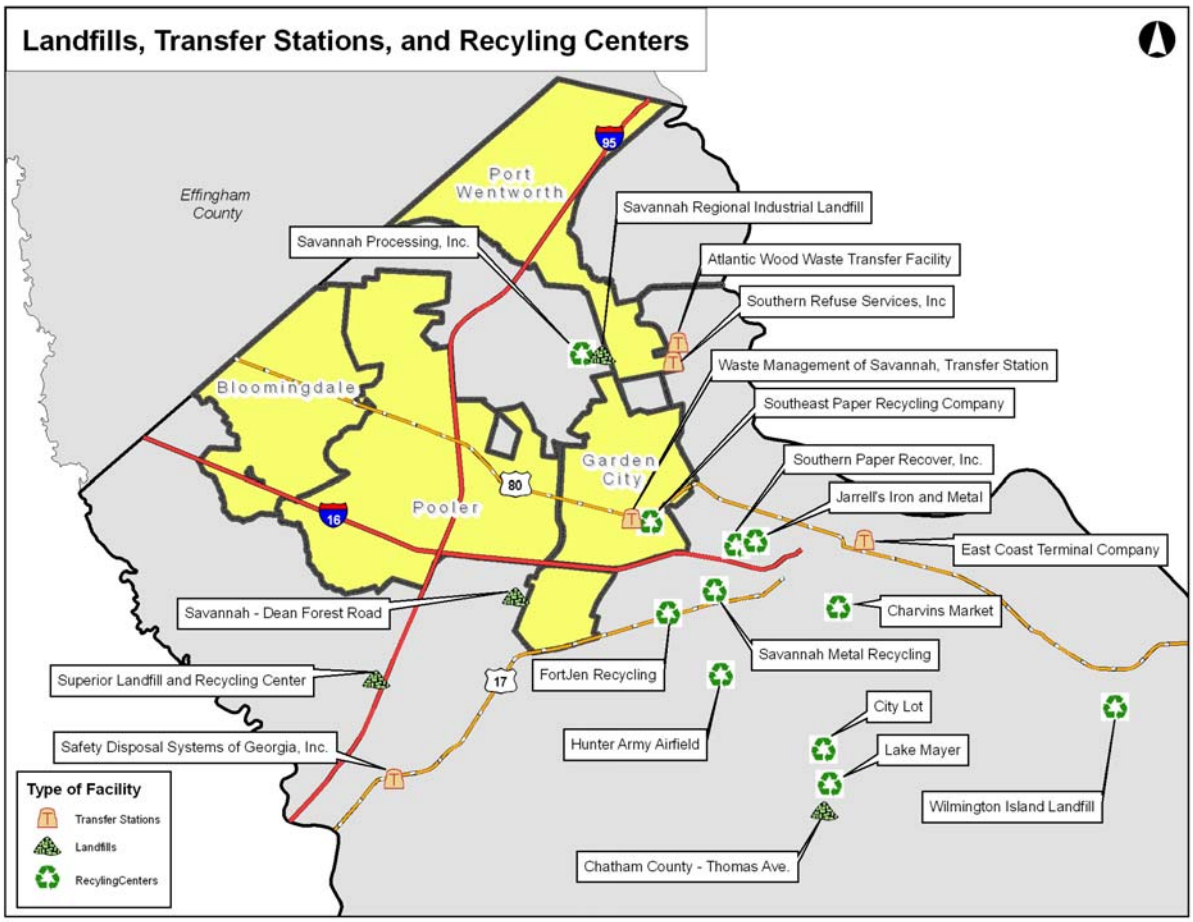
Yard trimmings collected as part of the curbside program are taken to the Pooler Recycling facility, where mulch is available free to residents. Residents may also elect to drop off yard trimmings at the City of Pooler's facility on South Rogers Street.

Port Wentworth

Yard trimmings collected by the City are disposed of at the Savannah Regional Industrial Landfill. Residents are billed for this service as part of the water utility bill.

Figure 3 illustrates the locations of landfills, transfer stations, recycling centers, and closed landfills within close proximity to the West Chatham planning area.

Figure 3. Landfills, Transfer Stations & Recycling Centers



According to the EPD database, there are three landfills operating in Chatham County that are available for MSW disposal, shown in Table 16.

Table 16. Landfills

Facility Name	Permit Number	Jurisdictions Using Facility	Owner/ Operator	Facility Type	Dominion	Capacity (CY)	Remaining Life	Mailing Address
Savannah Regional Industrial Landfill, Inc	025-072D(L)(I)	Bloomingdale Port Wentworth	Mr. Jamey Amick	Industrial Landfill	Private/ Commercial/ Industrial	3,206,122	11 Years 8/22/2018	PO Box 4144 Port Wentworth, GA 31407
Superior Landfill & Recycling Center	025-070D(MSWL)	Pooler	Kelley Rooney	MSW	Private Commercial	3,588,078	8 Years 5/14/2015	3001 Little Neck Road Savannah, GA 31419
Savannah-Dean Forest Rd (SL)	025-051D(SL)		Stephanie S. Cutter	MSW	Public	1,912,979	21 Years 1/27/2028	PO Box 1027 Savannah, GA 31402

Source: Environmental Protection Division (EPD)

5.1.3 Transfer Stations

According to EPD, there are six transfer stations that operate in or in close proximity to the West Chatham planning area, listed in Table 17. Residents have a choice of using the two located in Garden City, the two in Port Wentworth or the two in Savannah.

Table 17. Transfer Stations

Facility Name	Permit Number	Facility Type Description	Mailing Address	Mailing City
Waste Management of Savannah Transfer Station	PBR-025-037TS	Transfer Station	1809 Highway 80	Garden City
Safety Disposal Systems of Georgia, Inc.	PBR-025-26TS	Transfer Station	6043 Ogeechee Road	Savannah
Waste Management of Savannah Transfer Station	PBR-025-37TS	Transfer Station	1809 Highway 80sr 17, Pin # 7-0017-01-Lot O04	Garden City
Southern Refuse Services, Inc.	PBR-025-38TS	Transfer Station	Grange Road	Port Wentworth
East Coast Terminal Company	PBR-025-41TS	Transfer Station	1 Harbor Street	Savannah
Atlantic Wood Waste Transfer Facility	PBR-025-46TS	Transfer Station	202 Oxford Drive	Port Wentworth

Source: Environmental Protection Division (EPD)

5.1.4 Assurance of 10-Year Capacity

Bloomingdale

The Savannah Regional Industrial Landfill has given assurance to the City of Bloomingdale that it has the capacity to accept all MSW disposed of by the City throughout the course of the 10-year planning period. The assurance provided to the City is based on the projected waste totaling 51,369 tons over the next 10 years as calculated in the Waste Disposal Stream Analysis. Included in Appendix B is a letter from the Savannah Regional Industrial Landfill assuring capacity through the 10-year planning period.

