

Heart of Florida Solid Waste Working Group



**Final Report
February 2009**

Abstract:

The Heart of Florida area consists of fifteen counties in the north-central and central part of Florida. As part of comprehensive strategic solid waste management planning in the region, an inventory of current practices and facilities has been conducted by a cooperative effort of the Hinkley Center for Solid and Hazardous Waste Management and the region's solid waste managers. The study found that nine counties within the region export their Class I waste from the county, while five counties own and operate public landfills. However, two of the counties currently using their own landfills will most likely begin exporting their waste by 2016. Three of the counties—Baker, Bradford and Union—currently have an interlocal agreement to use a regional landfill (New River) in Union County, and anticipate their needs are met for the next 50 years. Three other counties have contracts with New River for waste disposal. Although there are several planned expansions at current landfill facilities within the Heart of Florida region, there are no new landfill sites scheduled in the region in the near future.

Several discrepancies arise when attempting to quantify waste due to differing methodologies of classification. There are also several entities within counties (municipalities, multiple county offices, Regional Planning Councils, etc.) who assist in the planning for solid waste management. Therefore, among the counties, different planning standards and goals exist, as well as various methodologies for quantifying waste and projecting future management and facility needs.

In addition to this report, an extensive database of survey results has been created.

Introduction

The mission of the Heart of Florida Solid Waste Working Group is to seek out viable and sustainable long-term solutions for municipal solid waste management needs throughout the region. The Group serves as a venue for sharing resources, is an open platform for the development and exchange of ideas, establishes the potential for advantages in contracting due to economies of scale, and serves as a credible voice in communications to the legislative and regulatory communities for the benefit of the citizens of the Group.

The Heart of Florida Solid Waste Group comprises solid waste professionals from Alachua, Baker, Bradford, Citrus, Clay, Gilchrist, Columbia, Hamilton, Hernando, Lake, Levy, Marion, Putnam, Sumter, Suwannee and Union Counties. The Cities of Gainesville and Ocala and the New River Regional Landfill also participate in the group.

The purpose of the initial phase of research was to investigate the solid waste resources, practices, and capacities of member counties of the Heart of Florida region and to provide a comprehensive database of current solid waste disposal practices within the region.

Specific tasks associated with this initial study included the following:

- Identify current area facilities and their capacities and projected lifespans. These facilities include but are not limited to landfills, transfer stations, waste-to-energy (WTE) plants, material recovery facilities, mulching/composting facilities, convenience centers.
- Identify proposed or planned area facilities, capacities and projected lifespans.
- Identify current and projected waste streams (commodities including but not limited to those listed below) being generated by both counties and other entities as they relate to Group facilities.
 - MSW
 - C&D
 - Recyclables
 - Yard waste
 - White goods
 - Tires
 - Household hazardous waste

- Identify the current collection systems including haulers names, contract terms, expiration dates, types of service provided, and future contract considerations. Facility data will be listed in order of remaining permitted and/or constructed capacity both in terms of years and volume from least to greatest.
- Organize the collected solid waste information into a database suitable for assisting future planning activities.

Methodology

It is important to distinguish between the Heart of Florida Working Group and Heart of Florida Counties. In some circumstances the Board of County Commissioners (BOCC), otherwise known as “the County” has complete control over the management of solid waste for the entire county. In other counties, however, this is not the case; municipalities within these counties may or may not utilize the county landfill or transfer station, or their residents may choose a subscription hauler who delivers waste outside of the county. This report utilizes county wide information as well as statistics compiled on those specific Heart of Florida entities (namely county governments) to describe as accurately as possible the solid waste management facilities and practices in the Heart of Florida region.

All of the population statistics come from the University of Florida’s Bureau of Economic and Business Research (BEBR). The overall population projections for years 2010-2035 (Table 2 in the report) use BEBR’s 2007 population estimate for each county as a starting point and then extrapolate the projections using population trends since 2000. BEBR made adjustments, however, to the underlying population data in some counties before applying their projection technique. These adjustments are for those where institutional populations, such as university students or prison inmates, account for a large proportion of the total population. Heart of Florida counties that fall under this category include Alachua, Baker, Bradford, Gilchrist, Hamilton, Suwannee and Union. Further details related to the methodology of the population projections can be found in *Projections of Florida Population by County, 2007-2035*, Volume 41, Bulletin 150, March 2008, available online at www.bebr.ufl.edu.

The methodology described above pertains to the overall county population projections, and represents data currently available. However, the population projections by municipality (which are used in the county profiles at the end of report), uses 2005 as the launch year and extrapolates using population trends since 1990. Although these data are older than the data used for the overall county projections, it still represents the general trend of population growth by

municipality over the next 35 years. For additional information related to the municipal population projections please see the University of Florida Shimberg Center for Affordable Housing's *AFFORDABLE HOUSING NEEDS ASSESSMENT: Population and Household Projection Methodology* available at <http://flhousingdata.shimberg.ufl.edu/docs/PopHousingProjMeth.pdf>).

The majority of the waste generation characterizations are based on the State of Florida's Department of Environmental Protection's (DEP) 2006 Solid Waste Management Annual Report. Although 2007 waste characterization data were collected from the Heart of Florida Working Group participants, much of the waste projections for this report are based on the 2006 DEP data. Even though there is no precise information concerning the percentage of overall waste each solid waste department is managing, an estimate was made by comparing the overall county tonnages to what the Heart of Florida county governments reported for this report using their 2007 data. The landfills and transfer stations reported within the study only pertain to those that are managed by the Heart of Florida Working Group members. Again, with the exception of a few municipalities, the New River Solid Waste Association Regional Landfill, and the Lake County Covanta Waste to Energy plant, the majority of these facilities are operated by local counties' environmental or solid waste departments. Also, if a privately run facility such as a Material Recovery Facility (MRF) is located onsite at the county landfill or transfer station it is also included in this study. Privately owned C&D disposal facilities (those not managed by County government) located throughout the Heart of Florida area were not included in the survey.

Description of Heart of Florida Area

The Heart of Florida area consists of fifteen counties in the central and north-central regions of the State (Figure 1). In order to understand waste generation characterization and management of the counties involved in the Heart of Florida Solid Waste Working Group, it is helpful to understand the economic and geographical nature of the area. The total geographical area of the fifteen counties is 15,606.89 square miles, which accounts for 24 percent of Florida's total land area. With only 10 percent of the State's population, the average housing density per square mile is 56, with Hernando County being the densest of the Heart of Florida counties and Hamilton County having the fewest houses per square mile. See Table 1 for a summary of geographical information by county.

Figure 1. Heart of Florida Area

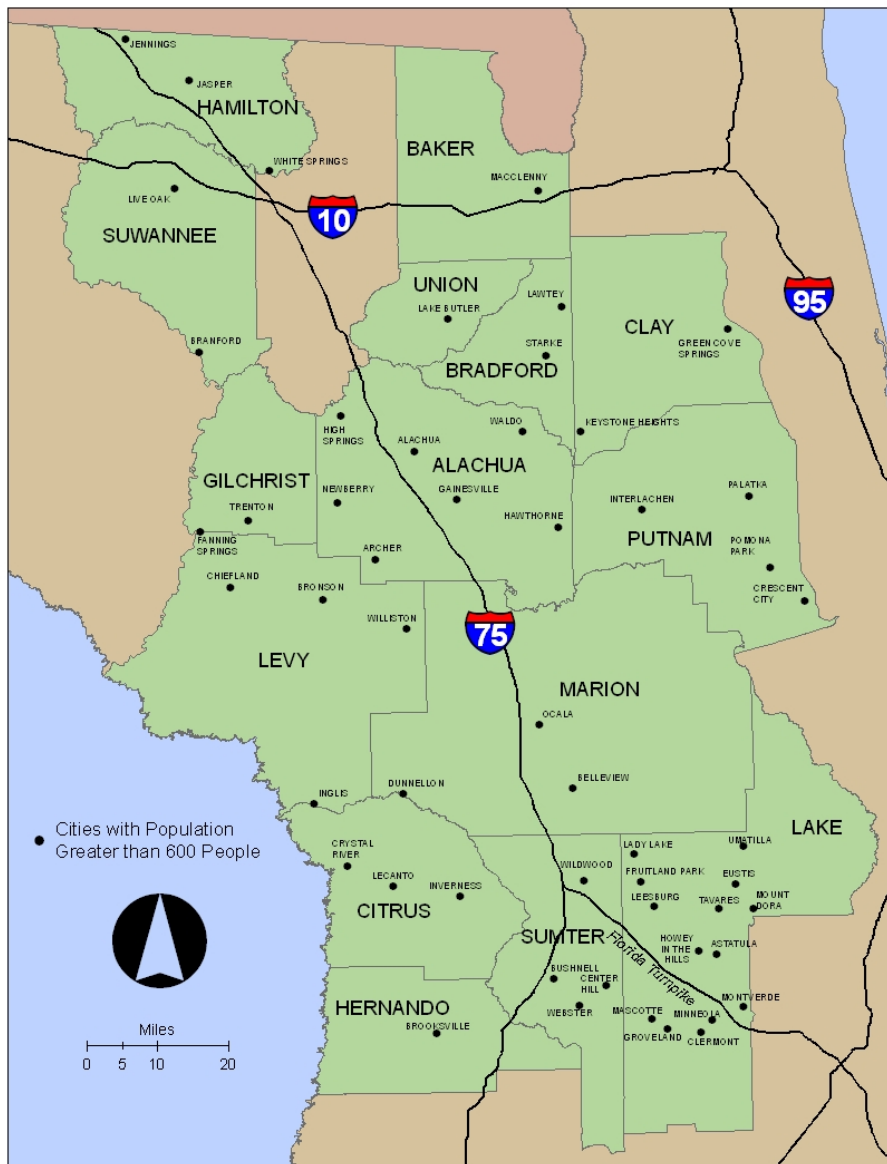
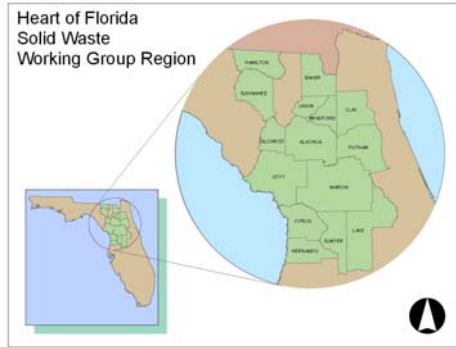


Table. 1 Geographical information for Heart of Florida Counties (From most to least populous)

County	Population (estimated 2007)	Area in square miles; Total area	Density per square mile (population)	Density per sq. mile of land area; Housing units (2000 Census data)
Marion	325,023	1663.01	195.44	77.7
Lake	286,499	1156.4	247.75	107.9
Alachua	247,561	969.12	255.45	108.8
Clay	184,644	643.69	286.85	89.4
Hernando	162,193	589.08	275.33	131.1
Citrus	140,124	773.15	181.24	106.5
Sumter	89,771	580.31	154.69	46.2
Putnam	74,799	827.16	90.43	46.9
Levy	40,045	1412.32	28.35	14.8
Suwannee	39,608	691.9	57.25	22.8
Bradford	29,055	300.04	96.84	32.8
Baker	25,623	588.89	43.51	13
Gilchrist	17,106	355.47	48.12	16.9
Union	15,722	3736	4.21	15.5
Hamilton	14,705	519.31	28.32	9.6
TOTAL	1,692,478	15,606.89	108.44 (Average)	

Population Trends

The current population of the Heart of Florida counties is around 1.7 million, which accounts for 10% of Florida’s total population. This number is expected to increase to 2.0 million by 2020 and to 2.5 million by 2030. Marion is the most populous Heart of Florida County with an estimated 2007 population of 325,023, followed by Lake with 286,499 and Alachua with 247,561. The least populous county in the region is Hamilton with a population of 14,704. When looking at projected growth, there is no dramatic shift in the rankings among the counties, although Sumter and Lake show the highest growth rate, with both counties expected to more

than double their populations between 2000 and 2030. Table 2 displays population trends and projections by county through 2030.

Table 2. Population Trends and Projections by County (BEBR)

County	Year						
	2007	2010	2015	2020	2025	2030	2035
Alachua	247,561	253,400	269,900	283,200	296,000	308,000	319,000
Baker	25,623	26,400	28,400	30,200	31,900	33,500	35,000
Bradford	29,055	29,600	30,900	32,200	33,400	34,500	35,500
Citrus	140,124	145,000	158,200	170,300	182,000	192,900	203,000
Clay	184,644	194,700	221,200	245,800	269,900	292,700	313,800
Gilchrist	17,106	17,800	19,700	21,500	23,200	24,900	26,400
Hamilton	14,705	14,900	15,400	15,800	16,200	16,600	17,000
Hernando	162,193	169,100	187,800	205,100	221,900	237,600	252,200
Lake	286,499	303,500	347,900	389,500	430,200	468,700	504,500
Levy	40,045	41,400	45,200	48,600	52,000	55,100	58,000
Marion	325,023	340,500	381,400	419,300	456,300	491,100	523,200
Putnam	74,799	75,800	78,400	80,800	83,100	85,300	87,400
Sumter	89,771	97,400	117,400	136,100	154,500	172,100	188,500
Suwannee	39,608	42,800	46,100	49,100	52,000	54,700	57,200
Union	15,722	16,100	16,900	17,600	18,400	19,100	19,700
TOTAL	1,692,478	1,768,400	1,964,800	2,145,100	2,321,000	2,486,800	2,640,400

County Government Budget Info

County budgets within the project area vary greatly, as does the percentage of county budgets allocated for solid waste management. Of the fifteen Heart of Florida counties, about half operate as an enterprise fund. County budget summaries are outlined in Table 3.

**Table 3. County Budgets for Fiscal Year 2007-08
(from largest budget to smallest)**

County	Departmental Budget (Fiscal Year 2007-08) in \$
Clay	25,498,414
Alachua	24,550,595
Marion	23,824,266
Lake	23,140,058
Hernando	10,158,136
Putnam	7,088,079
Citrus	6,903,550
Suwannee	3,975,377
Levy	3,383,011
Sumter	2,386,578
Bradford	1,328,535
Union	1,216,435
Baker	996,514
Gilchrist	948,515
Hamilton	255,951*
New River Solid Waste Association	8,527,000
TOTAL	\$143,925,063

*Recycling and Solid Waste Management Costs only

Waste Characterization

According to a 2007 U.S. Environmental Protection Agency report, residential waste (including waste from multi-family dwellings) makes up 55-65% of total MSW generation in the country. Commercial waste (including waste from schools, institutions, and businesses) constitutes between 35-45% of the country's MSW (2007 EPA Report <http://www.epa.gov/osw/nonhaz/municipal/pubs/msw07-rpt.pdf>).

In 2006, Florida generated 25,039,675 tons of residential and commercial waste, constituting 71% of the total MSW waste. Survey results of the Heart of Florida Solid Waste Working Group

showed similar results for the solid waste collected in 2007, with residential and commercial waste composing 79% of the region's total solid waste generated (Figure 2).

For this study, the Heart of Florida county solid waste departments or environmental departments reported a total of 1,404,775 tons of MSW collected from all sources in 2007 (Figure 3). When comparing these survey results with the 2006 waste reported to DEP, the Heart of Florida Solid Waste Working Group manages around 76% of all MSW generated in the 15-county region.

