



Solid Waste Management Study

Revised Draft

WALTON COUNTY
FLORIDA

July 1993

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

David M. Griffith & Associates, Ltd. (DMG) was retained by Walton County to review the County's existing solid waste management program and to evaluate future solid waste collection, disposal and funding alternatives, to include establishing a MSBU for the solid waste program. In conducting this review, DMG projected the total county waste stream for five years; developed capital, quantity, maintenance and equipment use for five alternative rural collection systems; and developed operating, maintenance, monitoring, closure, and post-closure cost for operating the on-site lined landfill.

Disposal Strategies

DMG considered the following disposal strategies:

1. Elevated Lined Landfill

This strategy entails operating the new lined cell on the present landfill site. The county would use the existing road, scale house, scales, MRF, C & D landfill and tire disposal method.

2. Transport Waste to Out-of-County Landfill

This strategy entails contracting with a private company to transport all Class I waste to an out-of-county lined landfill for disposal. The remaining operation would be the same as in strategy 1 above.

Collection Strategies

DMG considered the following collection strategies:

1. Two Manned and Twenty-two Unmanned Sites

Under this strategy, the county would continue to operate the present dumpster program. There would be no capital cost other than equipment replacement. The estimated annual operating cost including disposal would be \$397,221.

2. Eight Manned Compactor Sites

Under this strategy, the county would construct eight convenience centers using stationary compactors and compartmentalized 40 cubic yard containers for recyclables. The estimated capital cost would be \$339,440 and the estimated annual operating cost including disposal would be \$387,815.

3. Eight Manned Sites (Blue Mountain type)

Under this strategy, the county would construct seven additional sites comparable to the site at Blue Mountain. The estimated capital cost would be \$44,080 and the estimated annual operating cost including disposal would be \$432,546.

4. Six Manned Sites and Eighteen Unmanned Sites

Under this strategy, the county would construct five additional sites comparable to the Blue Mountain site and use eighteen unmanned sites utilizing the present equipment. The estimated capital cost would be \$27,060 and the estimated annual operating cost including disposal would be \$417,092.

5. Six Manned Compactor Sites and Twelve Unmanned Sites

Under this strategy, the county would construct six convenience centers with stationary compactors and compartmentalized 40 cubic yard containers for recyclables and twelve unmanned sites using the present equipment. The county would contract with a private company to transport the compactor containers and recyclables. The estimated capital cost would be \$172,080 and the estimated annual operating cost including disposal would be \$408,090.

6. House-to-House Collection

Under this strategy, the county would contract with one or more private collection companies to provide twice per week curbside collection of household waste in the unincorporated areas of the county. The collection and disposal would be funded from a per household assessment. There would be no capital cost; the estimated annual operating cost including disposal would be \$1,435,157.

Recommendations

DMG recommends the following:

1. Establish an enterprise fund for collection and disposal beginning in 1994 and adopt the following assessment and tipping fee schedule:

Waste that goes to the MRF	\$50 per ton
Construction and demolition waste	\$21 per ton

Grit	\$21 per ton
Tires, small - less than ten	\$.75 per tire
Tires, large - more than ten small	\$90 per ton
Assessment per household (those not certified as using private collector)	\$70 per household
Commercial facilities (those not certified as using private collector or hauling their own waste and paying by the ton at the landfill)	\$291 per facility

2. Continue to dispose of Class I waste out-of-county.
3. Construct six manned convenience centers using stationary compactors and 40 cubic yard compartmentalized containers for recyclables. Contract with a private contractor to haul the compacted waste and recyclables. Utilize the best of the present equipment and operate twelve dumpster sites.
4. Expand the recycling program.
5. Continue to dispose of tires out-of-county.
6. Operate a C & D landfill.

I. BACKGROUND AND OBJECTIVES

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A. Background

Walton County is considering solid waste collection, disposal and funding alternatives in a rapidly changing regulatory and funding environment. In doing so, the county is exploring the following options:

- Disposing of Class I waste in an on-site lined landfill or transporting it to an out-of-county landfill.
- Exploring new methods for rural collection.
- Exploring a method of funding so each generator pays a fair share while encouraging recycling.