Pooler

The Superior Landfill and Recycling Center [from pooler's comments] has given assurance to the City of Pooler that it has the capacity to accept all MSW disposed of by the City for the next 8 years or until 2015, at which point the facility will run out of capacity unless there is a facility expansion prior to that time. Included in Appendix B is a letter from the Superior Landfill and Recycling Center assuring capacity until 2015 for the City of Pooler based on the projected waste totaling 154,597 tons, 2008 to 2015, as calculated in the Waste Disposal Stream Analysis.

The City of Pooler will have to seek capacity for its remaining waste, 65,819 tons, collected from 2016 to the duration of the plan period (2018) at another location. The Savannah Dean Forest Road Landfill may be an option for this remaining capacity assurance, since this facility has a remaining life of 21-years. Given this assurance, Pooler will have capacity assurance for all of its projected waste, totaling 220,416 tons, over the next 10 years.

Port Wentworth

The Savannah Regional Industrial Landfill has given assurance to the City of Port Wentworth that it has the capacity to accept all MSW disposed of by the City throughout the course of the 10-year planning period. The assurance provided to the City is based on the projected waste totaling 77,443 tons over the next 10 years as calculated in the Waste Disposal Stream Analysis. Included in Appendix B is a letter from the Savannah Regional Industrial Landfill assuring capacity through the 10-year planning period.

5.1.5 Contingency Strategy

There are a number of landfills within close proximity to the West Chatham planning area. In the event of a disruption in the current disposal arrangements, the Cities in the West Chatham planning area would need to arrange for temporary disposal at one of these local facilities. In addition to the landfills in Georgia, there are additional facilities in South Carolina that could be utilized if such a situation arises.

The West Chatham jurisdictions anticipate a seamless transition in disposal from the perspective of residents since the City of Port Wentworth or the contracted haulers would still be responsible for collection. Although a transition from the existing disposal facility to a new, temporary facility would take place with the goal of uninterrupted service to customers, information would

be posted to each City's website and on the local cable channel to inform residents and businesses about the change in service.

5.1.6 Disaster Debris Management

Although, the plan jurisdictions do not currently have a disaster debris management strategy, as addressed in the Collection Element, they intend to develop and adopt the GEMA Debris Management Program. The Program involves developing a plan for potential situations that might otherwise catch the community by surprise. The GEMA Debris Management Plan would address debris disposal and strategies for diverting material from the waste stream to prevent onerous impacts to the long-term waste reduction goal.

5.2 ASSESSMENT OF DISPOSAL PROGRAMS

The MSW collected from the cities of Bloomingdale and Port Wentworth is disposed at the Savannah Regional Industrial Landfill, which has capacity to manage these cities' waste disposal needs for the duration of the West Chatham Solid Waste Management Plan. The MSW collected from the City of Pooler is disposed at the Superior Landfill and Recycling Center, which has capacity until 2015. The City of Pooler must seek capacity for its waste in 2016 - 2018 at another disposal facility. Although the Savannah Regional Industrial Landfill may not be an option (it is projected to reach capacity in 2018 at its current disposal rate), the Savannah Dean Forest Road Landfill has the capacity to dispose of Pooler's remaining amount of MSW in 2016 and could provide this assurance. In addition, there are disposal facilities in South Carolina that could be used if necessary.

Each of the cities has an adequate program to dispose of yard trimmings. The Bloomingdale and Pooler compost their yard trimmings and provide free mulch to residents. Port Wentworth may want to consider offering a similar service or partnering with another plan jurisdiction, under an intergovernmental agreement, for this service to divert their yard trimmings from the Savannah Regional Industrial Landfill.

The West Chatham planning area jurisdictions have a strategy to address disposal disruption contingencies and to develop a Plan to dispose of disaster debris, including public notification.

5.3 NEEDS & GOALS

The waste disposal goal is to ensure there is sufficient capacity to handle the projected waste for the planning period, 2008 – 2018. To achieve this, the following needs have been identified:

- Collectively work to ensure adequate space is available in landfills used by the jurisdictions in the planning area.
- Produce a formal document (plan) that dictates the contingency strategy in the event that current disposal practices are affected by an unforeseen circumstance including public notification.
- Explore the development of an intergovernmental agreement that defines the role of each jurisdiction in the event that one or more area has a disruption in disposal services.

- Evaluate and implement the GEMA Debris Management Plan for disaster planning as a multi-jurisdictional plan for the West Chatham planning area.
- Continue current yard trimmings collections, grinding and mulching programs in Bloomingdale and Pooler.
- Explore the development of an intergovernmental agreement that combines the disposal of yard trimmings from Port Wentworth with another plan jurisdiction's mulching and composting program to divert yard waste from local landfills.

6 LAND LIMITATION ELEMENT

There are a number of different factors that must be considered when selecting a suitable site for development of new or the expansion of existing landfills and/or other waste handling facilities. Demographic factors, land use factors, and environmental factors collectively place limitations and pose challenges with regard to finding an appropriate site.

Sites selected for landfills and other related facilities should not diminish the overall quality of life for residents in a community. These sites should also have a minimal impact on the natural environment. The environmental and land use factors presented in the Land Limitation Element are required to be considered by state law. Some factors specify design requirements while others prohibit the siting of facilities in certain areas.

The Land Limitation Element also includes discussion of local government review to determine permit application consistency with the West Chatham Solid Waste Management Plan. Together, the Land Limitation Element provides guidance to minimize the adverse effects that could result from potential siting of future waste facilities.

6.1 NATURAL & ENVIRONMENTAL LIMITATIONS

This section discusses some of the restrictions with regard to where a solid waste facility can be located within a City based on federal, state, and local policy. The items discussed in this section are illustrated in Figure 4.

6.1.1 Water Supply Watersheds

> *"DNR Rule 391-3-16-.01(7)(c)1 requires that at any location within a small water supply watershed, new solid waste landfills must have synthetic liners and leachate collection systems."*

None of the jurisdictions in the West Chatham planning area fall within the boundaries of a water supply watershed.