Figure 2. Heart of Florida Solid Waste Working Group Waste Composition

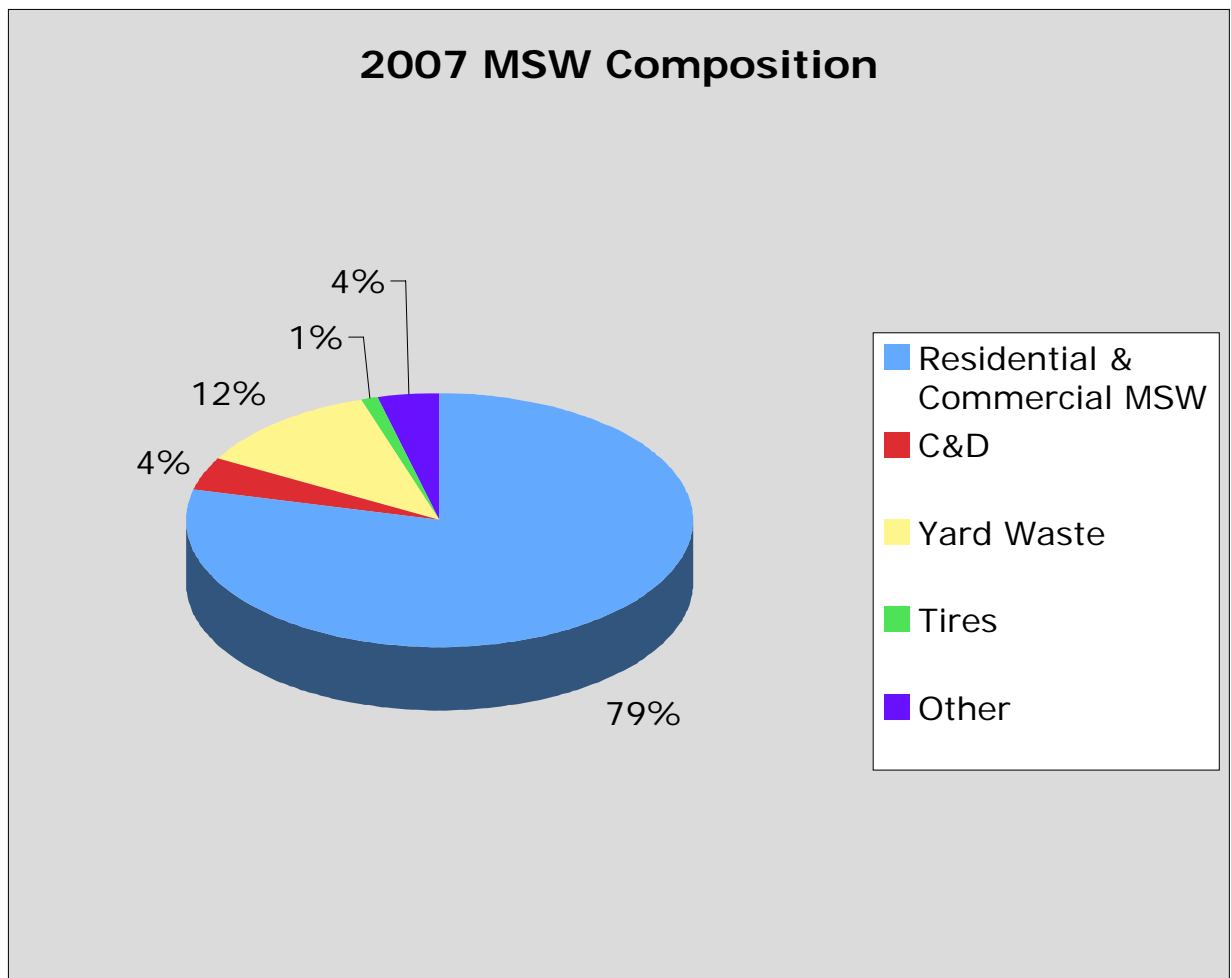
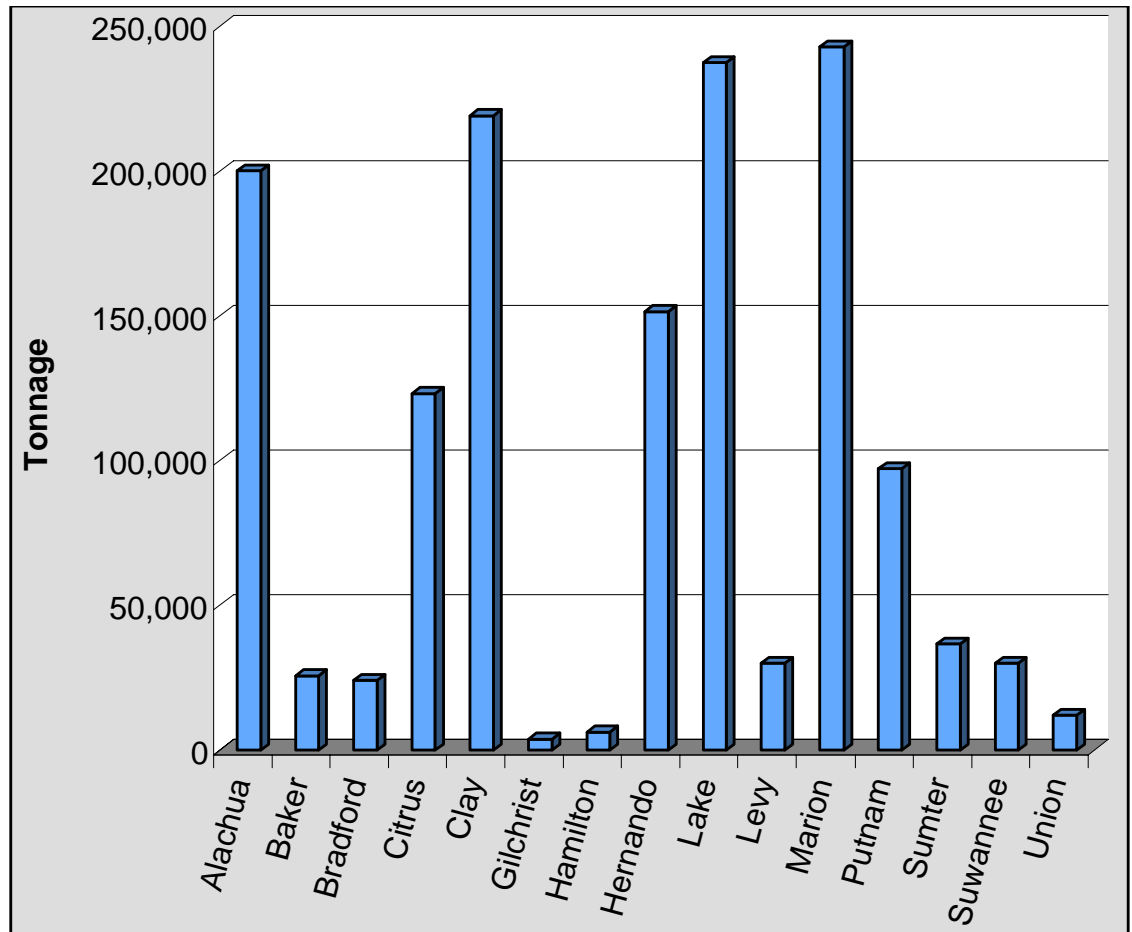


Figure 3. Total Solid Waste Managed by the Heart of Florida Working Group Participants 2007



Waste Collection and Management

Of the 15 Heart of Florida counties, nine county governments export their waste to an out of county landfill (Table 4). Of the waste that is exported, 60 percent is still managed in the Heart of Florida region, while the remaining 40 percent goes to disposal facilities outside of the region.

Table 4. Exporting Counties within Heart of Florida Area

County	Landfill Waste is Exported to
Alachua	New River Regional Landfill
Levy	New River Regional Landfill
Suwannee	Waste Management (Chesser Island—GA)
Hamilton	Veiola (GA)
Baker	New River Regional Landfill
Bradford	New River Regional Landfill
Gilchrist	New River Regional Landfill
Clay	Waste Management (Chesser Island—GA)
Sumter	Waste Services—Omni Landfill (Holopaw)
Union*	New River Regional Landfill

*New River Regional Landfill is located in Union County, but the County does not manage it, therefore Union County’s waste is considered as exported “off-site.”

Seven county governments in the region operate their own landfills, and one county contains a regional landfill, New River, whose three member counties (Baker, Bradford, Union) are part of the Heart of Florida area. In all, there are six Class I landfills and three Class III landfills operated by the counties in the Heart of Florida area. Lake County also has a waste-to-energy plant, owned and operated by Covanta, which receives 80% of the County’s waste. Levy and Hamilton counties each export their Class I waste, but still operate a Class III landfill. The nine landfills dispose of nearly 2,700 tons per day region-wide. See Table 5 for a description of these facilities.

There are multiple ways in which counties collect and haul waste. Seven counties have permitted transfer stations for this purpose. Due to the re-opening of the County Landfill in 2008, Marion County is not currently using its transfer station. There are more than 70 waste collection centers in the Heart of Florida area, some that essentially act as transfer stations. Table 6 summarizes the Heart of Florida transfer stations and collections centers. Figure 4 depicts the waste to energy plant, municipal landfills, transfer stations and number of collection centers for the Heart of Florida area.

Table 5. Active Landfills and WTE Facilities: Heart of Florida Area

County	Facility Name	Class Type	Permit expiration date	Total area of site (in acres)	Capacity (in tons per year)	Year facility opened	Estimated year of closing	Average daily waste managed
Lake	Lake County Solid Waste Management Facility	I	N/A	346 acres	N/A	1995	2025	8.25 tons/day (Class 1)
Lake (Covanta)	Covanta of Lake Waste to Energy	WTE	2011	25.25	170,000	1991	2033	519 tons/day
Marion	Baseline Landfill	I	2014	140	205,000	1985	2016	550 tons/day
Levy	Levy County Solid Waste Management Facility	III	2009	109	N/A	N/A	2012	90 tons/day
Union (New River)	New River Regional Landfill	I & III	2011	78	275,000	1992	2018	850 tons/day
Hernando	Hernando County Northwest Landfill	I	2010	246	N/A	1991	2010	400 tons/day
Putnam	Putnam County Central Landfill	I	2010	118.5	115,500	1982	2010	300 tons/day
Hamilton	Hamilton Class 3 Landfill	III	2009	7.3	N/A	N/A	2030	7 tons/day
Citrus	Citrus County Central Landfill	I	2010	80	108,500	1990	2015	400 tons/day

Table 6. Active Transfer Stations and Collection Sites: Heart of Florida Area

	Transfer Stations (w/collection center)	Staffed Recycle & Solid Waste Collection Centers	Recycle Drop-off Only	Household Waste Only--No Recyclables	Average tons per day
Alachua	1	5			600
Baker	0	8			62
Bradford	0	6			60
Citrus	0	0	12		12
Clay	2*	5			445
Gilchrist	1	2	1***		10
Hamilton	0	1			1.5****
Hernando	2	2	7		N/A
Lake	0	5			N/A
Levy	1	0	20***		50****
Marion	1**	17		2	N/A
Putnam	0	2	3		N/A
Sumter	1	0			68
Suwannee	1	14			N/A
Union	0	5			30

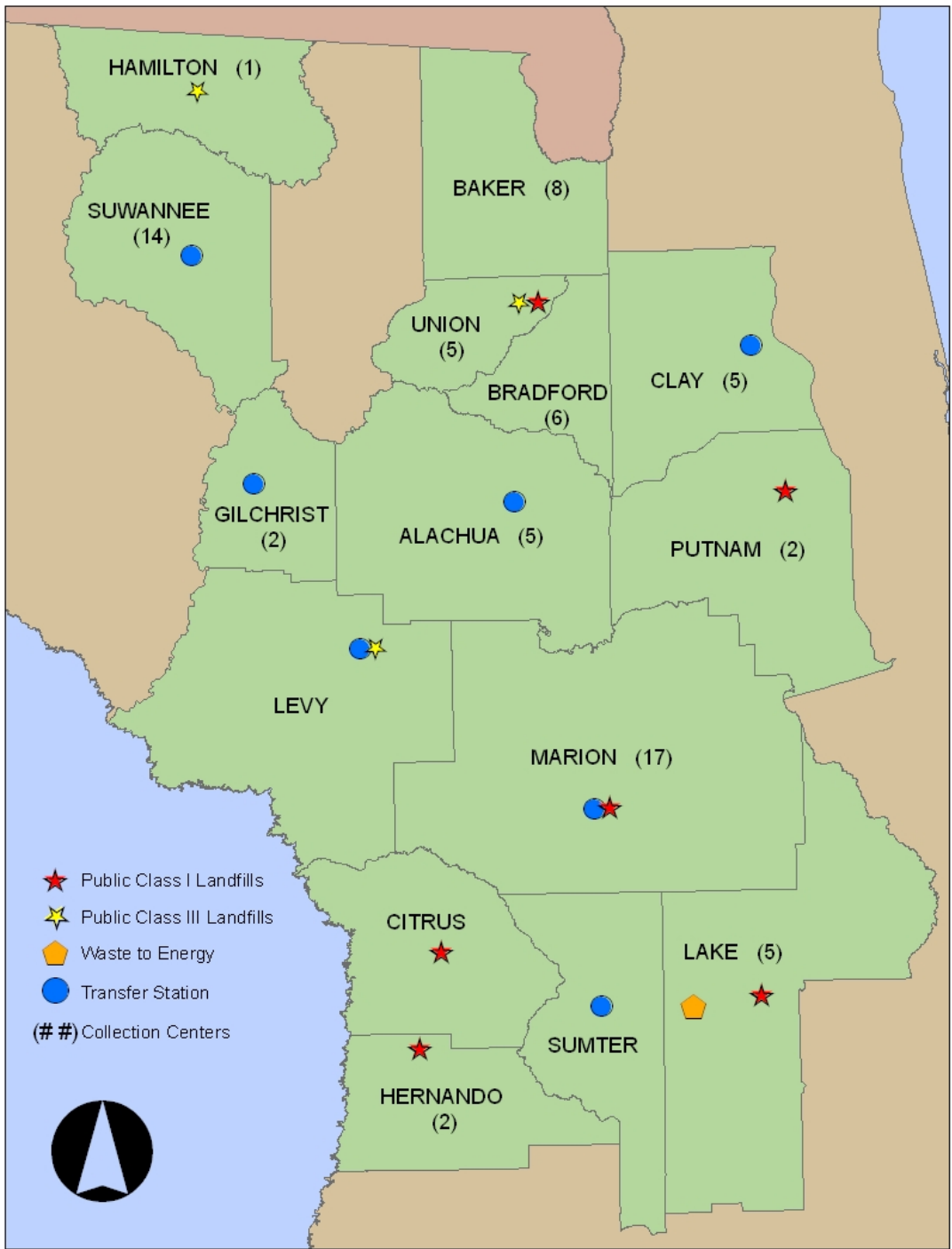
*One of these transfer stations is for C&D only

**Not currently active

***Mobile Units

****Exported Class I waste only; does not include Class III waste that is managed onsite

Figure 4. Location of Landfills, Transfer Stations and number of Waste Collection Centers in Heart of Florida area



Nine counties have material recovery facilities (MRFs) onsite. For this report, all counties that operate bailers were considered a MRF, regardless of whether they have a picking line or are permitted by DEP as a MRF. Of the large MRFs with picking lines (Clay, Putnam, Alachua, Hernando and Lake) Lake, Hernando and Clay, own and operate their MRFs, while Putnam and Alachua counties lease their property to private companies for facility operations.

Eleven counties have household hazardous waste (HHW) collection centers onsite. Those counties which do not have HHW collection facilities hold household hazardous waste collection events (formerly called “Amnesty Days”) at various times during the year. The Solid Waste Directors in Bradford and Union counties (neither have HHW centers) expressed a need and a desire to establish household hazardous collection center in their county. Figure 5 shows the counties who host or operate MRFs and HHW collection centers.

All the counties have waste tire collection centers and all but four counties have yard waste processing sites. Of the yard waste processed, 68% is mulched or composted, 16% is exported out of the Heart of Florida region, 14% is burned and 2% is landfilled. Eight counties provide mulched yard waste free to the public. Table 7 summarizes the facilities operated by the counties involved with the Heart of Florida project.

Figure 5. Location of Material Recovery Facilities and Household Hazardous Waste Collection Centers in the Heart of Florida Area

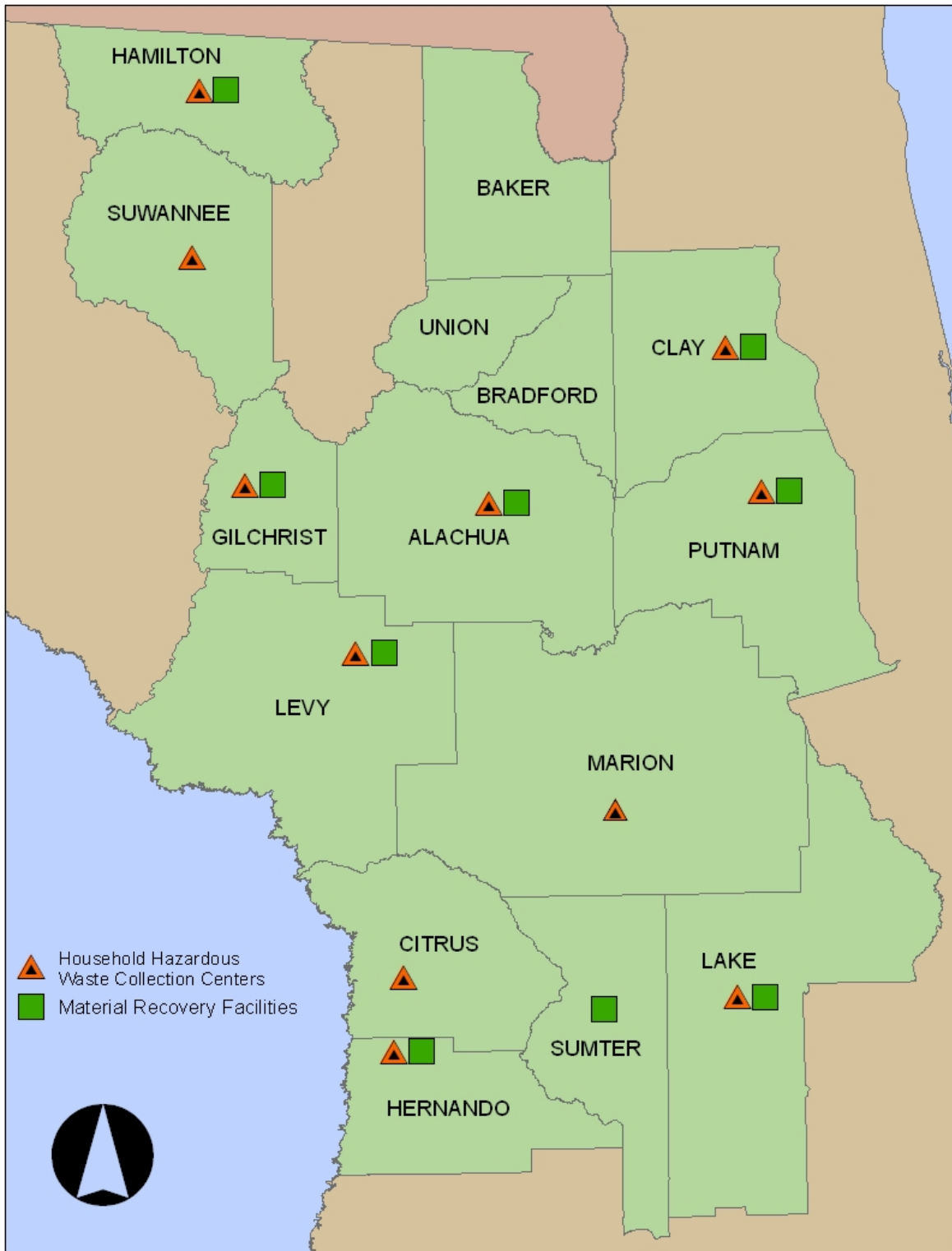


Table 7. Summary of Number and Types Heart of Florida Facilities

	Class I Landfil 1	Class III Landfil 1	Waste to Energy Plant	Transfer Station	Household Waste Collection Site	Tire Collection Center	Yard Waste Processing	Household Hazardous Waste Collection Center	Material Recovery Facility
Alachua				1	5	1	1	1	1*
Baker					8	1	1		
Bradford					6	1			
Citrus	1				0	1	1	1	
Clay				1	5	1	1	1	1
Gilchrist					2	1		1	1
Hamilton		1			1	1		1	1
Hernando	1				2	1	1	1	1
Lake	1		1*		5	1	1	1	1
Levy		1		1	0	1	1	1	1
Marion	1			1**	18	1	1	1	
Putnam	1				2	1	1	1	1*
Sumter				1	0	1			1
Suwannee				1	14	1	1	1	
Union					5	1			
New River	1	1				1	1		

*Operated by private company

**Exists, but is not in use

Only three counties (Lake, Putnam and Clay) have county-wide curbside collection service. Two additional counties, Alachua and Hernando, have curbside collection service in part of the county. All counties allow for self-haul to either their transfer stations or collection centers.