B. Objectives

DMG conducted a comprehensive study of the above mentioned solid waste management alternatives. The study objectives were to:

- Review the present solid waste management program.
- Determine the county's demographic variables and relate them to solid waste generation.
- Determine the current quantity and composition and project the future quantity and composition of solid waste.
- Determine waste stream percentages, tonnage, capital, operating and maintenance costs associated with:
 - Operating an on-site lined landfill
 - Transporting waste to an out-of-county landfill
 - Operating a C & D landfill on-site
 - Tire disposal
 - Grit disposal

- Waste collection in the unincorporated areas under five alternatives.
- Determine the full cost associated with each alternative and recommend a method of financing.

II. STUDY METHODOLOGY

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The study methodology included the following:

- Reviewing county, state and federal rules, ordinances and regulations including:
 - Subtitle D of the Resource Conservation and Recovery Act.
 - Florida solid waste management rules.
 - County ordinances and contracts.
- Reviewing the county zoning and tax records to determine the number of family household and commercial facilities.
- Assessing the quantity and composition of waste generated in the county.
 - Reviewed available scale data from the landfill.
 - Discussed with county solid waste officials.
 - Reviewed waste stream composition studies conducted by DMG in other counties with similar population.
 - Conferred with the two franchised garbage collectors.
- Assessing the amount of solid waste that is recycled.
- Assessing the amount of tires and white goods received.
- Assessing the amount of waste that could be placed in a construction and demolition landfill.
- Assessing the amount of waste transported to an out-of-county Class I landfill.
- Determining, from state and local demographic data, current population mix by age and sex, birth and death rates by age and sex, and the annual migration rate.
- Projecting the future solid waste quantity and composition based on the population growth for residential waste and by estimating the impact of

tourism on the annual waste flow by reviewing records for the past ten years.

- Projecting costs associated with:
 - Operating a lined landfill on-site.
 - Operating a recycling facility.
 - Operating a construction and demolition landfill.
 - Tire disposal.
 - Disposing of Class I waste out-of-county.
 - Grit disposal.
 - The dumpster program, including alternatives to present operations.

III. SOLID WASTE PROJECTIONS

III. SOLID WASTE PROJECTIONS

A. Future Solid Waste by Volume and Type

In order to project solid waste volume and type, DMG developed solid waste projections for the next 20 years. This entailed the following:

- Working with the county in reviewing the last 12 months of scale data to determine the amount of waste currently received at the site.
- Reviewing the results of waste stream sampling operations conducted in other counties under DMG technical supervision. Typically, we supervised the hand sorting and categorizing of 40,000 to 50,000 pounds of waste.
- Reviewing the waste stream analysis for Dare County in North Carolina which has a population distribution much like Walton County.
- Reviewing the waste stream analysis presented by Walton County to the state on grant request.
- Obtaining demographic data and using DMG's solid waste management software to project future population. These demographics included a profile of the resident and seasonal population.

Demographic and economic assumptions, as well as DMG's estimate of Walton County's waste stream, are shown on the following page. The two pages after the following page provide population projections for Walton County (including the annualized seasonal population) and tonnage projections by waste stream category. These numbers are the basis for calculations in the remainder of the study.

Base Year of Forecast	1993
Base Population	34,461
Net Migration per 1,000	15.00

% Distribution of Population	Male	Female
0 to 14 years	0.23	0.19
15 to 24 years	0.13	0.11
25 to 34 years	0.13	0.14
35 to 44 years	0.12	0.14
45 to 54 years	0.24	0.24
55 to 64 years	0.05	0.06
65 to 74 years	0.05	0.06
75 and Older	0.05	0.06

Birth Rates per 1,000 Women	
0 to 14 years	0.05
15 to 24 years	5.05
25 to 34 years	6.35
35 to 44 years	1.04
45 and Older	0.01