6.1.2 Significant Groundwater Recharge Areas

> *"DNR Rule 391-3-16-.02(3)(a) requires that in significant groundwater recharge areas, DNR shall not issue permits for new solid waste landfills not having synthetic liners and leachate collection systems."*

> *"DNR Rule 391-3-4-.05(1)(j) requires new solid waste landfills or expansions of existing facilities within two miles of a significant groundwater recharge areas to have liners and leachate collection systems, with the exception of facilities accepting waste generated from outside the county in which the facility is located. In that case, the facility must be totally outside of any area designated as a significant groundwater recharge area."*

None of the jurisdictions in the West Chatham planning area fall within the boundaries of any significant groundwater recharge areas.

6.1.3 Wetlands

"DNR Rule 391-3-16-.03(3)(e) establishes that solid waste landfills may constitute an unacceptable use of a wetland."

"DNR Rule 391-3-4-.05(1)(e) prohibits the development of solid waste landfills in wetlands, as defined by the U. S. Army Corps of Engineers, unless evidence is provided by the applicant to EPD that use of such wetlands has been permitted or otherwise authorized under all other applicable state and federal laws and rules."

The West Chatham planning area contains a total of roughly 19,800 acres of wetlands, which accounts for nearly 43% of the total land area. Applicable DNR rules will be referenced and applicants will be required to obtain a Section 404 Permit prior to getting a Land Disturbance Permit.

6.1.4 River Corridors

"DNR Rule 391-3-16-.04(4)(h) prohibits the development of new solid waste landfills within protected river corridors."

The West Chatham planning area does not contain, nor does it fall within the buffer of any protected river corridors.

6.1.5 Protected Mountains

"DNR Rule 391-3-16-.05(4)(l) prohibits the development of new solid waste landfills in areas designated as protected mountains."

There are no protected mountains in the West Chatham planning area.

6.1.6 Floodplains

"DNR Rule 391-3-4-.05(1)(d) stipulates that any solid waste landfill located in the 100-year floodplain shall 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 threat to human health or the environment."

All applicants proposing development within the 100-year floodplain are required to obtain a Section 404 Permit prior to receiving a Land Disturbance Permit.

6.1.7 Fault Zones, Seismic Impact Zones & Unstable Areas

"DNR Rule 391-3-4-.05(1)(f) focuses on fault areas and requires that new landfill units and lateral expansions of existing landfills not be located within 200 feet of a fault that has had a displacement in Holocene time, unless an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the landfill and will protect human health and the environment."

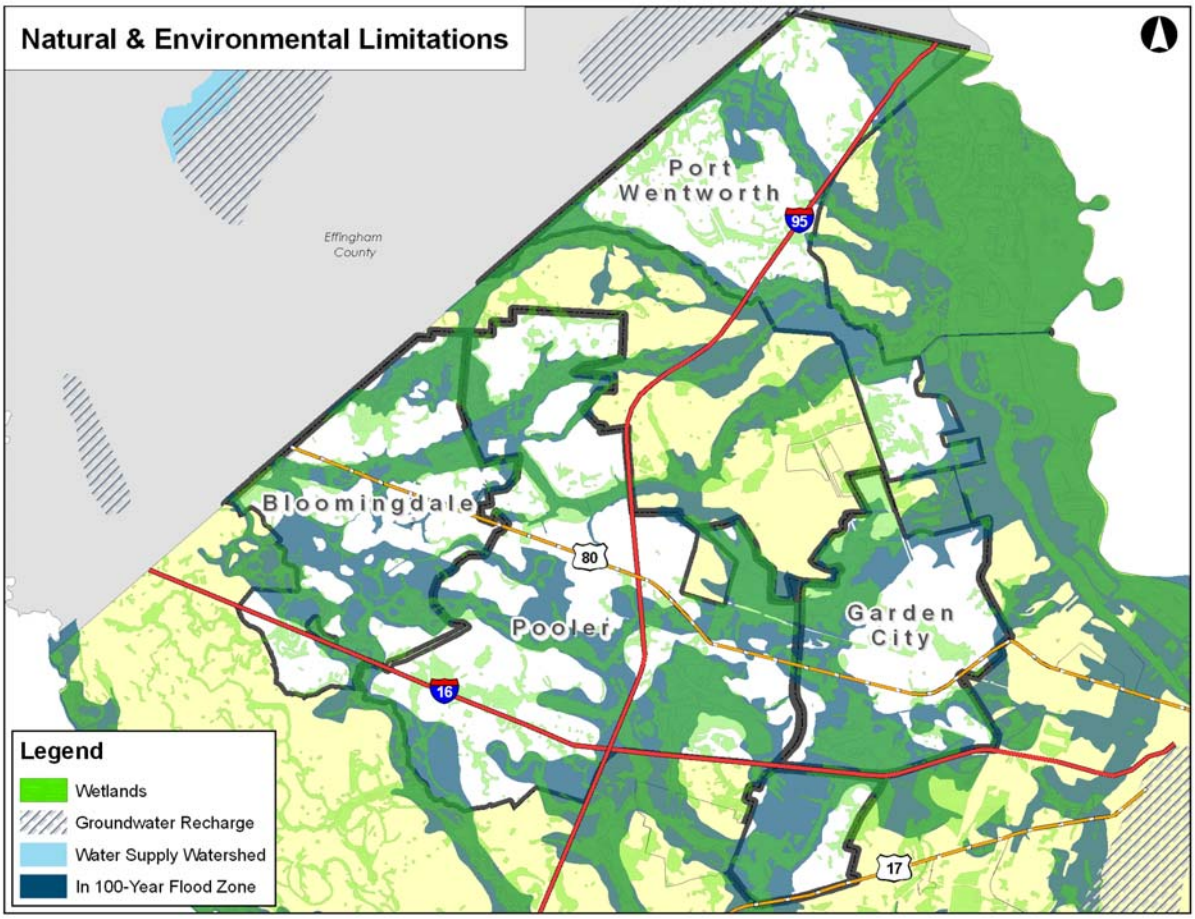
"DNR Rule 391-3-4-.05(1)(g) prohibits the development of new landfills and lateral expansions of existing landfills in seismic impact zones, unless all landfill containment structures, including

existing landfill liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site."