Although costs and fees for collection and disposal of solid waste are of great interest to the Heart of Florida Solid Waste Working Group, it is difficult to compare data among counties. Size of containers or frequency of collection, for instance, makes it difficult to compare rates. Additionally, what is paid for by levied “assessment fees” vary from county to county. Some counties include curbside pickup or landfill closure costs in the fee. Other counties may include such costs as fire service or mosquito control in their fees. The database attempts to differentiate among the counties and explicitly explain what is covered in the fees. However, comparisons among fee structures should be made with caution. Table 8 summarizes each county’s collection practices.

Table 8. Summary of Household Collection Services

	How is residential MSW collected in your service area?			Collection service coverage			Fees for service		
	Mandatory curbside w/ your organization	Voluntary subscription w/ certified or franchised hauler	Self-haul/ other	Number of households receiving curbside service	% of total households in service area receiving curbside service	Frequency of collection	Mandatory Residential Solid waste management assessment fee (per household/ year)	Separate Garbage Collection Fee (per household per year)	Tipping fees for residential MSW (per ton) self-hauled
Alachua	Only in designated urban area	Only in designated "subscription area"	x	21,668 (mandatory)	64%	1x/week	Rural (no curbside): \$132.69	Urban only: Varies due to PAYT system^	\$45.50*
Baker			x	N/A	N/A		\$52.59	+	*
Bradford			x	N/A	N/A		\$110	+	*
Citrus			x	69,000	72%	1-2x/week	\$25	+	Approx. \$30
Clay	x		x	59,433	100%	1x/week	\$84	\$146	\$57*
Gilchrist			x	N/A	N/A		\$80.90		*
Hamilton			x	N/A	N/A		None		\$25
Hernando	x		x	N/A	N/A	2x/week	\$63.05	\$144	\$53*

Table 8 Summary of Household Collection Services (Continued)

	How is residential MSW collected in your service area?			Collection service coverage			Fees for service		
	Mandatory curbside w/ your organization	Voluntary subscription w/ certified or franchised hauler	Self-haul/ other	Number of households receiving curbside service	% of total households in service area receiving curbside service	Frequency of collection	Mandatory Residential Solid waste management assessment fee (per household/ year)	Separate Garbage Collection Fee (per household per year)	Tipping fees for residential MSW (per ton) self-hauled
Lake	x		x	66,643	100%	2x/week	\$174	^	\$40*
Levy		x	x	N/A	N/A		\$25	+	\$61
Marion		x	x	N/A	Approx. 44%	Varies-	\$87		*
Putnam	x		x	29,603	100%	1x/week	\$160	^	\$42*
Sumter		x	x	N/A	N/A		None		Approx. \$34.24
Suwannee		x	x	N/A	N/A		\$130		*
Union		x	x	N/A	N/A		\$125		*

- *No Charge for residents paying an assessment fee;
- +Customer negotiates with private hauler;
- ^Included in overall assessment

Waste Generation

The national average per capita waste generation for 2006 was 4.65 pounds per person per day. For the Heart of Florida area in 2006, the county with the minimum waste generation rate calculated from reported data was Gilchrist with 1.99 lbs/person/day and the maximum is Hernando¹ with 8.76 lbs/person/day. The median for the Heart of Florida area in 2006 was 6.01 and the mean was 5.2 lbs/person/day, which more closely reflects the national average than the 2006 state of Florida average of 10.46 lbs/person/day. Table 9 shows the results of the 2006 DEP Report used to calculate many of the waste projections for the area.

Florida Statutes require that counties assess their solid waste management every five years via the capital improvement elements of their comprehensive plan. This assessment includes facility capacity projections as well as level of service needs. The level of service is an estimate of the amount of trash that is generated within the county and is usually reported in pounds per person per day. An example of this mandate is found in the Union County Comprehensive Plan: *“The County shall continue to coordinate the extension of, or increase in, the capacity of solid waste facilities by scheduling the completion of public facility improvements and requiring that they are concurrent with projected demand.”* Similar wording can be found in Comprehensive Plans across the region and the State. The data collected in this project indicate that eight Heart of Florida counties are generating more waste than the Level of Service Generation Rate specified in the Solid Waste Element of their Comprehensive Plan and six counties are generating less than their Level of Service Generation Rate.

It is difficult to assess the service population for county governments due to lack of flow control within the counties. As mentioned in the methodology, the county population may not be indicative of the number of people using County waste management services. This problem affects such calculations, as per capita waste generation, which in turn affects future waste projections. Therefore, it was necessary to use DEP’s Solid Waste Annual reports on waste generation for projecting future needs in the Heart of Florida area. In order to do this projection, the last estimated per capita waste generation rate (2006) was used for the per capita waste generation rate through 2030. Of course, this number can go up or down depending on counties’ efforts to divert waste from entering landfills. Figure 7 shows the amount of waste generated compared to the Heart of Florida population. Figure 6 compares the difference in waste

¹ Suwannee County has the highest rate of the Heart of Florida counties, but due to the likelihood of over reporting of ferrous metals, the data was not included in the calculations.

generation between the average projected levels of service for the Heart of Florida area (as outlined in the County Comprehensive Plans) versus the actual levels of service (using the 2006 actual rate).

Table 9. 2006 Heart of Florida Counties Waste Summary (2006 Solid Waste Management Annual Report, DEP)

2006 Quantities of Municipal Sector Waste Recycled, Composted and Disposed by County (FDEP Recycling Data as reported by Counties)							
County	Estimated Population	Landfilled (Refuse Tons)	Diverted (Recycled or Composted, in Tons)	Total Tons of Waste Generated (Gross)	Pounds/person/day	MSW Recycling Rate	Overall Diversion Rate
Alachua	243,779	221,783	62,831	284,614	6.4	22.08%	0.2833
Baker	25,004	16,810	2,172	18,982	4.16	11.44%	0.1292
Bradford	28,551	18,138	6,333	24,471	4.7	25.88%	0.3492
Citrus	136,749	133,634	40,084	173,718	6.96	23.07%	0.3
Clay	176,901	159,459	45,453	204,912	6.35	22.18%	0.285
Gilchrist	16,703	5,053	1,008	6,061	1.99	16.63%	0.1995
Hamilton	14,517	5,237	977	6,214	2.35	15.72%	0.1866
Hernando	157,006	197,756	53,232	250,988	8.76	21.21%	0.2692
Lake	276,783	69,734	55,865	291,767	4.7	23.52%	3.184
Levy	38,981	23,428	3,692	27,120	3.86	13.43%	0.1576
Marion	315,074	244,967	100,836	345,803	6.01	29.16%	0.4116
Putnam	74,416	41,126	18,719	59,845	4.41	31.00%	0.4552
Sumter	82,599	96,503	10,537	107,040	7.1	9.84%	0.1092
Suwannee ¹	38,799	23,428	3,692	27,120	3.86	13.43%	0.1576
Union	15,028	10,627	6,568	17,195	6.45	37.12%	0.6181
Totals	1,640,890	1,267,683	411,999	1,845,850			
Means of Totals		84,512	27,467	123,057	5.20	21.05%	0.473
Medians of Totals	74,416	41,126	10,537	59,845	4.7	22.08%	0.2833

¹Due to a suspected over reporting of ferrous metals (over 450,000 tons of waste reported), Suwannee's data were not used. Since Suwannee and Levy counties' populations are almost identical, Levy County's 2006 numbers were used as a substitute for Suwannee's to give a more realistic picture of waste produced in the region.

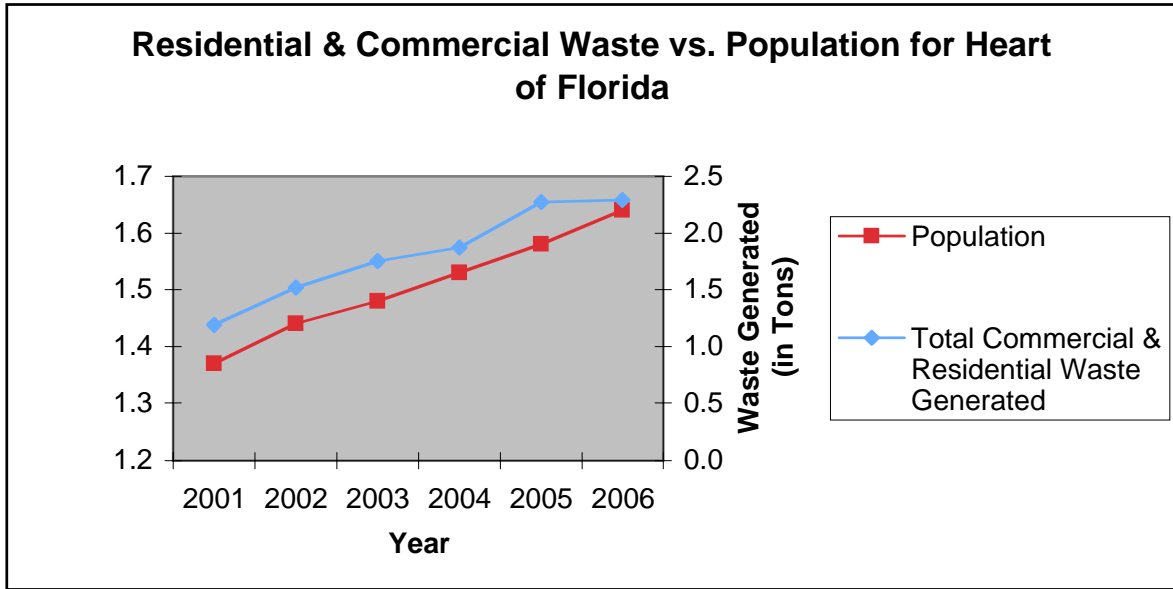
Table 10. Level of Service Planned (via County Comp Plans vs. Actual-2006)

	Level of Service as Mandated by County Comp Plan (lbs/person/day)	Actual County-wide Level of Service 2006 (lbs/person/day)
Alachua	4.0	6.40
Baker*	5.08	4.16
Bradford*	4.49	4.70
Citrus	4.3	6.96
Clay	3.43	6.35
Gilchrist	4.0	1.99
Hamilton	5.0	2.35
Hernando	4.75	8.76
Lake	6.67	4.70
Levy	2.8	3.86
Marion	6.2	6.01
Putnam	6.4	4.41
Sumter	2.04	7.10
Suwannee**	3.5	74.42
Union*	4.16	6.45
New River	N/A	N/A
HoF		
AVERAGE	4.45	4.95**

*These counties' Comprehensive Plans take into account the future use of New River's facilities, rather than planning specifically for their own county.

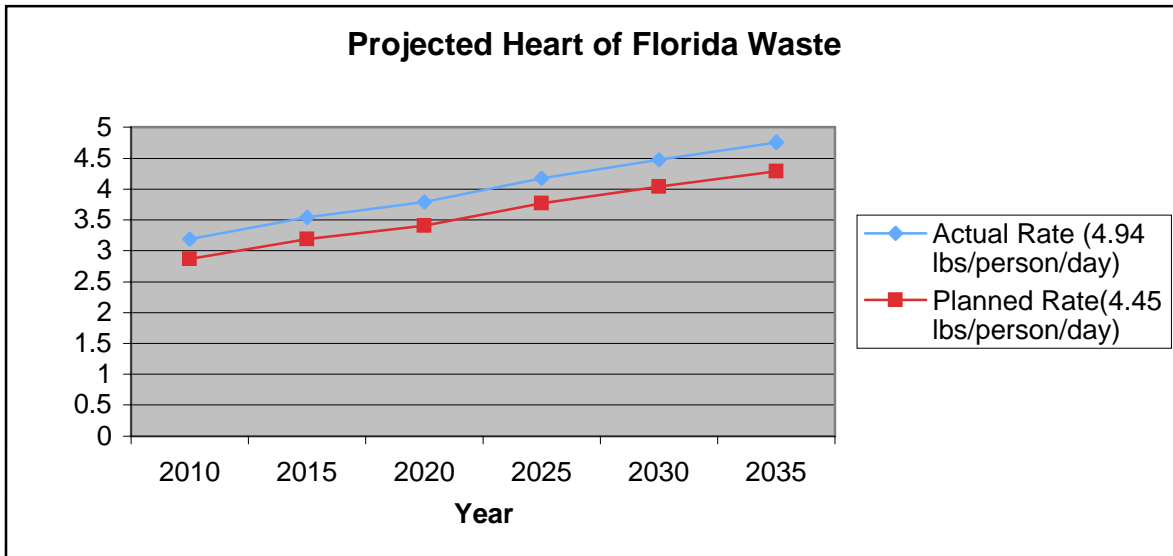
**Suwannee County was discarded from the average calculation due to potential over-reporting of ferrous metals data.

Figure 6. Waste Generated vs. Heart of Florida Population



Based on data from DEPs Solid Waste Annual Reports

Figure 7. Projected Heart of Florida Waste



The Planned Rate is an average lbs/person/day as designated in the Counties' Comprehensive Plans for the Heart of Florida region. The Actual rate is the Heart of Florida's 2006 average lbs/person/day as calculated from the DEP's 2006 Solid Waste Annual Report.

Conclusion

Future Needs

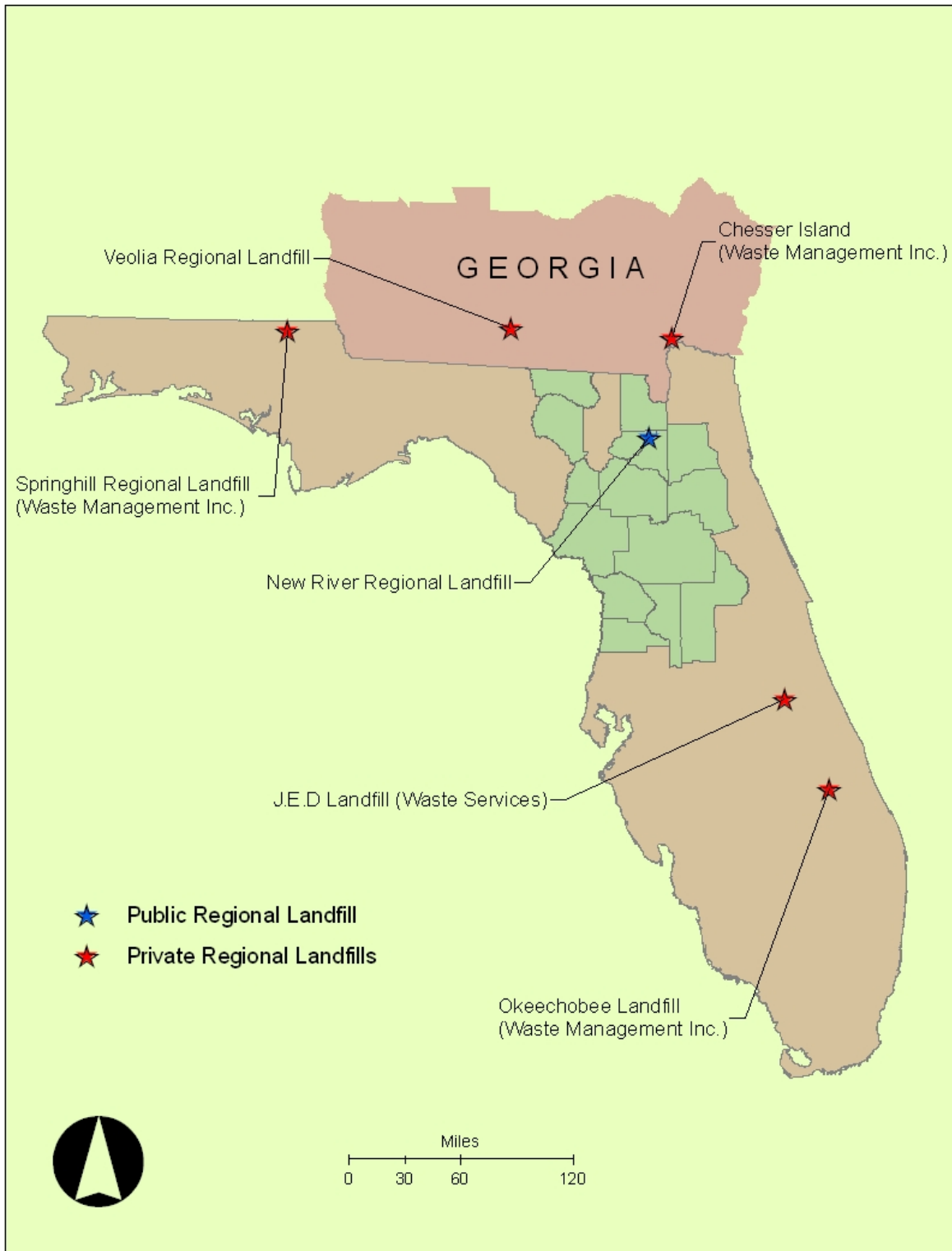
Although there are no new landfills sited by the Heart of Florida counties, six are planning to expand their current landfills (Table 11). Since Lake County sends nearly 80 percent of its municipal solid waste to Covanta for incineration, they are expected to have landfill space at least until 2025, perhaps longer. Citrus' current landfill space is projected to reach full capacity by 2016 and with the expansion they will have space until 2020. However, in order to expand the life of their landfills, Citrus, as well as Marion County, are expected to begin exporting their waste by at least 2016. Marion County has a transfer station ready for operation and Citrus expects to open a transfer station in 2010. Marion County is projected to reach full capacity by 2016. After 2016, Hernando and Putnam county governments will most likely be the only Heart of Florida Counties disposing of all their Class I solid waste onsite via a municipal county landfill. Baker, Bradford and Union will continue their interlocal agreement as the New River Regional Association, and plan to open a Phase II expansion of their facility. This phase consists of 50-plus years of capacity available for the three counties.