Mortality Rates per 1,000	Male	Female
0 to 14 years	0.08	0.08
15 to 24 years	0.09	0.11
25 to 34 years	0.11	0.09
35 to 44 years	0.14	0.20
45 to 54 years	0.33	0.35
55 to 64 years	1.13	0.96
65 to 74 years	2.04	2.30
75 and Older	5.98	5.80

Res/Com Solid Waste per Capita (lbs/day)	3.73
Uncompacted Waste Density (lbs/cy)	250

% Paper & Paperboard	43.00
% Glass	7.00
% Metals	6.00
% Plastics	4.00
% Rubber & Leather	3.00
% Textiles	3.00
% Wood	2.00
% Food Wastes	10.00
% Yard Wastes	1.00
% Misc. and Other Wastes	21.00

Annual Inflation Rate - General	4.00
Annual Inflation Rate - Labor	4.00
Annual Inflation Rate - Materials	4.00
Annual Inflation Rate - Energy	4.00
Discount Rate for PV Calculations	6.00

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
RESIDENTIAL/COMMERCIAL SOLID WASTE (TONS/YR)										
Paper & Paperboard	10,238	10,390	10,541	10,692	10,844	10,995	11,146	11,298	11,449	11,600
Glass (all types)	1,667	1,691	1,716	1,741	1,765	1,790	1,815	1,839	1,864	1,888
Metals (all types)	1,429	1,450	1,471	1,492	1,513	1,534	1,555	1,576	1,598	1,619
Plastics(all types)	952	966	981	995	1,009	1,023	1,037	1,051	1,065	1,079
Rubr(Shredded)&Lthr	714	725	735	746	757	767	778	788	799	809
Textiles	714	725	735	746	757	767	778	788	799	809
Wood,Lbr,Plts,Brush	476	483	490	497	504	511	518	525	533	540
Food Wastes	2,381	2,416	2,451	2,487	2,522	2,557	2,592	2,627	2,663	2,698
Yard (Lvs,Grns,Trsh)	238	242	245	249	252	256	259	263	266	270
Misc(Solid,D&C,etc)	5,000	5,074	5,148	5,222	5,296	5,370	5,444	5,518	5,591	5,665
Subtotal Res/Com	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
INDUSTRIAL/OTHER SOLID WASTE (TONS/YR)										
Paper & Paperboard	0	0	0	0	0	0	0	0	0	0
Glass (all types)	0	0	0	0	0	0	0	0	0	0
Metals (all types)	0	0	0	0	0	0	0	0	0	0
Plastics(all types)	0	0	0	0	0	0	0	0	0	0
Rubr(Shredded)&Lthr	0	0	0	0	0	0	0	0	0	0
Textiles	0	0	0	0	0	0	0	0	0	0
Wood,Lbr,Plts,Brush	0	0	0	0	0	0	0	0	0	0
Food Wastes	0	0	0	0	0	0	0	0	0	0
Yard (Lvs,Grns,Trsh)	0	0	0	0	0	0	0	0	0	0
Misc(Solid,D&C,etc)	0	0	0	0	0	0	0	0	0	0
Subtotal Ind/Other	0	0	0	0	0	0	0	0	0	0
TOTAL SOLID WASTE (TONS/YR)										
Paper & Paperboard	10,238	10,390	10,541	10,692	10,844	10,995	11,146	11,298	11,449	11,600
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Total (Tons/Year)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Total (Tons/Day)	65	66	67	68	69	70	71	72	73	74

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794

RESIDENTIAL/COMMERCIAL SOLID WASTE (TONS/YR)

Paper & Paperboard	11,752	11,903	12,054	12,205	12,356	12,507	12,659	12,810	12,961	13,112
Glass (all types)	1,913	1,938	1,962	1,987	2,011	2,036	2,061	2,085	2,110	2,134
Metals (all types)	1,640	1,661	1,682	1,703	1,724	1,745	1,766	1,787	1,808	1,830
Plastics(all types)	1,093	1,107	1,121	1,135	1,149	1,163	1,178	1,192	1,206	1,220
Rubr(Shredded)&Lthr	820	830	841	852	862	873	883	894	904	915
Textiles	820	830	841	852	862	873	883	894	904	915
Wood,Lbr,Plts,Brush	547	554	561	568	575	582	589	596	603	610
Food Wastes	2,733	2,768	2,803	2,838	2,874	2,909	2,944	2,979	3,014	3,049
Yard (Lvs,Grns,Trsh)	273	277	280	284	287	291	294	298	301	305
Misc(Solid,D&C,etc)	5,739	5,813	5,887	5,961	6,034	6,108	6,182	6,256	6,330	6,403
Subtotal Res/Com	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492