"DNR Rule 391-3-4-.05(1)(h),owners/operators of news landfills, existing landfills and lateral expansions of existing landfills located in an unstable area must demonstrate that engineering measures have been incorporated into the landfill's design to ensure that the integrity of the structural components of the landfill will not be compromised."

An engineer (P.E.) or registered geologist is required to conduct a hydro-geological assessment at the proposed location of any new solid waste disposal facility. The potential for problems to result from development on fault zones, areas susceptible to seismic activity, and unstable ground are evaluated as part of this assessment. The DNR rules for each of these items are included here.

Figure 4. Natural & Environmental Limitations



6.2 LAND USE & ZONING LIMITATIONS

This section discusses some of the restrictions with regard to where a solid waste facility can be located within a City based on state, and local policy. The items discussed in this section are illustrated in Figure 5.

6.2.1 Zoning Restrictions

> *"DNR Rule 391-3-4-.05(1)(a) requires that the site must conform to all local zoning/land use ordinances, and that written verification of such be submitted to EPD."*

Bloomingdale

Solid waste disposal will only be permitted in zones PUD, PW, and I-2 if a Conditional Use Permit is granted by the board of appeals (Code of Ordinances, City of Bloomingdale, Georgia; Appendix A, Article V. Zoning District Schedule).

Pooler

The City of Pooler's current zoning categories do not permit development of MSW, C&D landfills, and transfer stations (Code of Ordinances, City of Pooler, Georgia; Article IV. Zoning Districts, Section 21.I-1 Light Industrial District and Section 22. I-2 Heavy Industrial District).

Port Wentworth

The City of Port Wentworth's current zoning categories do not permit development of MSW, C&D landfills, and transfer stations (Code of Ordinances, City of Port Wentworth, Georgia; Appendix B. Zoning, Article V Zoned Districts).

6.2.2 National Historic Sites

Bloomingdale

No nationally listed historic sites are located in the City of Bloomingdale.

Pooler

No nationally listed historic sites are located in the City of Pooler.

Port Wentworth

The Mulberry Grove Plantation site was added to the National Registry in July of 1975. A number of key events in the early history of Georgia and the U.S. took place at this site. The site has been preserved and is being used as a cultural and educational center, while preserving the natural environment.

MSW landfills are not permitted within 5,708 yards of a National Historic Site. The Mulberry Grove Plantation is illustrated in Figure 5.

The City of Savannah and Chatham County contain a number of nationally listed sites. None of these site fall within the 5,708 yard buffer of the West Chatham planning area.

6.2.3 Airport Safety

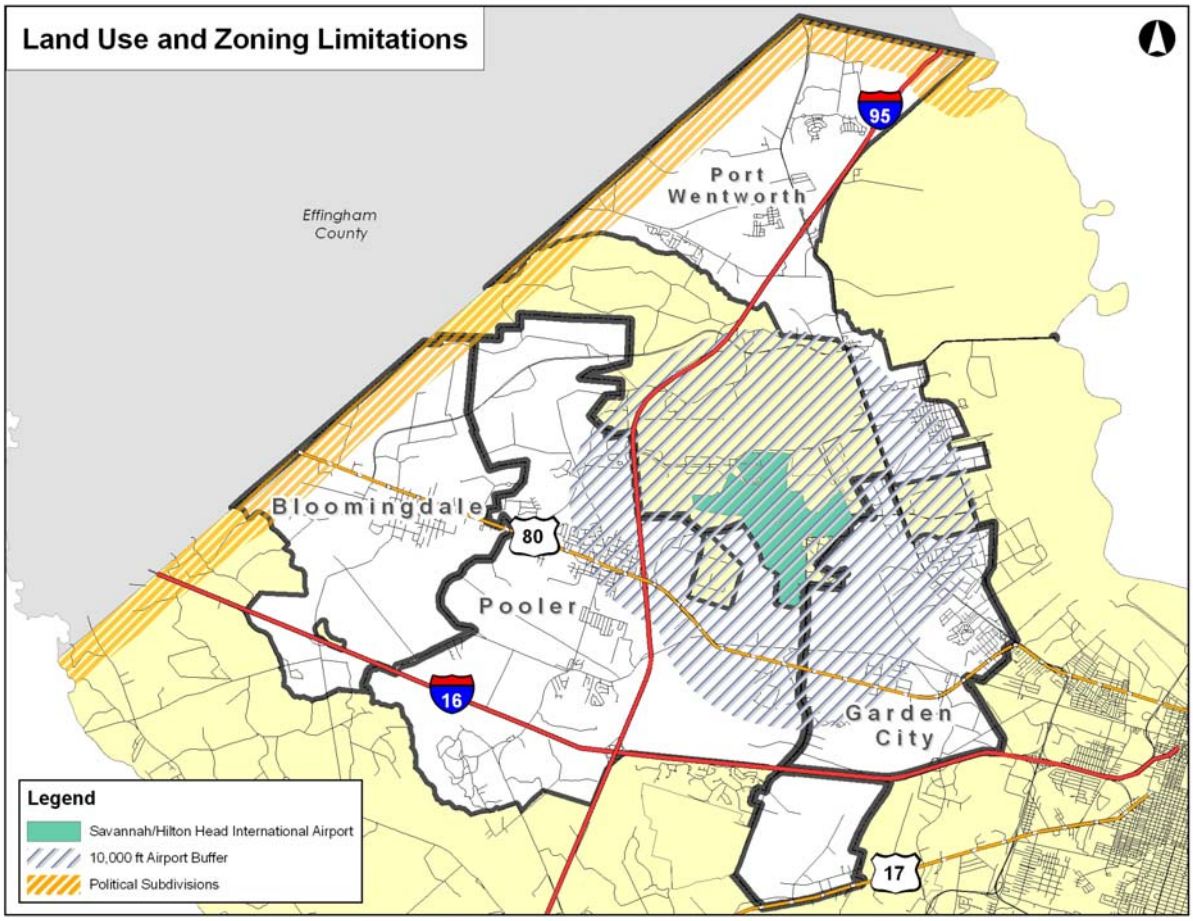
> *"DNR Rule 391-3-4-.05(1)(c) requires that new solid waste landfill units or lateral expansions of existing units shall not be within 10,000 feet of any public use or private use airport runway end used by turbojet aircraft or within 5,000 feet of any public use or private use airport runway end used by only piston type aircraft."*

The Savannah/Hilton Head International Airport in the City of Savannah is centrally located between Pooler and Port Wentworth. As a result, an MSW landfill is not permitted within 10,000 feet from the runways of this facility. Land within the Cities listed above affected by this constraint are illustrated in Figure 5.