A 1995 Florida Center for Solid and Hazardous Waste Management report, *Solid and Hazardous Waste Collection, Disposal, and Recycling in Florida*, analyzed the period of July 1992-June 1993. This report indicates that out of 39 Florida counties responding; only three did not operate their own Class I landfill. This trend is changing, as evidenced by this study. Today only five counties in the Heart of Florida Region have their own Class I landfill, and by 2016 that number may be down to three or four counties operating a municipal Class I landfill. As landfills close, many Florida counties are moving towards exporting waste to regional landfills. Figure 8 indicates the closest regional landfills to the Heart of Florida area. One of the beneficial impacts of the State's 75% recycling goal might be the extended life of current landfills. Education and outreach activities will be very important elements in reaching this goal. It is imperative that the Heart of Florida counties begin aggressively planning for future waste management needs.

Table 11. Future Planned Facilities

County	Facility Name	Class Type	Total area of site (in acres)	Capacity	Expected Year of Opening	Estimated Life Span
Lake	Lake County Solid Waste Management Facility Expansion of Phase III Landfill (Beginning w/ Stage 1)	Class I; Ash Monofill	Phase III(Stage 1);:18 acres Ash: 2 acres; Total of entire facility: 346 acres	Phase III (stage i): 1.5 million cy; Ultimate build-out of Phase III L.F.: 10-11.5 million cy; Ash: 247,000 cy	2010	Phase III (stage 1): 7 years; Total Phase III: 15 years
Marion	Transfer Station	T.S.	140	1200 tons/day	2016	N/A
Levy	Levy County Solid Waste Management Facility Expansion	Class III	N/A	N/A	2012	8-10 years
Union (New River)	New River Regional Landfill Phase II	Class I	300 acres	13,000,000 or 26,000,000 CY	N/A	50+years
Hernando	Hernando County Northwest Landfill Expansion	Class I	25 acres	130,000 tons/year	2010	15 years
Putnam	Putnam County Central Landfill Expansion	Class I	13 acres	522,000 tons	2009	N/A
Hamilton	Hamilton Class 3 Landfill	Class III	N/A	2030	N/A	25 years
Citrus	Citrus County Central Landfill Expansion; Transfer Station	Class I; Transfer Station	L.F.: 6 acres; T.S.:25 acres	L.F.: 108,500 tons/year T.S.: 123,000 tons/year to start;	L.F: 2009; T.S: 2010	L.F: 12 years; T.S.: 20+ years

Figure 8. Regional Landfills in Florida and South Georgia



Alachua County

Estimated 2007 County Population:
247,561

Public Works Department: Division of Waste Management

- Total 2007 MSW Managed by Alachua County: **200,606 tons**
 - % of Total County Waste Generated*: **70%**
-

- 2007 Department Budget: **\$ 24,550,595**
- Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Alachua County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Website:

www.alachuacounty.us/government/depts/pw/waste/

Principle method of waste collection:

Curbside pickup and self-haul

Facilities operated:

Transfer Station
Waste Tire Collection
Material Recovery Facility (by private company)
Yard Waste Processing
Hazardous Waste Collection Center
Residential Waste Collection Centers (5)

Future Facilities:

Resource Recovery Park

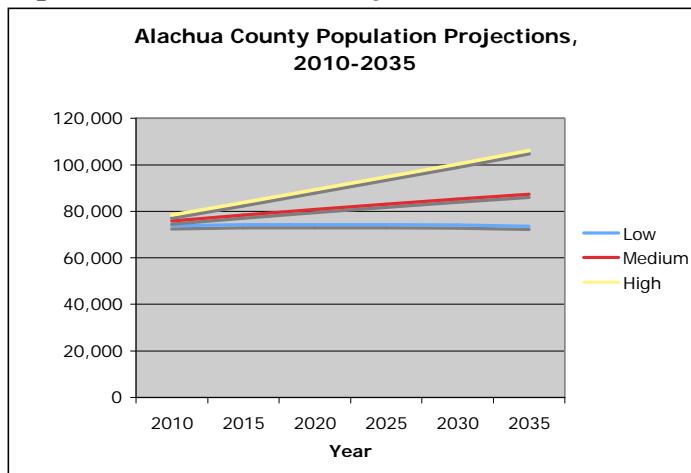
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of Management Activities performed onsite	Where does waste go after collection and processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	193,241	Collect, receive			x	
Recyclables*	3898	Collect, receive sort, bale	x			
C&D	0					
Yard Waste	927	Collect, receive, mulch	x	x		
Tires	322	Receive				x
Household Hazardous Waste	510	Receive, sort				x
E-Waste	202	Receive, sort				x
Other	1506					
TOTAL	200,606					

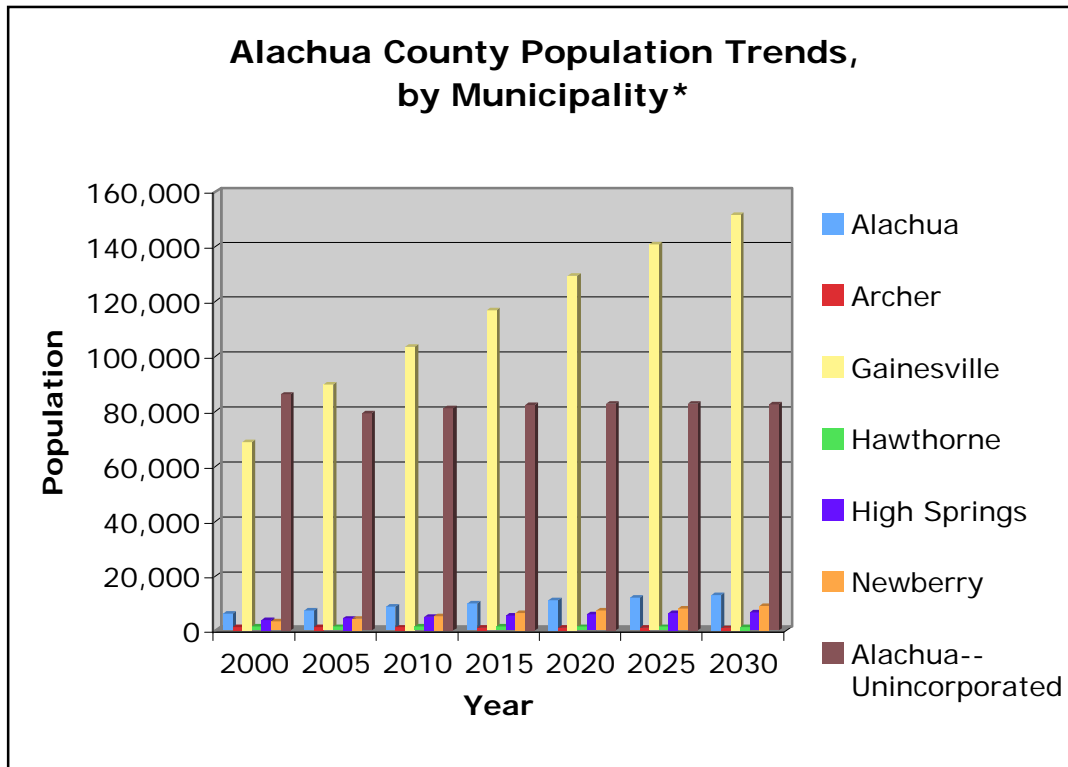
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

**Onsite means management activities that are done on county property, either by the County, or by a company contracted with the County.

Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



*Includes municipalities over 1000 people

Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Alachua County is aggressively striving for waste reduction as a primary goal in their waste management approach. This is evident in their extensive education and outreach programs, including the Alachua Exchange program that provides an online forum for the reuse and recycling of unwanted usable items. The Household Hazardous Waste Collection Center also provides a wide variety of items such as paint and household cleaning chemicals free to public for reuse. Additionally, the County is creating a Resource Recovery Park expected to open in 2011. This environmental park will house waste-based businesses ranging from manufacturing activities like tire processing to service businesses such as recycled-glass artisan studios together on a common property.

Baker County

Estimated 2007 County Population:
25,623

Baker Landfill Department

- Total 2007 MSW Managed by Bradford County: **25,704 tons**
 - % of Total County Waste Generated*: **100%**
-

- 2007 Department Budget: **\$ 996,514**
- Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire County, compared to the amount of waste reported by Baker County for 2007. The DEP 2007 total county waste numbers were not available at the time of this report.

Webpage:

<http://www.bakercountyfl.org/>

Principle method of waste collection:

Self-haul to Collection Centers

Facilities operated:

Residential Waste Collection Centers (8)

Waste Tire Collection

Yard Waste Processing

Future Facilities:

No immediate plans

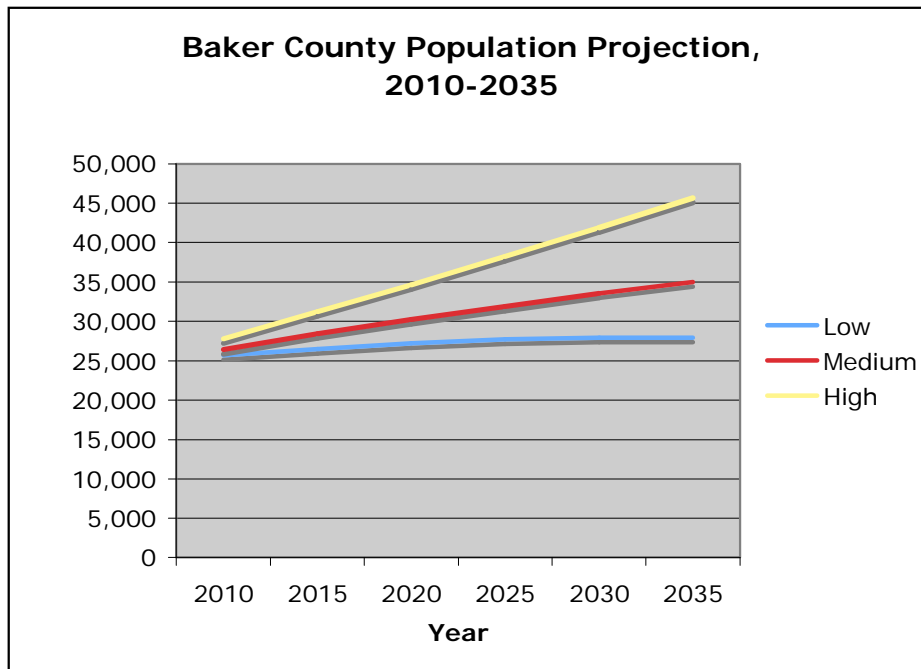
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection and/or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	12,858	Receives			x	
Recyclables*	N/A	Receives			x	
C&D	7511	Receives			x	
Yard Waste	4751	Receives, burns		x	x	
Tires	156	Receives			x	
Household Hazardous Waste	N/A					
E-Waste	N/A					
Other	428					
TOTAL	25,704					

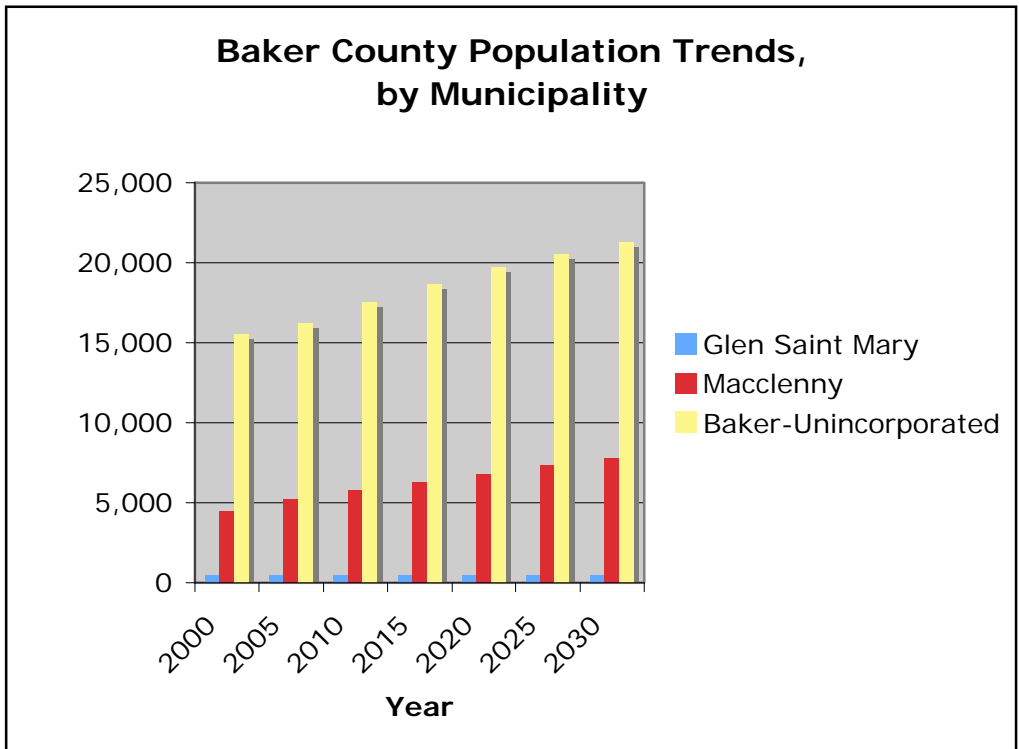
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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Baker County is part of the New River Solid Waste Association. Baker County’s Solid Waste Department (which is part of the County Roads Department) partnered with the town of MacClenny to purchase an air curtain burner for processing yard waste. When asked about the future needs of the County, the Director suggested that although Baker County has its disposal needs met far into the future via the New River landfill, he believes that “waste to energy” holds the key to future solid waste management in the region and in the State.

Estimated 2007 County Population:
140,124

Bradford County

Solid Waste and Code Enforcement

- Total 2007 MSW Managed by Bradford County: **24,053 tons**
 - % of Total County Waste Generated*: **98%**
-

- 2007 Department Budget: **\$1,328,535.00**
- Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Bradford County for 2007. The DEP 2007 total county waste numbers were not yet available at the time of this report.

Website:

<http://www.bradford-co-fla.org>

Principle method of waste collection:

Self-haul to Collection Centers

Facilities operated:

Residential Waste Collection Centers (6)
Waste Tire Collection

Future Facilities:

No immediate plans

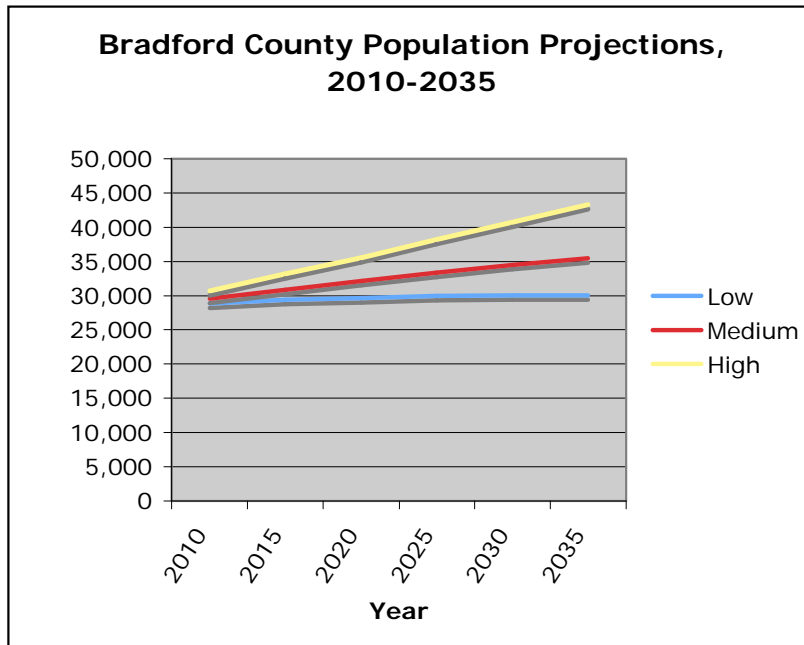
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection and processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	12,460	Receives			x	
Recyclables*	N/A	Receives				
C&D	4101	Receives			x	
Yard Waste	2735	Receives			x	
Tires	142	Receives			x	
Household Hazardous Waste	N/A					
E-Waste	N/A					
Other	4615					
TOTAL	24,053					

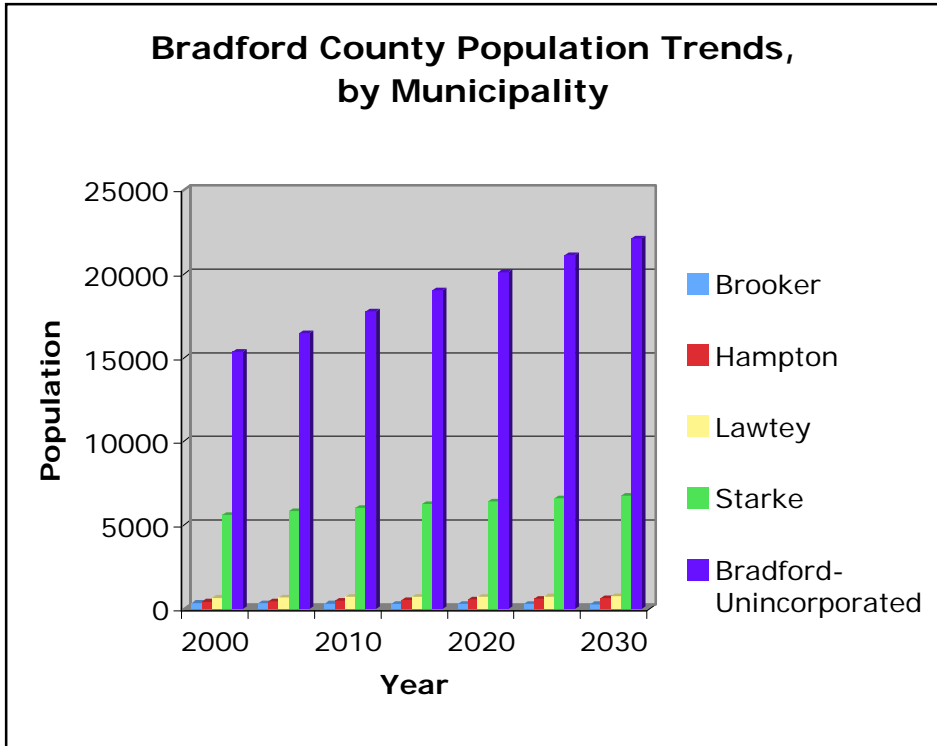
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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

The office of the Director of Solid Waste is the only office in the Heart of Florida area that is not located at the County landfill or transfer station. Instead, the office is located in the middle of Starke in an office park. Part of the purpose of this location is the fact that the Director also serves as the County Code Enforcement Officer. The County also has a unique commercial solid waste assessment fee scheme in that the fee is dependent upon how much waste the business generates. The commercial category has 11 subcategories that range from \$220 to \$4,400. The County relies on the contracted haulers to report how much waste a business is generating. Another interesting note: churches and apartment complexes are classified in the residential category for assessment purposes.