INDUSTRIAL/OTHER SOLID WASTE (TONS/YR)

Paper & Paperboard	0	0	0	0	0	0	0	0	0	0
Glass (all types)	0	0	0	0	0	0	0	0	0	0
Metals (all types)	0	0	0	0	0	0	0	0	0	0
Plastics(all types)	0	0	0	0	0	0	0	0	0	0
Rubr(Shredded)&Lthr	0	0	0	0	0	0	0	0	0	0
Textiles	0	0	0	0	0	0	0	0	0	0
Wood,Lbr,Plts,Brush	0	0	0	0	0	0	0	0	0	0
Food Wastes	0	0	0	0	0	0	0	0	0	0
Yard (Lvs,Grns,Trsh)	0	0	0	0	0	0	0	0	0	0
Misc(Solid,D&C,etc)	0	0	0	0	0	0	0	0	0	0
Subtotal Ind/Other	0	0	0	0	0	0	0	0	0	0

TOTAL SOLID WASTE (TONS/YR)

Paper & Paperboard	11,752	11,903	12,054	12,205	12,356	12,507	12,659	12,810	12,961	13,112
Glass (all types)	1,913	1,938	1,962	1,987	2,011	2,036	2,061	2,085	2,110	2,134
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Yard (Lvs,Grns,Trsh)	273	277	280	284	287	291	294	298	301	305
Misc(Solid,D&C,etc)	5,739	5,813	5,887	5,961	6,034	6,108	6,182	6,256	6,330	6,403
Total (Tons/Year)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Total (Tons/Day)	75	76	77	78	79	80	81	82	83	84

B. Current Quantity of Waste

DMG analyzed the latest 12 months of scale data from the county landfill and determined the site received 23,427 tons. DMG projected the 1993 population, including an average annual seasonal population, to be 34,978. The 23,427 tons represent a per capita waste generation rate of 3.73 pounds per day. This per capita of waste per day represents only that waste received at the Walton County landfill. There are two private landfills in the county receiving large amounts of demolition, construction, trash, land clearance and miscellaneous waste. Some residential waste that is not included in the 3.73 pounds per day is burned or otherwise disposed of on site by the generator. The total amount of waste to be managed is projected to increase to 25,218 tons in 1998.

Waste Received by Source

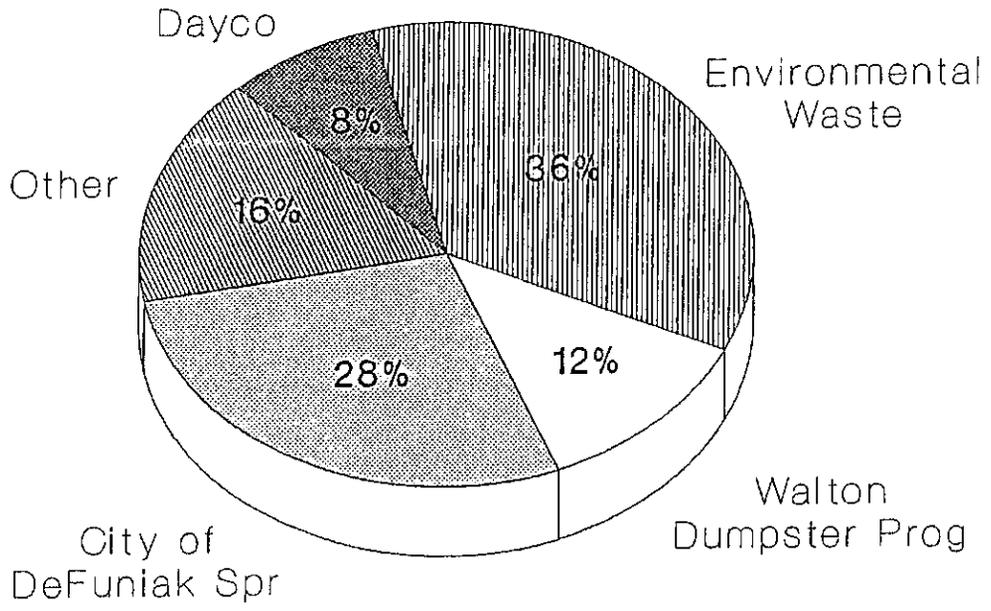
The following table shows the source of solid waste received at the Walton County landfill (May 1, 1992 - April 30, 1993).