6.2.4 Political Subdivisions

According to the Georgia Comprehensive Solid Waste Management Act, it is prohibited to develop an MSW landfill within one-half mile of an adjacent county's border without the approval of the governing authority. The Cities of Bloomingdale and Port Wentworth border Effingham County to the north of their city limits. As a result, approximately 3,950 acres or 6.2 square miles of land in the Cities are affected by this law.

Figure 5. Land Use & Zoning Limitations



6.3 ASSESSMENT OF LAND LIMITATIONS

Table 18 shows the natural / environmental and land use factors, required by state law to be considered, that affect the West Chatham planning jurisdictions. Some factors specify design requirements while others prohibit the siting of new facilities or the expansion or existing facilities in certain areas; these considerations are noted in Table 18. Potential future applications for a permit to site a new or an expansion of an existing solid waste facility must address these land limitations.

Table 18. Natural / Environmental and Land Use Limitation Factors

	Bloomingdale	Pooler	Port Wentworth
Wetlands & Floodplains	Prohibited without 404 permit	Prohibited without 404 permit	Prohibited without 404 permit
Fault & Seismic Zones / Unstable Areas	Prohibitions and Design Restrictions – Requires a hydro-geological assessment	Prohibitions and Design Restrictions – Requires a hydro-geological assessment	Prohibitions and Design Restrictions – Requires a hydro-geological assessment
Zoning	Prohibited without conditional use permit	Prohibited	Prohibited
National Historic Sites			Design Restriction – Buffer required
Airport Safety		Design Restriction – Buffer required	Design Restriction – Buffer required
Political Subdivisions	Design Restriction without approval		Design Restriction without approval

It should be noted, while current zoning classifications may prohibit or limit development of solid waste facilities, the possibility of granting a variance exists. As a result, it is important for decisions makers to consider land uses and environmental conditions when reviewing the proposed locations of solid waste facilities.

6.4 PLAN CONSISTENCY

Prior to the EPD issuing a renewal permit or a permit for a new solid waste handling facility or the expansion of an existing solid waste facility, the permit application must be consistent with the local government solid waste management plan. Each city in the planning area will use the following to determine if a proposed facility or facility expansion is consistent with the West Chatham Solid Waste Management Plan as well as the community vision as defined in the Comprehensive Plan.

It will be the responsibility of the site owner/operator or permit applicant to submit a written document to the city in which the proposed facility or facility expansion is located 60 days prior to filing for a solid waste handling permit. In short, the document must address: (1) how the proposed facility or facility expansion meets the goals and objectives identified in the West Chatham Solid Waste Management Plan; and (2) the impact the facility will have on the community. These items and the other requirements are listed below.

1. Any proposed facility or facility expansion shall meet the goals identified in the West Chatham Solid Waste Management Plan, specifically the impact on recycling, collection, disposal, and the per capita waste disposal reduction goal.

2. Any proposed facility or facility expansion and its operations plan shall document its impact on the community in the following areas and objections:
    a. Transportation. The impact to vehicle traffic and public safety around the proposed facility or facility expansion and throughout the City shall not reduce the level of service by more than one letter for all roadways and intersections within 2,000 feet (without improvements).
    b. Natural & Cultural Resources. The impact of the facility to natural and cultural resources in the City shall be addressed according to previously stated requirements and objectives. Impacts to natural and cultural resources in the City not covered in the previously stated requirements and objections shall be minimized to the greatest extent practicable.
    c. Rates. The impact to residential and commercial solid waste management rates shall not cause an increase in collection or disposal rates.

3. Any proposed facility shall provide financial assurance to address potential environmental issues.

4. Any proposed facility shall meet the geographic site limitations defined in the West Chatham Solid Waste Management Plan.

5. Any proposed facility shall be an allowable use based on existing zoning.

The given jurisdiction's City Council will hold at least one public hearing on the proposed facility to get feedback from City residents. Based on the results of the initial public hearing, the City Council can decide whether additional public meetings are necessary. Following the public meeting(s), the City Council will evaluate the proposed facility and all related documentation for consistency with the West Chatham Solid Waste Management Plan and goals established in the Comprehensive Plan. The applicant will be notified within 30 days regarding the status of the consistency evaluation. The City Council will determine that the proposed facility or facility expansion is consistent or inconsistent with the West Chatham Solid Waste Management Plan. The applicant will have the opportunity to address any inconsistencies and resubmit the application to City Council for review. Once a proposed facility is considered acceptable by the City, the Council will issue a letter to the applicant stating the facility is consistent with the West Chatham Solid Waste Management Plan.

6.5 NEEDS & GOALS

The land limitation goal is to ensure that the development of any type of waste handling facility is done in a manner that does not compromise public health and the environment. To achieve this, the following needs have been identified:

- Ensure potential new facilities or facility expansions are sited and operated in a manner that is consistent with the West Chatham Solid Waste Management Plan.
- Update and maintain maps with regard to the identified environmental, land use, and zoning limitations.

- Evaluate and revise city zoning ordinances to ensure desires of community are expressly protected, consistency with West Chatham Solid Waste Management Plan and consistency among city zoning ordinances to support regional goals.

7 EDUCATION & PUBLIC INVOLVEMENT ELEMENT

The pubic must be educated and involved in solid waste efforts for the success of local government plans and programs. Public education and involvement is a key factor in ensuring that collection and disposal services meet community needs and expectations. It is critical for the success of recycling programs that accomplish waste reduction goals. Public education and involvement is also an integral part of efforts to prevent littering and illegal dumping.

7.1 INVENTORY OF PUBLIC EDUCATION & INVOLVEMENT

Table 17 describes the public education and involvement programs available in the West Chatham plan jurisdictions. It includes the responsible entity and frequency of program.