Citrus County

Public Works Department—Solid Waste Management Division

Estimated 2007 County Population:
140,124

- Total 2007 MSW Managed by Citrus County: **123,108 tons**
 - % of Total County Waste Generated*: **71%**
-

- 2007 Department Budget: **\$7,085,525**
- Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Citrus County for 2007. The DEP 2007 total county waste numbers were not yet available at the time of this report.

Website:

http://www.bocc.citrus.fl.us/pubworks/swm/solid_waste.htm

Principle method of waste collection:

Subscription service, self-haul to Central Landfill

Facilities operated:

Class I Landfill
Yard Trash Processing Facility
Waste Tire Collection
Household Hazardous Waste Collection

Future Facilities:

Class I Landfill Expansion
Transfer Station

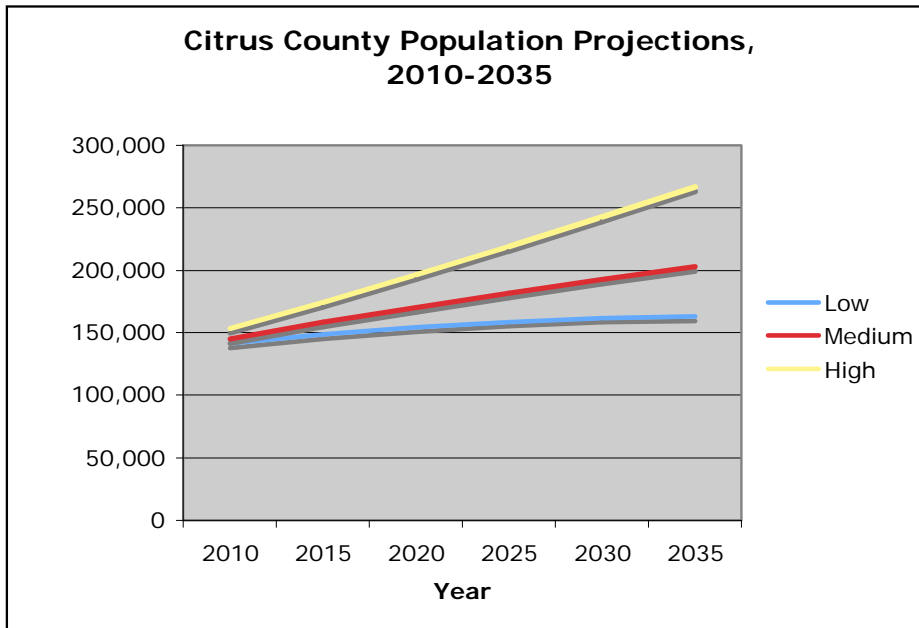
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection and processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	104,217	Receive, landfill	x			
Recyclables*	4,066	Receive, sort		x		
C&D	0					
Yard Waste	13,714	Receive, mulch	x			
Tires	292	Receive				x
Household Hazardous Waste	184	Receive, sort				x
E-Waste	318	Receive				x
Other	317					
TOTAL	123,108					

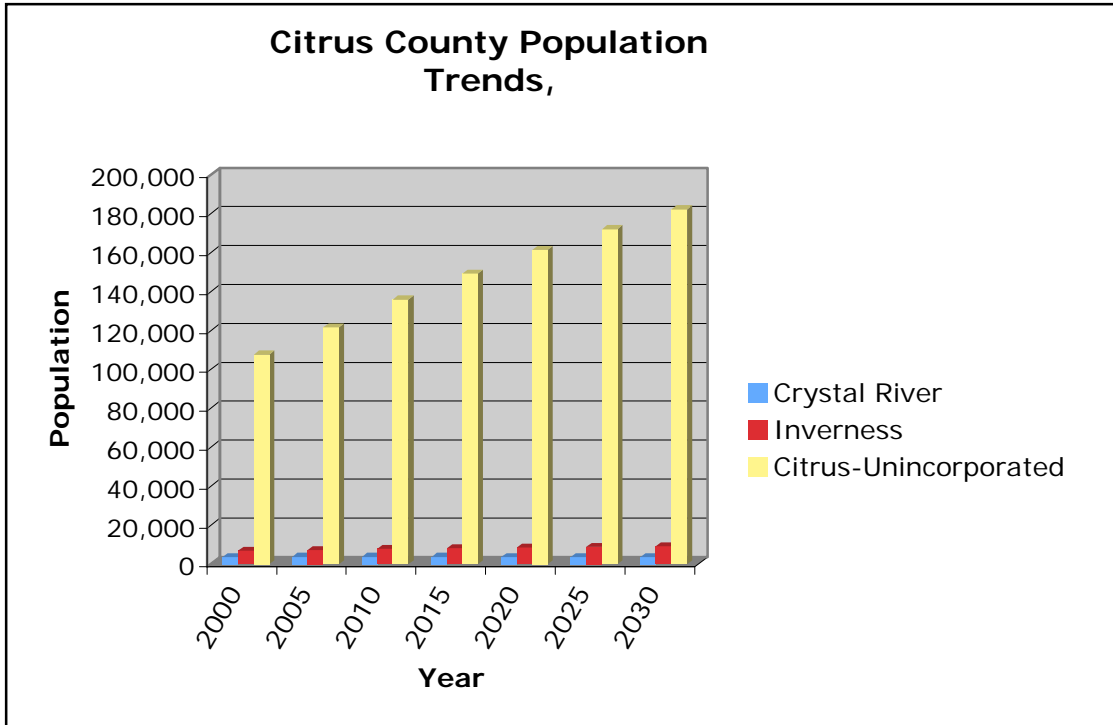
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



*Includes municipalities over 1000 people

Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Citrus County is actively involved in the diversion of waste from their landfill. This effort entails a large education and outreach program, including a colorful vehicle wrap on one of their trucks that promotes recycling. The County has twelve neighborhood drop-off centers where citizens bring and segregate recyclables to collection boxes. In order to keep their recycling program affordable, Citrus County utilizes volunteer efforts from civic groups in exchange for revenue from the sale of the recyclables.

Clay County

Estimated 2007 County Population:
184,644

Department of Environmental Services

- Total 2007 MSW Managed by Clay County: **219,140 tons**
 - % of Total County Waste Generated*: **100%**
-

- 2007 Department Budget: **\$ 25,498,414**
- Residential Solid Waste Assessment Fee: **Yes**



*This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Clay County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Website:

www.claycountygov.com/departments/environmental/environmental_services.htm

Principle method of waste collection:

Curbside pickup

Facilities operated:

Transfer Station
Waste Tire Collection
Material Recovery Facility
Yard Waste Processing
Hazardous Waste Collection Center
Residential Waste Collection Centers (5)

Future Facilities:

In process of conducting a study for future needs

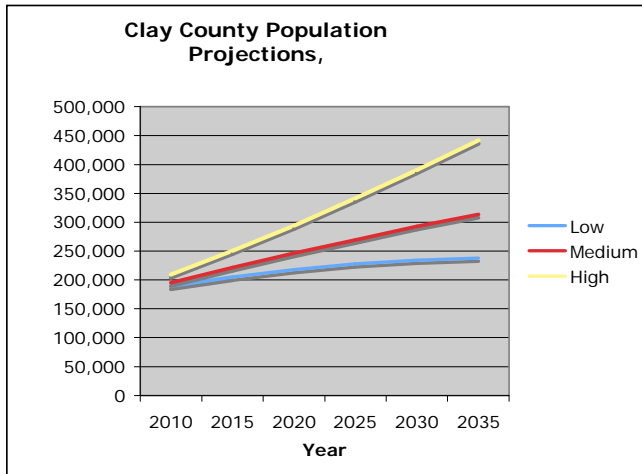
Summary of Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection and/or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	138,284	Collect, receive				X
Recyclables*	6419	Collect, receive, sort, bale				X
C&D	44,547	Receive				X
Yard Waste	27,538	Collect, receive, mulch	X	X		
Tires	467	Receive			X	
Household Hazardous Waste	Unknown	Receive, sort				X
E-Waste	0					
Other	1885					
Total	219,140					

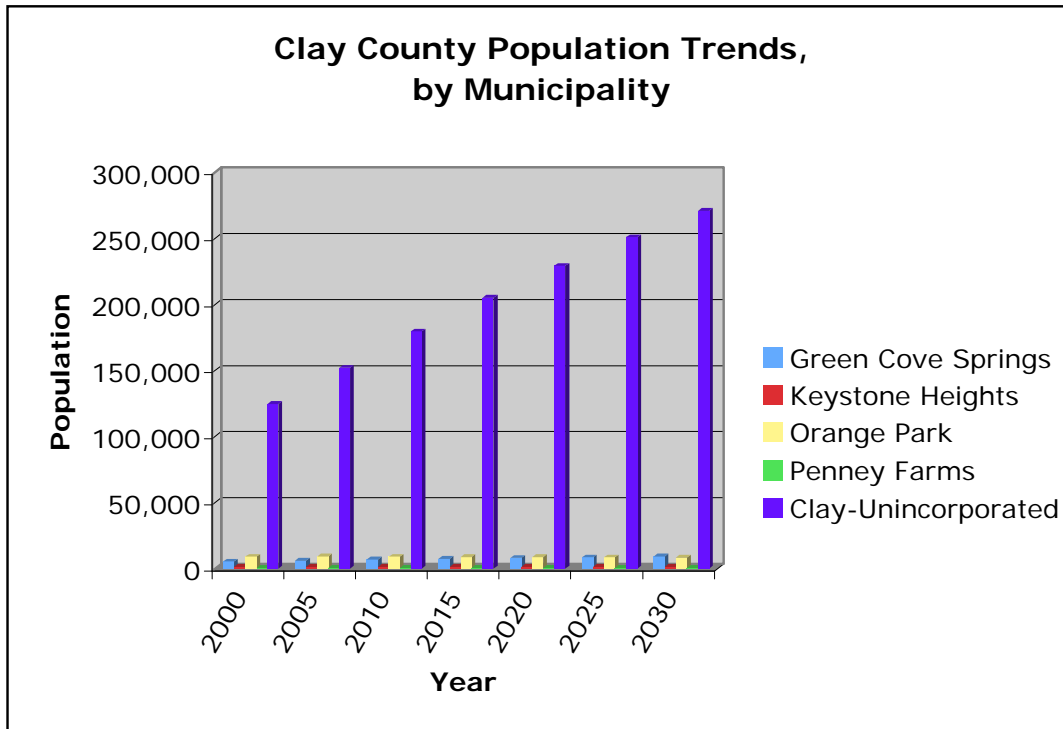
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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Clay County recently underwent major upgrades to their facilities, with \$3 million put towards various projects including a new household hazardous waste collection facility, recycling facility expansion and new administrative offices. While walking through the County’s facilities, there is something noticeably different about their employees—70 percent of their operators are women! Another unique aspect about Clay County is that the department has two sheriff deputies whose primary duties include enforcing any environmental crimes within the county including illegal dumping. Although deputized by the County’s Sheriff’s Department, these employees salaries are paid through the enterprise fund under the Department of Environmental Services.

Estimated 2007 County Population:
17,106

Gilchrist County

Solid Waste and Recycling Department

- Total 2007 MSW Managed by Gilchrist County: **3,769 tons**
 - % of Total County Waste Generated*: **62%**
-

- 2007 Department Budget: **\$ 948,515.00**
- Residential Solid Waste Assessment Fee: **Yes**



*This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Gilchrist County for 2007. The DEP 2007 total county waste numbers were not yet available at the time of this report.

Webpage:
gilchrist.fl.us

Principle method of waste collection:
Self-haul to Collection Centers

Facilities operated:
Transfer Station
Residential Waste Collection Centers (3)
Waste Tire Collection
Household Hazardous Waste Collection Center
Material Recovery Facility

Future Facilities:
None

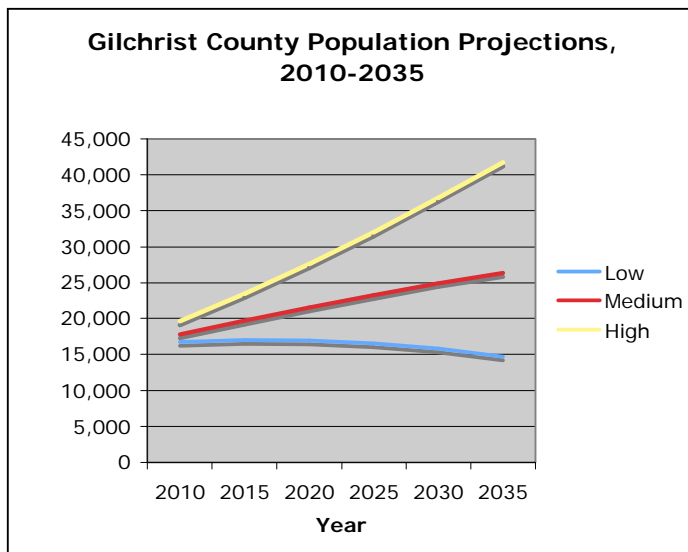
Summary of County Waste Services

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection and/or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	2389	Receive			x	
Recyclables*	386	Receive, sort, bale			x	
C&D	689	Receive		x		
Yard Waste	76	Receive, burn	x			
Tires	85	Receive				x
Household Hazardous Waste	12	Receive, sort				x
E-Waste	N/A					
Other	132					
TOTAL	3769					

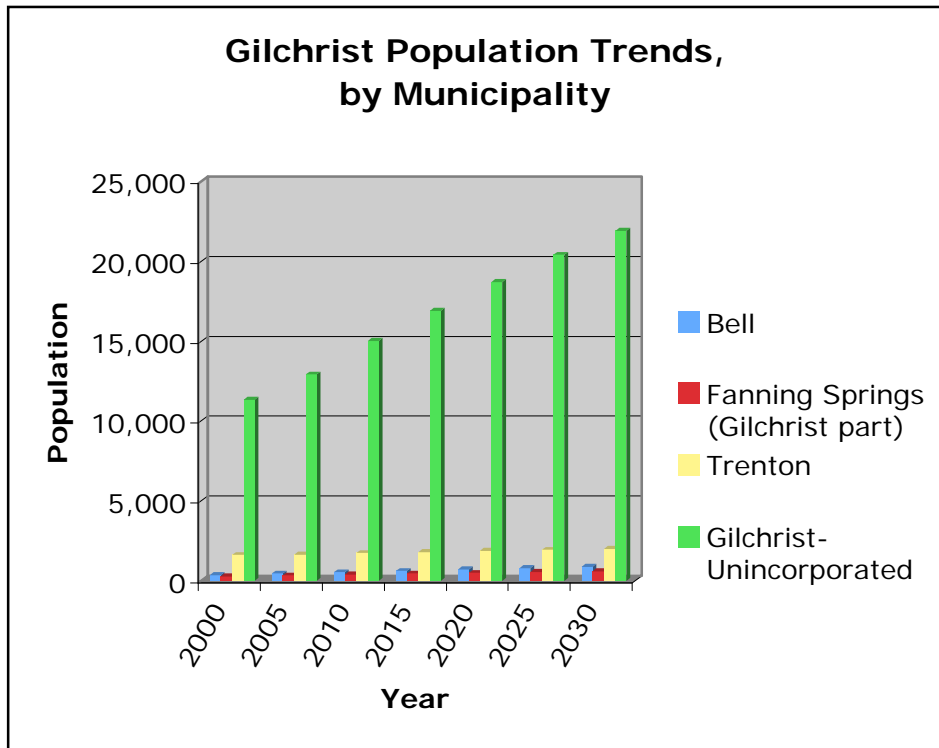
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Being one of the smallest counties in the Heart of Florida area (in terms of population and in area) Gilchrist County has a relatively small budget and limited space to work in. Their entire facility is operating on a 1.5-acre site. Yet, the County manages to operate a transfer station and household waste collection center, four balers for recycling, a tire collection site, and a household hazardous waste collection center at this location. When asked about future needs, the Solid Waste Supervisor expressed an interest in a regional waste to energy as a way to manage the area’s MSW.