Environmental Waste	8,359 tons
Dayco	1,889 tons
City of DeFuniak Springs	6,459 tons
County Dumpster Program	2,930 tons
Other	<u>3,790 tons</u>
Total	23,427 tons

The "Other" category includes waste transported to the landfill by individuals or companies that haul their own waste.

The chart on the following page provides a percentage breakout of waste received by source.

Percentage of Waste by Source



**IV. CURRENT SOLID WASTE
MANAGEMENT PROGRAM**

IV. CURRENT SOLID WASTE MANAGEMENT PROGRAM

A. Supervisor

The county solid waste management program is supervised by a landfill supervisor who reports to the public works director or his assistant.

B. Funding

The county landfill program is funded by a per ton tipping fee, a fee per tire received, state grants, sale of recyclables, and ad valorem taxes as required.

The county dumpster program is funded by the sale of tags and permits, state grants, and ad valorem taxes.

C. Collection

The City of DeFuniak Springs provides solid waste collection in the city and transports the waste to the county disposal site. This represents 28% of the total waste received. The two remaining incorporated areas of Paxton and Freeport provide no solid waste collection.

The county has provided an exclusive franchise for waste collection to Environmental Waste for an area of the county commonly referred to as South Walton, which includes the densely populated area near the beach. A large percentage of the residents and commercial establishments utilize this service. This company collects approximately 36% of the waste received.

The county has also provided an exclusive franchise for waste collection to Dayco for the remaining part of the county, which is sparsely populated. Dayco provides collection service in the towns of Paxton and Freeport to those that are willing to pay for the service. Dayco collects approximately 8% of waste received.

The county provides a dumpster program for waste collection by providing 22 unattended and 2 manned sites for those that do not utilize the private collectors. The sites are located primarily in those areas away from South Walton as most of the waste generated in that area is collected by the franchised collector. It is estimated that 6 of the dumpster sites, Blue Mountain, Freeport, Black Creek, Kings Lake, Deerwoods and

Still Church, receive 47% of waste collected in this program. The dumpster program collects 12% of waste collected.

The remaining 16% of waste is collected and transported to the landfill by individuals.

D. Disposal

The county operates a C & D landfill utilizing its own land, manpower, and equipment. The county has a contract with a private waste company to dispose of Class I landfill waste at an out-of-county site. Tires are transported out of the county by a private company. Grit is disposed of at the landfill site as cover material.

E. Recycling

The county is operating a MRF at the landfill. All incoming waste, with the exception of trash, construction and demolition waste, tires, and grit, is placed on a tipping floor and loaded on a conveyor where prison labor removes the recyclables by hand. The recyclables that are presently collected are glass, metals, and plastics. A very small amount of recyclables, including some paper, are removed at the site of generation or at the Blue Mountain dumpster site. The amount of waste recycled from the on-site MRF is estimated to be 5% of total waste received.