Table 19. Public Education & Involvement Programs

Type of Program	Description	Responsible Party / Organization	Schedule / Frequency
Bloomingdale			
Great American Cleanup	This month-long event asks residents to volunteer to pick up trash in their neighborhoods and other places around the City.	Keep Bloomingdale Beautiful & City Staff	Annual
E-Recycling	Annual event that consists of the collection and recycling of electronics from businesses and households within the community.	Chatham County	Annual
Bring One for the Chipper	This is a Christmas tree recycling program. Trees are mulched and the mulch is given to City residents and/or used at City properties. Residents who bring their Christmas tree receive a free sapling.	Public Works	Annual
Amnesty Day for Household Hazardous Materials	Materials accepted include paint, used oil, batteries, old computers, Goodwill items, cans, glass, aluminum, cell phones, newspaper, etc., which are recycled or disposed of properly. The event is promoted through: television, radio, local newspaper, billboards, websites, newsletters and posters.	Chatham County Local Emergency Planning Committee	Annual
Earth Day	Environmental education event about water quality protection, wildlife and habitat conservation, waste recycling, and many other environmental efforts that are taking place in Chatham County and nearby areas.	Chatham County	Annual
Keep Bloomingdale Beautiful and Blooming Campaign	Campaign that incorporates a number of recycling, trash removal and tree planting events.	City Staff	Ongoing
Fact Sheet for New Residents	Fact Sheets provide information to new City residents about City services, waste reduction, upcoming events, recycling programs, yard trimming pickup, litter prevention, illegal dumping, etc.	City Staff	Ongoing
Website	The City's website contains information about trash collection, recycling, yard trimming pickup, and other services offered by the City.	City Staff	Ongoing

Type of Program	Description	Responsible Party / Organization	Schedule / Frequency
Informational Brochures	Brochures provide information about City services, waste reduction, upcoming events, recycling programs, yard trimming pickup, litter prevention, illegal dumping, etc.	City Staff	Ongoing
Newspaper	Periodic articles in local publications educate residents about recycling, source reduction, and other programs related to waste reduction.	Savannah Morning News & *The Spirit*	Periodically
Pooler			
Elementary School Program			
Website	The City's website contains information about trash collection, recycling, yard trimming pickup, and other services offered by the City.	City Staff	Ongoing
Newsletter	Articles provide information about City services, waste reduction, upcoming events, recycling programs, yard trimming pickup, litter prevention, illegal dumping, etc.	City Staff	Quarterly
Council Meeting Announcements / Reports	Status reports are given at each Council meeting to educate residents about current waste reduction efforts and projects in the City.	City Staff	At Each Meeting
Recycling Center	The Recycling Center provides a location for residents to drop off recyclables, yard trimmings, and bulk items.	City Staff	Ongoing
E-Recycling	Annual event that consists of the collection and recycling of electronics from businesses and households within the community.	Chatham County	Annual
Utility Bill Inserts	Inserts put into utility bills that educate residents about littering, illegal dumping, and other solid waste related issues.	City Staff	Ongoing
Bring One for the Chipper	This is a Christmas tree recycling program. Trees are mulched and the mulch is given to City residents and/or used at City properties. Residents who bring their Christmas tree receive a free sapling.	Public Works	Annual
Amnesty Day for Household Hazardous Materials	Materials accepted include paint, used oil, batteries, old computers, Goodwill items, cans, glass, aluminum, cell phones, newspaper, etc., which are recycled or disposed of properly. The event is promoted through: television, radio, local newspaper, billboards, websites, newsletters and posters.	Chatham County Local Emergency Planning Committee	Annual
Earth Day	Environmental education event about water quality protection, wildlife and habitat conservation, waste recycling, and many other environmental efforts that are taking place in Chatham County and nearby areas.	Chatham County	Annual
Newspaper	Periodic articles in local publications educate residents about recycling, source reduction, and other programs related to waste reduction.	Savannah Morning News & *The Spirit*	Periodically
Recycling Flyers / Brochures	Brochures provide information about City services, waste reduction, upcoming events, recycling programs, yard trimming pickup, litter prevention, illegal dumping, etc.	City Staff	Ongoing
Port Wentworth			
Website	The City's website contains information about trash collection, recycling, yard trimming pickup, and other services offered by the City.	City Staff	Ongoing
Coastal Cleanup Program	Clean Coast is a Savannah based, 501(c)3 non-profit volunteer organization which works to combat marine debris by holding monthly beach and marsh cleanups on the Georgia Coast	City Staff / Volunteer Groups	Annual

Type of Program	Description	Responsible Party / Organization	Schedule / Frequency
Newsletter	Article to provide information about City services, waste reduction, upcoming events, recycling programs, yard trimming pickup, litter prevention, illegal dumping, etc	City Staff	Ongoing
Utility Bill Inserts	Inserts put into utility bills that educate residents about littering, illegal dumping, and other solid waste related issues.	City Staff	Ongoing
Door Hangers	Hangers are placed on doors of City residents to inform about litter, debris, and other contaminants discovered in the local storm system. Information about recycling and other good housekeeping tips are included on the hangers.	City Staff	Ongoing
Adopt-A-Road	This program keeps highways and roads clean by getting volunteers to conduct litter cleanup on a regular basis.	Volunteer Groups	Ongoing
E-Recycling	Annual event that consists of the collection and recycling of electronics from businesses and households within the community.	Chatham County	Annual
Amnesty Day for Household Hazardous Materials	Materials accepted include paint, used oil, batteries, old computers, Goodwill items, cans, glass, aluminum, cell phones, newspaper, etc., which are recycled or disposed of properly. The event is promoted through: television, radio, local newspaper, billboards, websites, newsletters and posters.	Chatham County Local Emergency Planning Committee	Annual
Earth Day	Environmental education event about water quality protection, wildlife and habitat conservation, waste recycling, and many other environmental efforts that are taking place in Chatham County and nearby areas.	Chatham County	Annual
Newspaper	Periodic articles in local publications educate residents about recycling, source reduction, and other programs related to waste reduction.	Savannah Morning News & *The Spirit*	Periodically

7.2 ASSESSMENT OF PUBLIC EDUCATION AND INVOLVEMENT

The West Chatham plan jurisdictions sponsor or participate in a variety of educational programs. The programs involve a diversity of mechanisms (internet, newspaper, television, radio, etc.) to reach a broad spectrum of the public (children and adults) and provide rich opportunities for public involvement in waste reduction, recycling and actual clean-ups.