Estimated 2007 County Population:
14,705

Hamilton County

Solid Waste Department

- Total 2007 MSW Managed by Hamilton County: **3,184 tons**
 - % of Total County Waste Generated*: **61%**
-
- 2007 Department Budget: **Unavailable at time of report**
 - Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Hamilton County for 2007. The DEP 2007 total county waste numbers were not yet available at the time of this report.

Webpage:

http://www.hamiltoncountyflorida.com/cd_solidwaste.aspx

Principle method of waste collection:

Self-haul to Collection Center

Facilities operated:

Residential Waste Collection Centers (1)
Waste Tire Collection
Household Hazardous Waste Collection Center
Material Recovery Facility

Future Facilities:

Class III Landfill Expansion

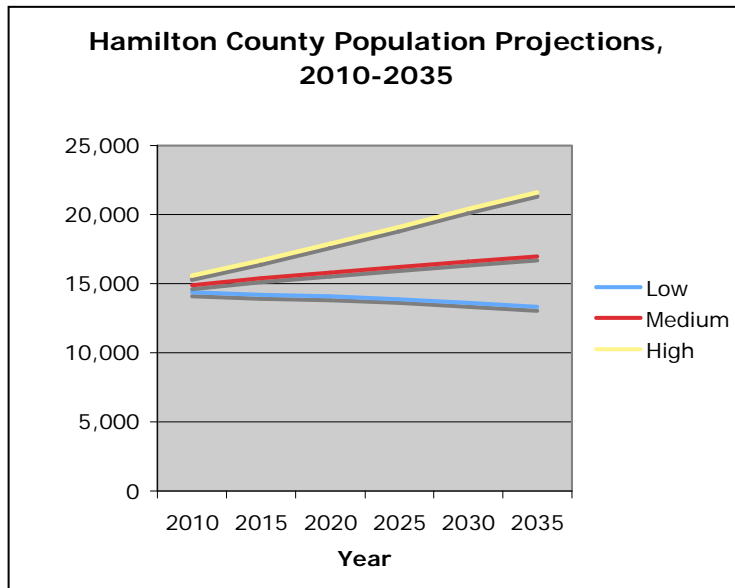
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection and processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	468	Receive				x
Recyclables*	268	Receive, collect, sort, bale				x
C&D	593	Receive, landfill	x			
Yard Waste	1064	Receive, landfill	x			x
Tires	128	Receive				
Household Hazardous Waste	N/A	Receive, sort				x
E-Waste	N/A					
Other	663					
TOTAL	3184					

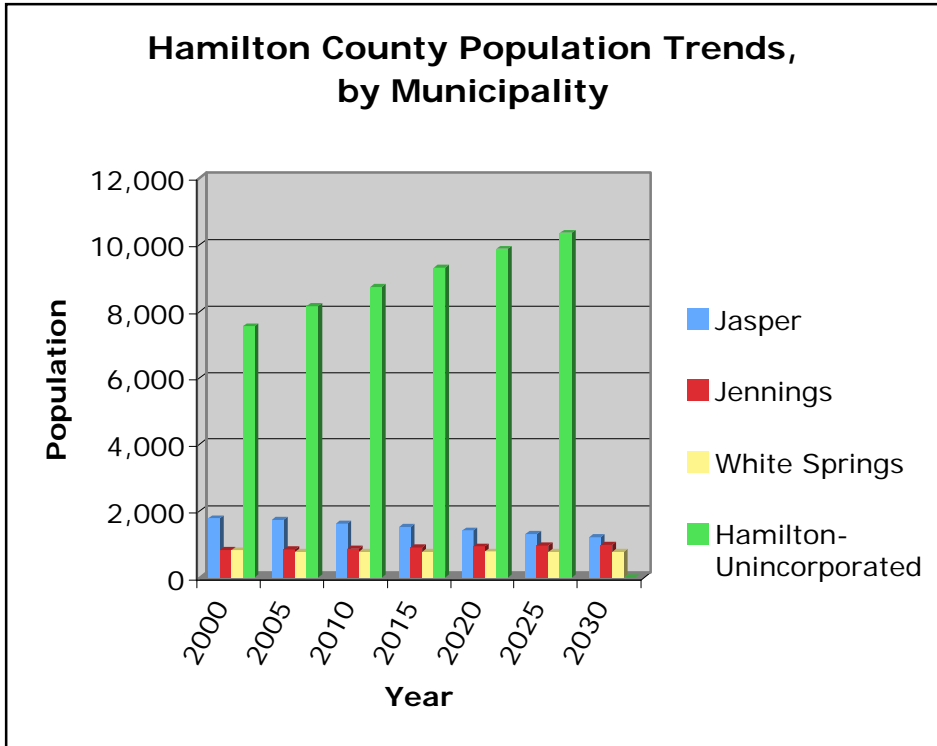
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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Hamilton County has the smallest population of the Heart of Florida counties. Hamilton owns and operates a class III landfill. Therefore, they only export around 2 tons of waste per week. They also have no restrictions regarding where the Class III waste comes from. The County expects to expand their Class III landfill providing an additional 25 years of Class III disposal capacity onsite.

Hernando County

Estimated 2007 County Population:
162,193

Utilities Department

- Total 2007 MSW Managed by Hernando County: **151,429 tons**
 - % of Total County Waste Generated: **60%**
-
- 2007 Department Budget: **\$10,158,136**
 - Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Hernando County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Webpage:

http://www.hernandocounty.us/utills/SolidWaste_Recycling/index.asp

Principle method of waste collection:

Self-haul, subscription service with franchised hauler

Facilities operated:

Class I Landfill
Waste Tire Collection
Material Recovery Facility
Yard Waste Processing (3)
Hazardous Waste Collection Center
Residential Waste Collection Centers (3)

Future Facilities:

Class I Landfill expansion

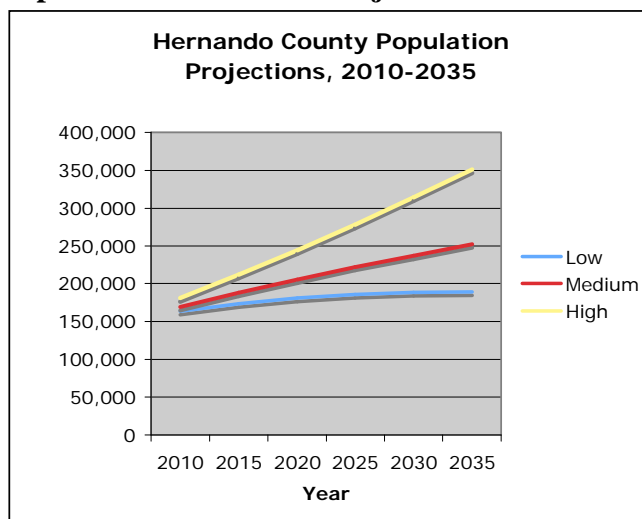
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	125,465	Collect, receive landfill	x			
Recyclables*	Unknown	Collect, receive sort, bale				
C&D	15,624	Collect				
Yard Waste	5961	Collect, receive mulch	x			
Tires	483	Receive				
Household Hazardous Waste	Unknown	Receive, sort, process	x			x
E-Waste	33	Receive				
Other	3863					
TOTAL	151,429					

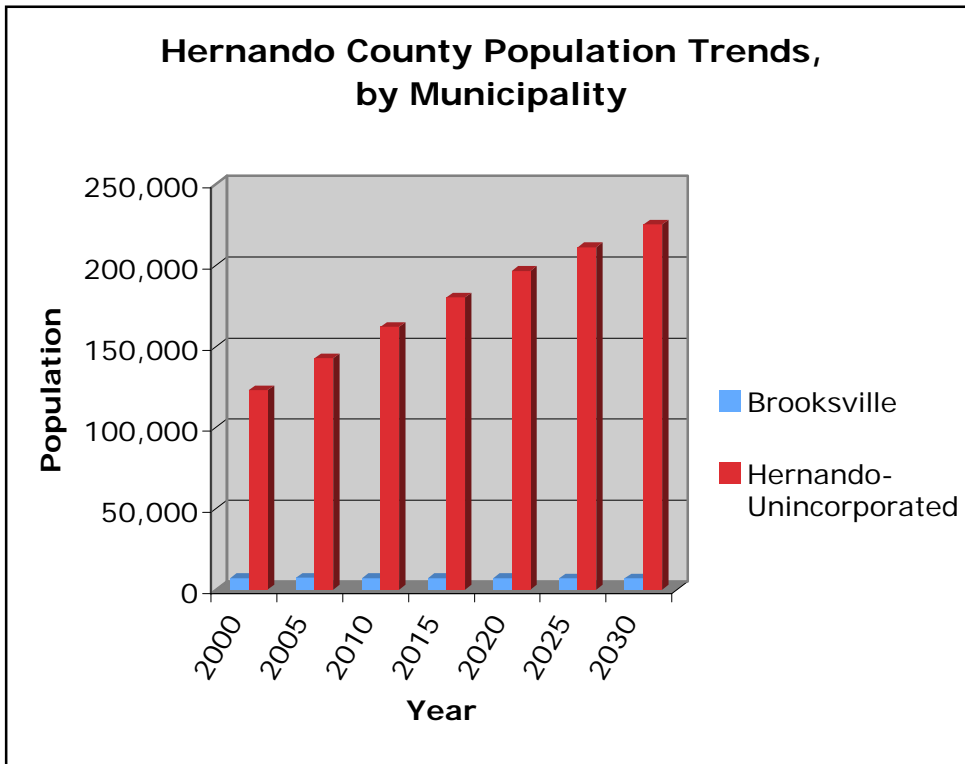
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

**Onsite means management activities that are done on county property, either by the County, or by a company contracted with the County.

Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Hernando County has an innovative Latex Paint Spraying Program that utilizes discarded latex paint as a cover material. This practice is an effective way to eliminate costly disposal of latex paint by instead reusing it for daily cover. The county developed the program without outside technical experts or consultants and won a 2002 National Association of Counties award for Environmental Protection & Energy practices for their efforts.

Lake County

Estimated 2007 County Population:
286,499

Department of Environmental Utilities

- Total 2007 MSW Managed by Lake County: **202,778 tons**
 - % of Total County Waste Generated*: **69%**
-

- 2007 Department Budget: **\$ 23,140,057.88**
- Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Lake County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Webpage:

http://www.lakecountyfl.gov/departments/environmental_utilities/

Principle method of waste collection:

Curbside collection

Facilities operated:

Class I Landfill

Incinerator

Waste Tire Collection (6)

Material Recovery Facility

Yard Waste Processing (3)

Hazardous Waste Collection Center

Residential Waste Collection Centers (6)

Future Facilities:

Expansion of Class I Landfill

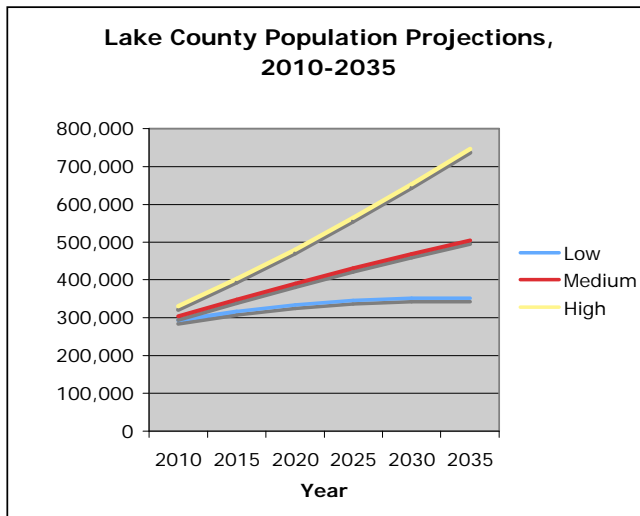
Ash Monofill Landfill

Summary of County Waste Services (2007):

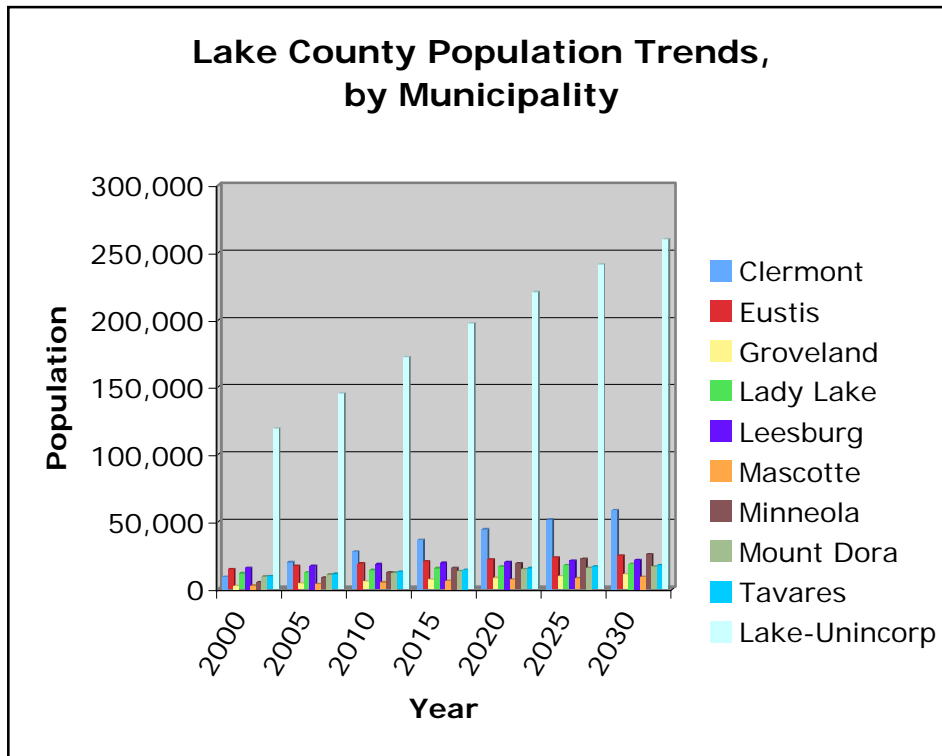
Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go aftr collection or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	181,726	Collect, receive landfill	x	x		
Recyclables*	9740	Collect, receive, sort, bale	x			
C&D	0			x		
Yard Waste	7,955	Collect, receive mulch	x			
Tires	458	Receive			x	
Household Hazardous Waste	90	Receive, sort				x
E-Waste	323	Receive, sort				x
Other	2486					
TOTAL	202,778					

*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



*Includes municipalities over 5000 people

Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Lake County is the only county in the Heart of Florida area that utilizes a waste to energy plant for incineration of municipal waste. Nearly 80% of the County's incoming municipal solid waste is incinerated at the plant operated by Covanta.

Lake County is also unique in that it has recently taken over the management of the County's recyclables in the form of operating a full onsite material recovery facility (MRF). Unlike most counties within area whose onsite MRFs are operated by private companies, Lake County fully owns and operates their MRF, affording them the entire profits from the sale of the recyclables generated within the county.

Estimated 2007 County Population:
40,045

Levy County

Solid Waste Department

- Total 2007 MSW Managed by Levy County: **30,123**
 - % of Total County Waste Generated*: **100%**
-
- 2007 Department Budget: **\$12,344,678**
 - Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Levy County for 2007. The DEP 2007 total county waste numbers were not yet available at the time of this report.