7.3 NEEDS & GOALS

The education and public involvement goal is to inform residents of services related to reduction, recycling, and collection of waste. The West Chatham Solid Waste Management Plan education and public involvement programs are working well but have the following needs:

- Continue the current education and public involvement activities and programs.
- Expand education and involvement programs for business and industry to target waste reduction efforts in this sector.
- Develop home composting education program to encourage diversion of yard trimmings and organics.
- Better track education program impacts by documenting target, audiences, number of participants per year and measurable gains in waste diversion, reduction, participation, awareness or other relevant factors.

- Work with non-profit groups like Keep Bloomingdale Beautiful and Clean Water Campaign to educate and involve residents in waste management topics.

8 IMPLEMENTATION STRATEGY

8.1 SUMMARY OF NEEDS & GOALS

The needs and goals identified in the waste reduction, collection, disposal, land limitations, and public education and involvement elements are summarized in Table 20.

Table 20. Summary of Needs and Goals

Waste Reduction	
Goal	Achieve a 10% per capita waste disposal reduction goal over the planning period, 2008 – 2018.
Needs	• Work with haulers to track and keep a better record of waste being generated in each City. • Promote and advertise current programs related to recycling, yard trimmings, and composting. • Encourage source reduction through continued public and increased business education. • Encourage diversion of yard trimmings and organics through home composting education. • Continue to financially support and maintain existing recycling and drop-off locations. • Continue the office paper recycling program in Bloomingdale. • Pursue grants related to solid waste reduction by applying for the GEFA recycling and waste reduction grant. • Explore purchasing composting bins. • Expand available drop-off locations for recyclables and/or bulk items. • Explore potential for recycling bins to be placed at the City of Port Wentworth Public Works site. • Explore the economic feasibility and impact of curbside recycling collections for residents and businesses by taking advantage of regional recycling opportunities. • Request the Department of Community Affairs to provide a regional single stream recycling hub workshop to learn more about how the cities can provide cost-effective recycling services. • Issue a Request for Proposals (RFP) to regional recycling vendors to compare costs and determine service levels for curbside recycling. • Consider entering a West Chatham planning area service area comprised of all planning jurisdictions when issuing the RFP to determine the most cost effective curbside recycling collection options.
Collection	
Goal	Provide consistent and efficient collection services in all jurisdictions.
Needs	• Work with private haulers for the cities of Bloomingdale and Pooler to ensure reliable and efficient collection. • Ensure the continuance of reliable and efficient collection in Port Wentworth. • Develop and enforce reporting requirements for haulers contracted by the cities of Bloomingdale and Pooler to better track quantities of waste collected within the City. • Develop and enforce reporting requirements for waste collected in the Port Wentworth. • Continue current litter and illegal dumping clean-up activities and programs. • Continue to enforce the litter, illegal dumping and junk car ordinances. • Evaluate and revise city solid waste, litter, illegal dumping and junk car ordinances to ensure desires of community are expressly protected, consistency with West Chatham Solid Waste Management Plan, consistency among city zoning ordinances to support regional goals and to ensure penalties are consistent in meeting city goals. • Evaluate and implement the GEMA Debris Management Plan for disaster planning as a multi-jurisdictional plan for the West Chatham planning area. • Develop an intergovernmental agreement that defines the role of each jurisdiction in the event that one or more area has a disruption in collection services. • Explore the potential for all jurisdictions to combine collection efforts for the West Chatham planning area.

Disposal	
Goal	Ensure there is sufficient capacity to handle the projected waste for the planning period, 2008 – 2018.
Needs	• Collectively work to ensure adequate space is available in landfills used by the jurisdictions in the planning area. • Produce a formal document (plan) that dictates the contingency strategy in the event that current disposal practices are affected by an unforeseen circumstance including public notification. • Explore the development of an intergovernmental agreement that defines the role of each jurisdiction in the event that one or more area has a disruption in disposal services. • Evaluate and implement the GEMA Debris Management Plan for disaster planning as a multi-jurisdictional plan for the West Chatham planning area. • Continue current yard trimmings collections, grinding and mulching programs in Bloomingdale and Pooler. • Explore the development of an intergovernmental agreement that combines the disposal of yard trimmings from Port Wentworth with another plan jurisdiction's mulching and composting program to divert yard waste from local landfills.
Land Limitation	
Goal	Ensure that the development of any type of waste handling facility is done in a manner that does not compromise public health and the environment.
Needs	• Ensure potential new facilities or facility expansions are sited and operated in a manner that is consistent with the West Chatham Solid Waste Management Plan. • Update and maintain maps with regard to the identified environmental, land use, and zoning limitations. • Evaluate and revise city zoning ordinances to ensure desires of community are expressly protected, consistency with West Chatham Solid Waste Management Plan and consistency among city zoning ordinances to support regional goals.
Education and Public Involvement	
Goal	Inform residents of services related to reduction, recycling, and collection of waste.
Needs	• Continue the current education and public involvement activities and programs. • Expand education and involvement programs for business and industry to target waste reduction efforts in this sector. • Develop home composting education program to encourage diversion of yard trimmings and organics. • Better track education program impacts by documenting target, audiences, number of participants per year and measurable gains in waste diversion, reduction, participation, awareness or other relevant factors. • Work with non-profit groups like Keep Bloomingdale Beautiful and Clean Water Campaign to educate and involve residents in waste management topics.

8.2 IMPLEMENTATION STRATEGY

This section identifies the specific tasks/activities, timeframe for implementation, responsible party, estimated costs and funding source for the items identified in this report. The short-term work program is defined as the first five years of the implementation strategy and is designed to ensure that each City moves forward with the goals and more specifically, the projects identified in this plan. The short-term work program will be submitted to the DCA every five years to demonstrate that the City has implemented the tasks outlined below.

Table 21. Implementation Strategy

Project	Years Program / Activity Takes Place											Cost Estimate	Funding Sources	Responsible Party
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Waste Reduction														
Promote and advertise current programs related to recycling, yard trimmings, and composting.														
Continue to financially support and maintain existing recycling and drop-off locations.														
Continue the office paper recycling program.														Bloomingdale
Pursue grants related to solid waste reduction by applying for the GEFA recycling and waste reduction grant.														
Explore purchasing composting bins.														
Expand available drop-off locations for recyclables and/or bulk items.														
Explore potential for recycling bins to be placed at Public Works site.														Port Wentworth
Explore the economic feasibility and impact of curbside recycling collections for residents and businesses by taking advantage of regional recycling opportunities.														
Request the Department of Community Affairs to provide a regional single stream recycling hub workshop to learn more about how the cities can provide cost-effective recycling services.														
Issue a Request for Proposals (RFP) to regional recycling vendors to compare costs and determine service levels for curbside recycling.														
Consider entering a West Chatham planning area service area comprised of all planning jurisdictions when issuing the RFP to determine the most cost effective curbside recycling collection options.														
Waste Collection														
Work with private haulers to ensure reliable and efficient collection.														Bloomingdale Pooler
Ensure the continuance of reliable and efficient collection.														Port Wentworth
Develop and enforce reporting requirements for contracted haulers to better track quantities of waste collected.														Bloomingdale Pooler
Develop and enforce reporting requirements for waste collected by the City.														Port Wentworth
Continue current litter and illegal dumping clean-up activities and programs.														

Project	Years Program / Activity Takes Place											Cost Estimate	Funding Sources	Responsible Party
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Continue to enforce the litter, illegal dumping and junk car ordinances.														
Evaluate and revise city solid waste, litter, illegal dumping and junk car ordinances to ensure desires of community are expressly protected, consistency with West Chatham Solid Waste Management Plan, consistency among city zoning ordinances to support regional goals and to ensure penalties are consistent in meeting city goals.														
Evaluate and implement the GEMA Debris Management Plan for disaster planning as a multi-jurisdictional plan for the West Chatham planning area.														
Develop an intergovernmental agreement that defines the role of each jurisdiction in the event that one or more area has a disruption in collection services.														
Explore the potential for all jurisdictions to combine collection efforts for the West Chatham planning area.														
Waste Disposal														
Collectively work to ensure adequate space is available in landfills used by the jurisdictions in the planning area.														
Produce a formal document (plan) that dictates the contingency strategy in the event that current disposal practices are affected by an unforeseen circumstance including public notification.														
Explore the development of an intergovernmental agreement that defines the role of each jurisdiction in the event that one or more area has a disruption in disposal services.														
Continue current yard trimmings collections, grinding and mulching programs in Bloomingdale and Pooler.														
Explore the development of an intergovernmental agreement that combines the disposal of yard trimmings from Port Wentworth with another plan jurisdiction's mulching and composting program.														
Land Limitations														
Ensure potential new facilities or facility expansions are sited and operated in a manner that is consistent with the West Chatham Solid Waste Management Plan.														
Update and maintain maps with regard to the identified environmental, land use, and zoning limitations.														
Evaluate and revise city zoning ordinances to ensure desires of community are expressly protected, consistency with West Chatham Solid Waste Management Plan and consistency														

Project	Years Program / Activity Takes Place											Cost Estimate	Funding Sources	Responsible Party
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
among city zoning ordinances to support regional goals.														
Public Education and Involvement														
Continue the current education and public involvement activities and programs.														
Expand education and involvement programs for business and industry to target waste reduction efforts in this sector.														
Develop home composting education program to encourage diversion of yard trimmings and organics.														
Better track education program impacts by documenting target, audiences, number of participants per year and measurable gains in waste diversion, reduction, participation, awareness or other relevant factors.														
Work with non-profit groups like Keep Bloomingdale Beautiful and Clean Water Campaign to educate and involve residents in waste management topics.														

8.3 PLAN UPDATES & AMENDMENTS

Each City will review the implementation strategy on an annual basis to ensure the short-term work program is on schedule. The implementation strategy and short-term work program will be updated every few years as necessary to account for unforeseen needs and goals that were not identified in the initial Solid Waste Management Plan.

APPENDIX A PUBLIC EDUCATION MATERIALS

Handout from City of Bloomington

WEST CHATHAM

SOLID WASTE MANAGEMENT PLAN

CITY OF BLOOMINGDALE

A PUBLIC HEARING INTRODUCING THE SOLID WASTE MANAGEMENT PLAN WILL BE HELD THURSDAY, JUNE 19TH, 2008 AT 7:00 PM.

The City of Bloomingdale is working to complete a West Chatham Solid Waste Management Plan. The purpose of the Plan is to outline how the City will manage solid waste over the next ten years based on population growth, economic circumstances, and other demographic trends.

The Solid Waste Management Plan estimates the amount of waste currently being disposed of in the City. The plan also identifies programs and services that would reduce the amount of waste being transported to and disposed of at landfills.

The plan is broken down into five main elements:

- Waste Reduction
- Waste Collection
- Waste Disposal
- Land Limitations
- Public Education and Involvement

Included in the plan is an inventory and assessment of programs related to each element listed above. The City has identified needs and goals related to each element and how projects will be funded and implemented to achieve these goals.

Public involvement is an integral part of any plan. The Solid Waste Management Plan will be discussed at two public meetings (one in June and another in August). Residents are encouraged to provide input and comments on the plan or about solid waste in general.

Feel free to contact the City for more information.

Handout from City of Pooler

WEST CHATHAM

SOLID WASTE MANAGEMENT PLAN

CITY OF POOLER

A PUBLIC HEARING INTRODUCING THE SOLID WASTE MANAGEMENT PLAN WILL BE HELD MONDAY, JUNE 16TH, 2008 AT 5:45 PM.

The City of Pooler is working to complete a West Chatham Solid Waste Management Plan. The purpose of the Plan is to outline how the City will manage solid waste over the next ten years based on population growth, economic circumstances, and other demographic trends.

The Solid Waste Management Plan estimates the amount of waste currently being disposed of in the City. The plan also identifies programs and services that would reduce the amount of waste being transported to and disposed of at landfills.

The plan is broken down into five main elements:

- Waste Reduction
- Waste Collection
- Waste Disposal
- Land Limitations
- Public Education and Involvement

Included in the plan is an inventory and assessment of programs related to each element listed above. The City has identified needs and goals related to each element and how projects will be funded and implemented to achieve these goals.

Public involvement is an integral part of any plan. The Solid Waste Management Plan will be discussed at two public meetings (one in June and another in August). Residents are encouraged to provide input and comments on the plan or about solid waste in general.

Feel free to contact the City for more information.

Handout from City of Port Wentworth

A sample of public education materials, article from *The Spirit*, and the agendas for each public hearing is included in Appendix A.

Article in The Spirit – local publication

Agenda for each public hearing – 6 (3 from June and 3 from August)

APPENDIX B LANDFILL CAPACITY ASSURANCE LETTERS

List letters per Gwinnett Plan

APPENDIX C TRANSMITTAL RESOLUTIONS

List resolutions per Gwinnett County