Webpage:

http://www.levycounty.org/cd_solidwaste.aspx

Principle method of waste collection:

Self-haul to Collection Centers

Facilities operated:

Transfer Station
Waste Tire Collection
Household Hazardous Waste Collection Center
Yard Processing Facility

Future Facilities:

Class III Landfill Expansion

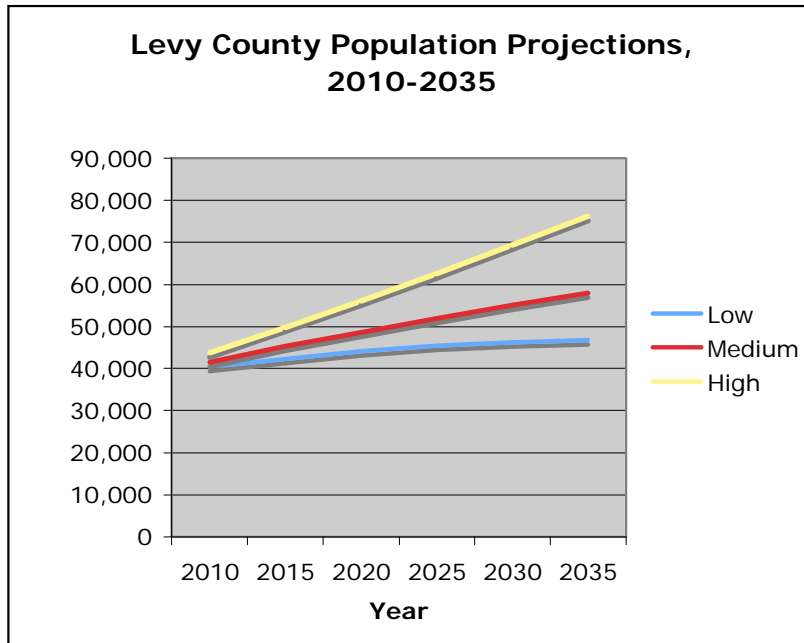
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	N/A	Receive, sort			x	
Recyclables*	12,049	Receive, sort, bale			x	
C&D	2,380	Receive	x			
Yard Waste	753	Receive, mulch	x			
Tires	602	Receive				x
Household Hazardous Waste	N/A	Receive, sort				x
E-Waste	N/A					
Other	14,339					
TOTAL	30,123					

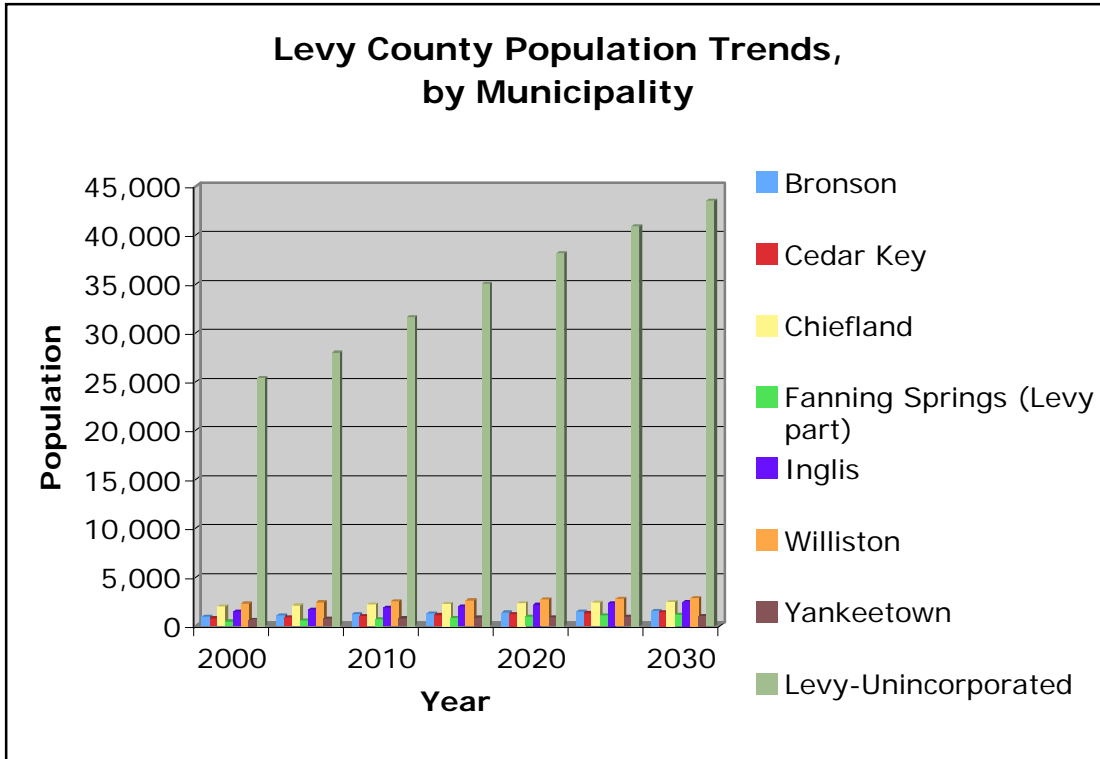
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

**Onsite means management activities that are done on county property, either by the County, or by a company contracted with the County.

Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Levy County has a strong emphasis on recycling. To promote recycling, Levy County has 20 mobile recycling units that are stationed around the county so as to collect recyclable material. The County also utilizes inmates to sort through garbage for recyclable materials. This extra effort shows in the reported amount of waste recycled in 2007: 12,049 tons, which is around 40 percent of the total MSW collected for the year.

Marion County

Estimated 2007 County Population:
325,023

Solid Waste Department

- Total 2007 MSW Managed by Marion County: **242,939 tons**
 - % of Total County Waste Generated*: **70%**
-

- 2007 Department Budget: **\$ 23,824,266**
- Residential Solid Waste Assessment Fee: **yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Marion County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Webpage:

http://www.marioncountyfl.org/SolidWaste/SolidWaste_default.aspx

Principle method of waste collection:

Self-haul to collection centers

Facilities operated:

Class I Landfill
Class III Landfill
Waste Tire Collection
Yard Waste Processing
Residential Waste Collection Centers (18)

Future Facilities:

Transfer Station (available, but not in use)

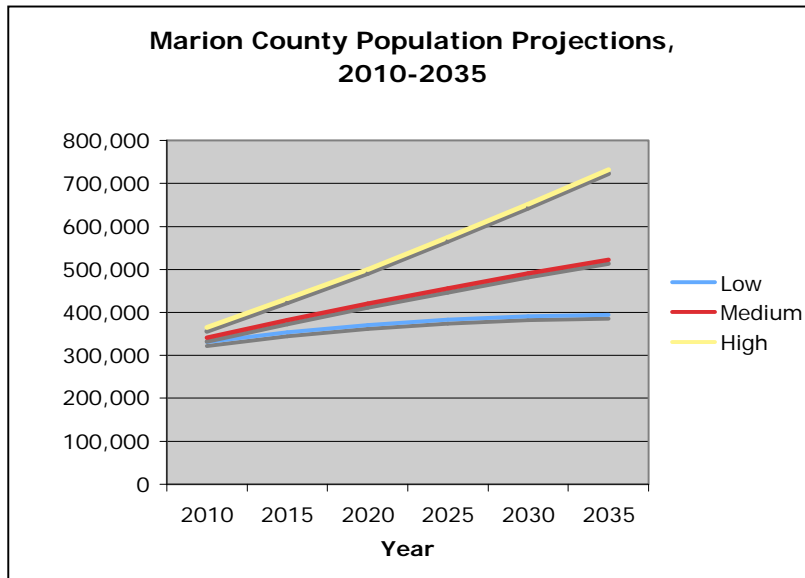
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	201,691	Receive, landfill	x			
Recyclables*	2755	Receive, sort		x		
C&D	Insignificant					
Yard Waste	32,446	Receive, mulch	x			
Tires	908	Receive				x
Household Hazardous Waste	N/A	Receive, sort				x
E-Waste	17	Receive				x
Other	5122					
TOTAL	242,939					

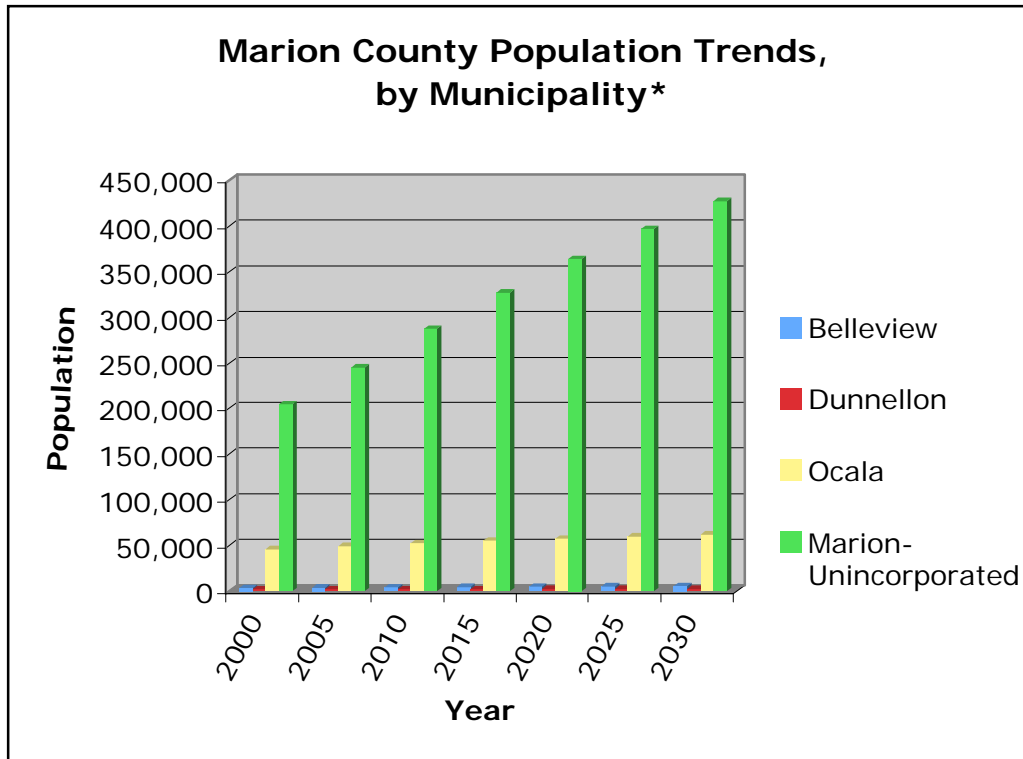
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



*Includes municipalities over 1000 people

Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Despite being one of the more populous counties in the Heart of Florida area, only about 44% of Marion County's service area has curbside pickup via private hauler subscriptions. The remainder of the County's residents self-haul to one of 18 residential waste collection centers, or Recycling Centers, as the County calls them. These Recycling Centers are staffed five days a week, ten hours a day, and accept garbage, recyclables, yard waste, used motor oil, white goods, and sharps in approved containers. Only the baseline landfill accepts tires, however. Another interesting aspect about Marion County is the available but unused Transfer Station. Marion County closed its Class I landfill for a while and exported nearly 75% waste out of county, only to reopen its landfill in July 2008. The County anticipates reopening its Transfer Station in the future, as the landfill is expected to close within seven years.

Putnam County

Estimated 2007 County Population:
74,799

Sanitation Department

- Total 2007 MSW Managed by Putnam County: **96,357 tons**
 - % of Total County Waste Generated: **100%**
-

- 2007 Department Budget: **\$ 7,088,079**
- Residential Solid Waste Assessment Fee: **Yes**



*This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Putnam County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Website:

<http://www1.putnam-fl.com/live/san.asp>

Principle method of waste collection:

Curbside pickup

Facilities operated:

Class I Landfill
Waste Tire Collection
Material Recovery Facility (by private company)
Yard Waste Processing
Hazardous Waste Collection Center
Residential Waste Collection Centers (7)

Future Facilities:

Class I landfill expansion

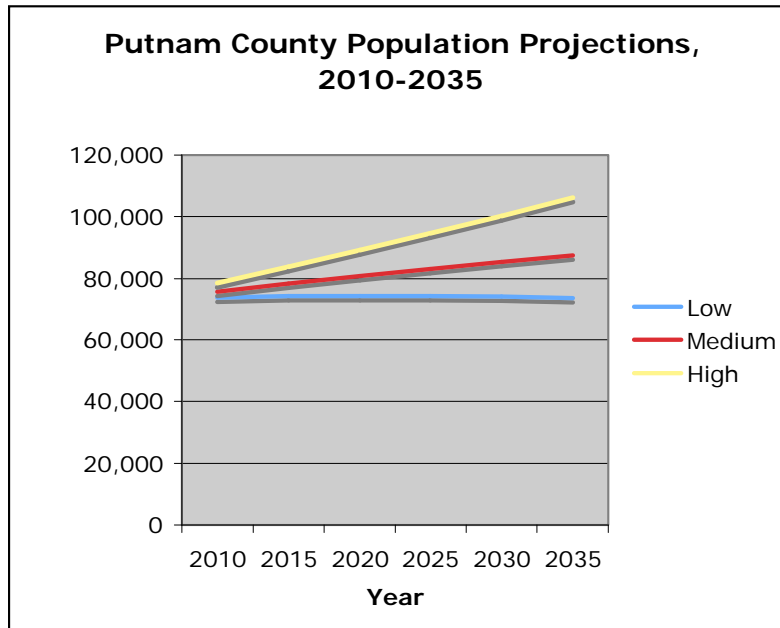
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection and processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	59,845	Collect, receive, landfill	x			
Recyclables*	N/A	Collect, receive, sort, bale			x	x
C&D	4,793	Receive		x		
Yard Waste	13,902	Collect, receive, mulch	x	x		
Tires	908	Receive			x	
Household Hazardous Waste	168	Receive, sort				x
E-Waste	unknown	none				
Other	16,741					
TOTAL	96,357					

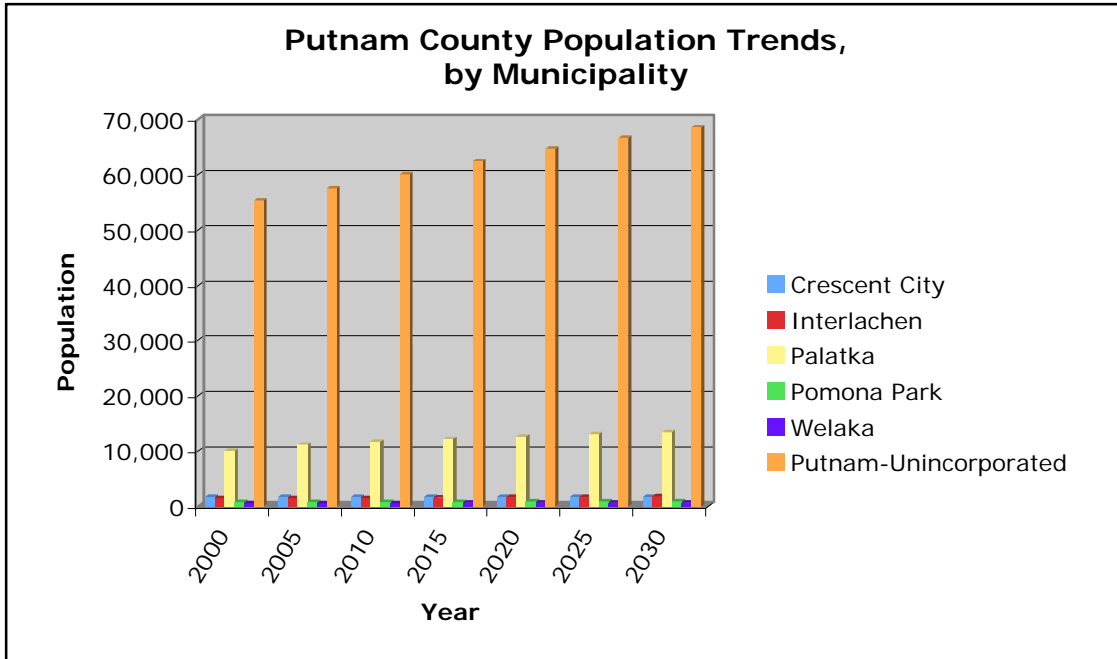
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

**Onsite means management activities that are done on county property, either by the County, or by a company contracted with the County.

Population Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Putnam County is fortunate to have very effective flow-control due to a special Solid Waste Collection and Disposal District established through an interlocal agreement with municipalities within the county. The District Board is made up of representatives consisting of three mayors and two county commissioners. The District Board meets twice a year to evaluate the county’s garbage collection and waste disposal activities. They are also responsible for setting the county’s assessment and tipping fees.

Estimated 2007 County Population:
89,771

Sumter County

Public Works Department—Solid Waste Department

- Total 2007 MSW Managed by BOCC: **36,655 tons**
 - % of Total County Waste Generated: **34%**
-
- 2007 Department Budget: **\$ 2,386,578**
 - Residential Solid Waste Assessment Fee: **None**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Hernando County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Webpage:

<http://sumtercountyfl.gov/pw/solidwaste.htm>

Principle method of waste collection:

Self-haul to County transfer station

Facilities operated:

Transfer Station

Waste tire collection

Material Recovery Facility

Future Facilities:

None

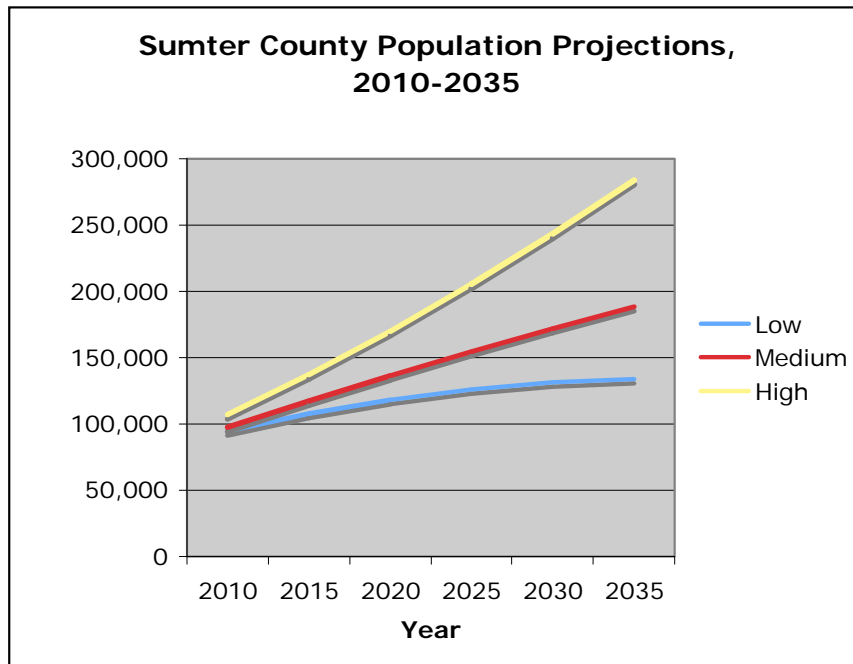
Summary of Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where does waste go after collection or processing?			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	32,625	Receive				x
Recyclables*	249	Receive, sort, bale			x	x—plastics
C&D	800	Receive		x		
Yard Waste	813	Receive		x		
Tires	120	Receive		x-passenger		x—large tires
Household Hazardous Waste	0					
Other	2048					
Total	36,655					

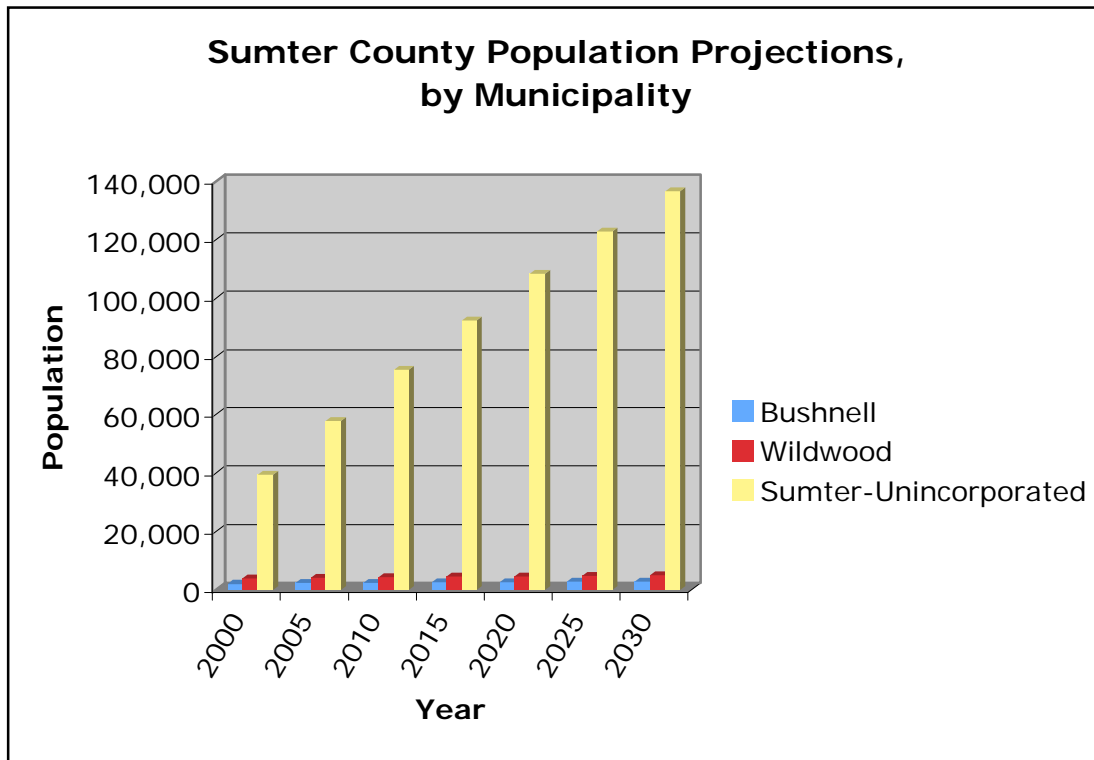
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

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Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



*Includes municipalities over 1000 people

Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

The Sumter County Solid Waste Management Facility is currently permitted as a Material Recovery Facility (MRF) and a yard trash processing facility, but is operating as a transfer station. These permits expired in May and June, respectively therefore Sumter County is in the process of applying for a new permit to operate as a Waste Processing Facility. If permitted under this category, the Sumter County Solid Waste Management Facility can operate as a transfer station and a MRF. Sumter County partnered with the Florida Legislature and the FDEP to purchase and install an innovative full-scale MSW composting system which the County successfully operated for several years. The County ultimately decided to stop composting MSW as it was difficult to find end users to purchase the finished compost product. The County indicated their willingness to allow other organizations such as UF to use the composting system.

Estimated 2007 County Population:
39,608

Suwannee County

Public Works Department

- Total 2007 MSW Managed by Suwannee County: **N/A**
 - % of Total County Waste Generated*: **N/A**
-
- 2007 Department Budget: **\$3,975,377.00**
 - Residential Solid Waste Assessment Fee: **Yes**



Webpage:

<http://www.suwcounty.org>

Principle method of waste collection:

Self-haul to Collection Centers

Facilities operated:

Transfer Station
Residential Waste Collection Centers (13)
Waste Tire Collection
Household Hazardous Waste Collection Center
Yard Processing Facility

Future Facilities:

No immediate plans

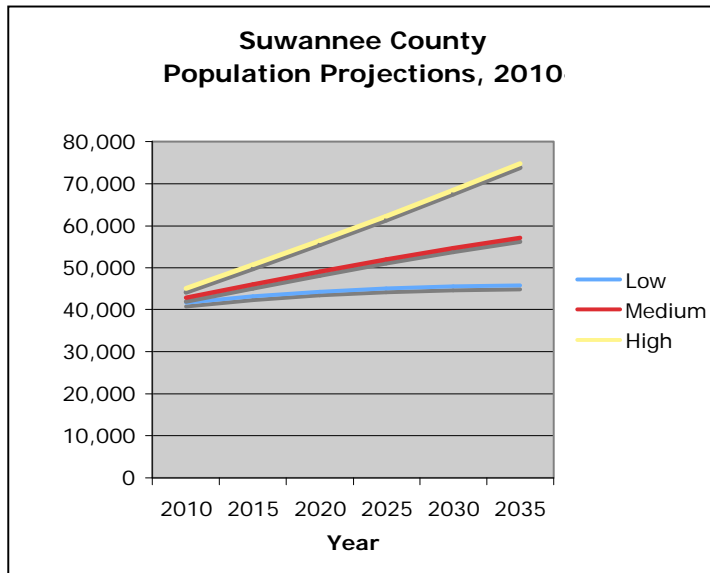
Summary of County Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where Managed:			
			Stays Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	N/A	Receive				x
Recyclables*	N/A	Receive, sort		x		
C&D	N/A	Receive		x		
Yard Waste	N/A	Receive, burn	x			
Tires	N/A	Receive				x
Household Hazardous Waste	N/A					x
E-Waste	N/A	Receive, sort				x
Other	N/A					
TOTAL	N/A					

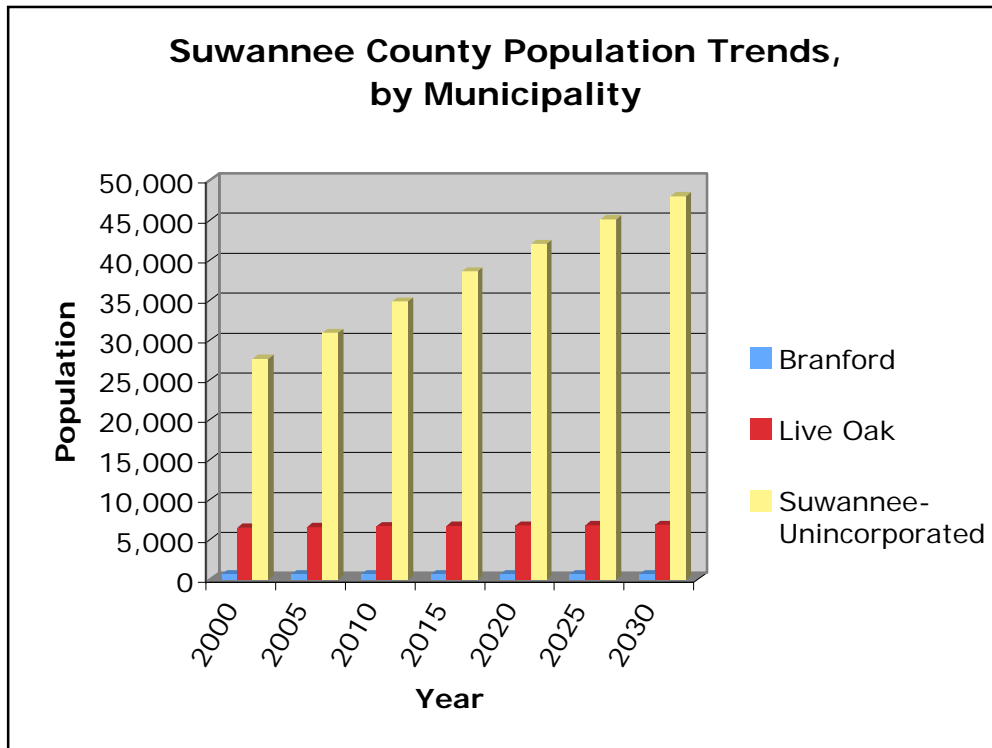
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

**Onsite means management activities that are done on county property, either by the County, or by a company contracted with the County.

Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



*Includes municipalities over 1000 people

Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Suwannee County recently purchased an air curtain burner to process all of their yard waste. The air curtain burner can burn up to 25 tons/day. They also have a unique system for hauling their recyclables: each day of the week is designated for each type of material. For example, one day the County truck goes and picks up all the paper from the 14 collection centers and delivers it to the recycling center in Live Oak. The next day the same truck goes around to all the collection sites and picks up glass, the next day metal and so forth.

Union County

Estimated 2007 County Population:
15,722

Solid Waste Department

- Total 2007 MSW Managed by Union County: **12,023 tons**
 - % of Total County Waste Generated*: **70%**
-

- 2007 Department Budget: **\$ 1,216,435.00**
- Residential Solid Waste Assessment Fee: **Yes**



* This percentage is based upon the 2006 total waste reported to DEP for the entire county compared to the amount of waste reported by Union County for 2007. The DEP 2007 total waste numbers were not yet available at the time of this report.

Principle method of waste collection:
Self-haul

Facilities operated:
Residential Waste Collection Centers (5)
Waste Tire Collection

Future Facilities:
None

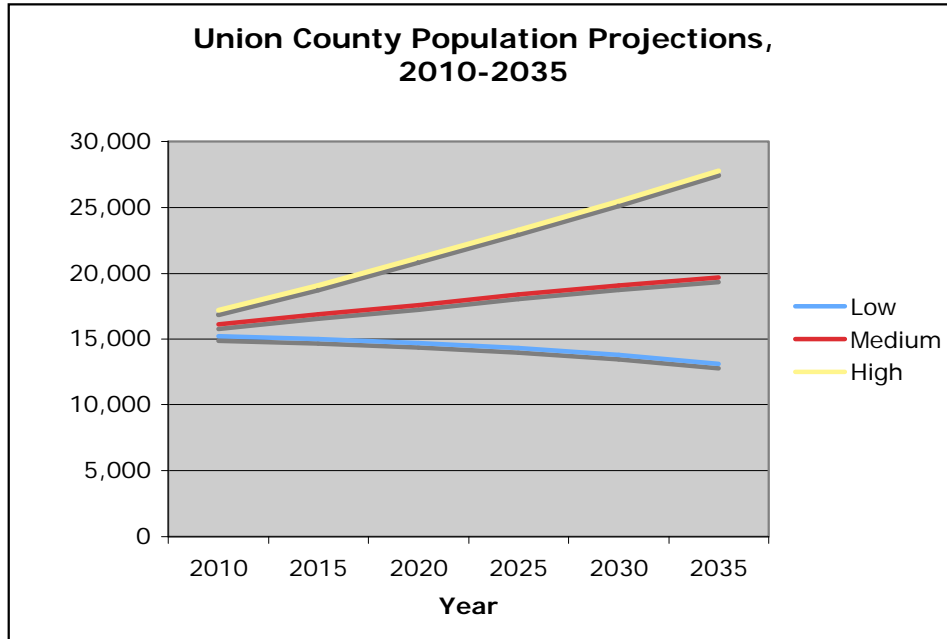
Summary of Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where Managed:			
			Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	6983	Receive		x		
Recyclables*	N/A	Receive		x		
C&D	1044	Receive		x		
Yard Waste	624	Receive, burn	x	x		
Tires	125	Receive		x		
Household Hazardous Waste	N/A					
E-Waste	NA					
Other	3247					
TOTAL	12,023					

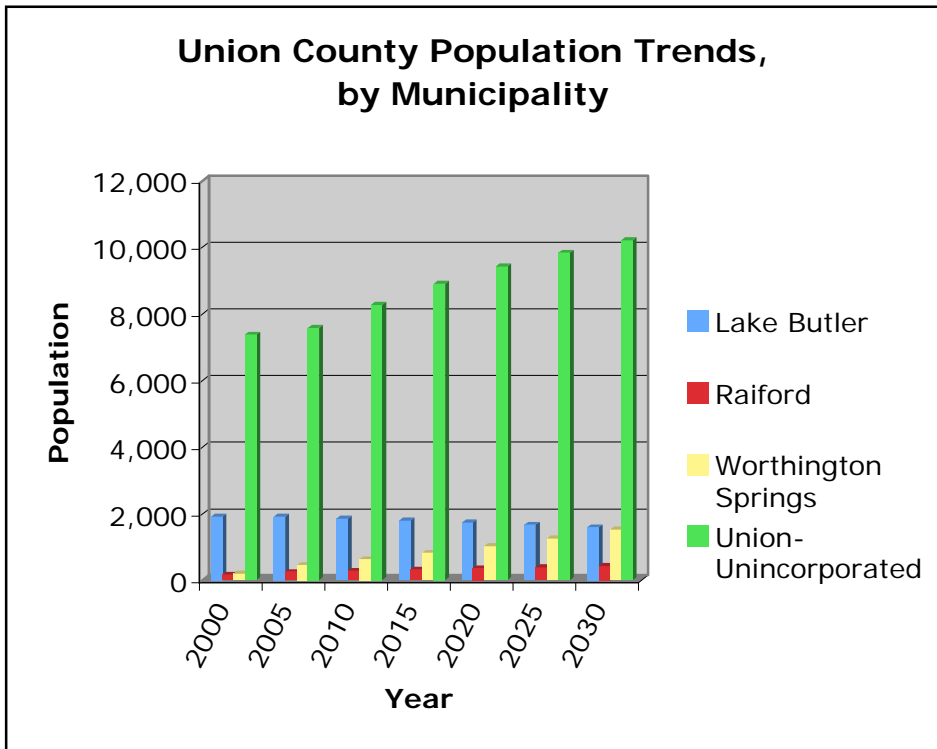
*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

**Onsite means management activities that are done on county property, either by the County, or by a company contracted with the County.

Population Trends and Projections:



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.



Source: Based on projections made by the University of Florida Shimberg Center for Affordable Housing using BEBR 2005 population estimates. Data are available at: www.flhousingdata.himber.ufl.edu.

Uniquely Theirs:

Union County is part of the New River Solid Waste Association. Since the New River Landfill is located within Union County, the County receives an annual “host fee” of \$325,000 from the New River Solid Waste Association.

New River Solid Waste Association

Association member counties utilizing landfill:

Baker, Bradford and Union

Other counties using landfill for MSW disposal:

Alachua, Levy and Gilchrist

-
- Total 2007 MSW Managed by New River: **278,646 tons**
-
- 2008 Department Budget: **\$8,527,000.00**



Principle method of waste collection:

Waste is hauled to landfill via county trucks or private haulers

Facilities operated:

Class I Landfill

Class III Landfill

Yard Trash Processing Site

Waste Tire Collection

Future Facilities:

Class I Landfill Expansion

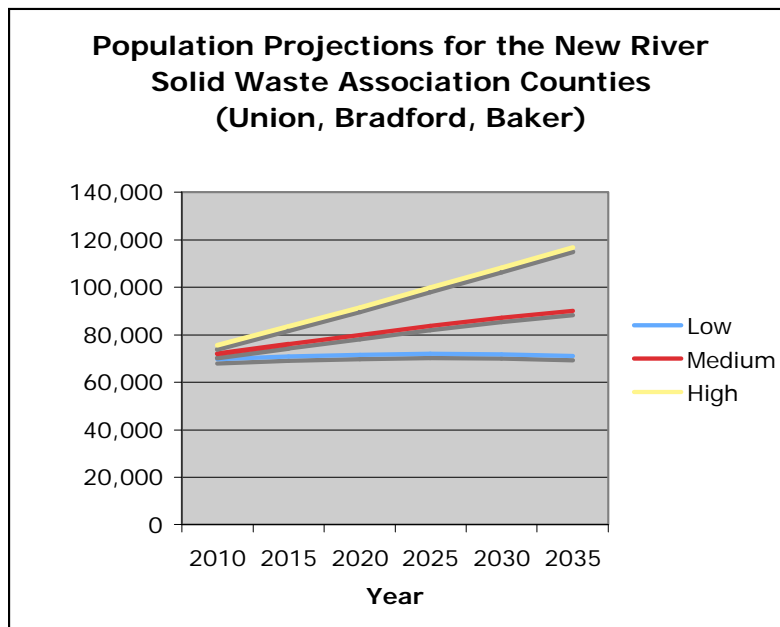
Summary of Waste Services (2007):

Management of:	Tons managed in 2007	Type of management activities performed onsite**	Where Managed:			
			Onsite	Offsite: In county	Offsite: Out of county (w/in H of F area)	Offsite: Out of H of F area
Household MSW	248,738	Receive, landfill	x			
Recyclables	531	Collect, receive			x	
C&D	13,004	Receive	x			
Yard Waste	3677	Receive, mulch	x			
Tires	428	Receive				x
Household Hazardous Waste	N/A					
E-Waste	N/A					

*Newspaper, office paper, cardboard, cans, aluminum, plastics & glass

**Onsite means management activities that are done on NRSWA property, either by NSRWA, or by a company contracted with NSRWA.

Population Trends and Projections (of Association member counties):



Source: Based on *Projections of Florida Population by County, 2007-2035, Volume 41, Bulletin 150*, Bureau of Economic and Business Research. March 2008.

Uniquely Theirs:

Authorized by Chapter 163.01, Florida Statutes in 1988, New River Waste Association is Florida's first multi-county solid waste authority. New River Waste Association is a voluntary association of counties consisting of Baker, Bradford and Union counties whose purpose is to “effectively, efficiently and economically dispose of solid waste generated within the counties” and “provide associated services related to solid waste mangement” (Florida Statutes, Chapter 163.01). The New River Association Board consists of two county commissioners from each county and is responsible for overseeing the authority. While most other counties in the region are concerned about dwindling landfill capacity, Baker, Bradford and Union Counties are set to have ample landfill space for the next fifty years, according to New River’s projections.

Another unique aspect about the New River Regional Landfill is the presence of the Florida Bioreactor Landfill Demonstration Project, which is sponsored by the legislature and the Florida Department of Environmental Protection. This innovative project compares both aerobic and anaerobic waste decomposition processes as ways to decrease landfill space needed for disposing waste.