Disposition of Waste Received

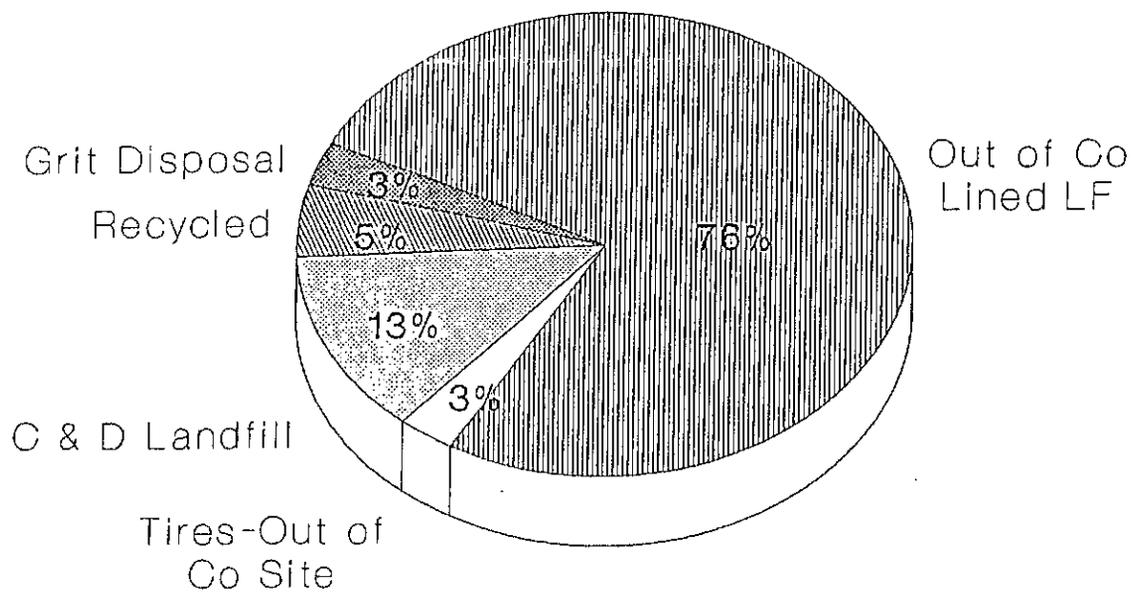
The following table shows the disposition of solid waste received at the Walton County landfill (May 1, 1992 - April 30, 1993).

Transported to out-of-county lined landfill	17,927 tons
Disposal in on-site C & D landfill	2,968 tons
Grit disposed of on-site*	737 tons
Tires transported out-of-county	666 tons
Recyclables (includes white goods)	<u>1,129 tons</u>
Total	23,427 tons

* Grit is waste from waste water treatment facilities collected primarily at the bar screen.

The following chart provides the percent distribution of waste received at the Walton County landfill.

Disposition of Waste by Percentage



**V. COST OF CURRENT SOLID
WASTE MANAGEMENT PROGRAMS**

V. COST OF CURRENT SOLID WASTE MANAGEMENT PROGRAMS

The following is a cost analysis of the current solid waste programs. A detailed breakout of costs associated with the current programs is provided at Appendix I.

Cost Analysis Summary

•	Disposal	
	Class I Waste Disposal (out-of-county)	
	Labor	\$117,665
	Non-labor including disposal cost	<u>747,049</u>
	Total	\$864,714
	Cost per ton	\$48.24
•	Construction and Demolition Landfill	
	Labor	\$19,600
	Non-labor	<u>41,185</u>
	Total	\$60,785
	Cost per ton	\$20.48
•	Tire Disposal	
	666 tons @ \$90/ton	\$59,940
•	Recycling	
	Labor	\$7,063
	Non-labor	26,426
	Less revenue - sale of recyclables	<u>(24,845)</u>
	Total	\$8,644
•	Grit Disposal	
	No cost	\$0

- Dumpster Program

Labor	\$67,071
Non-labor	<u>163,527</u>
Total	\$230,598
Disposal Cost - 2,930 tons	<u>141,343</u>
Total Cost	\$371,941

VI. ALTERNATIVE SYSTEMS FOR COLLECTION AND DISPOSAL

VI. ALTERNATIVE SYSTEMS FOR COLLECTION AND DISPOSAL

A. Disposal

Walton County has constructed a Class I landfill with double artificial liner and a leachate storage lagoon on the present landfill site. The lined area is a 4.9 acre cell which is planned for five years of operations. This site has enough area remaining for additional cells to extend the site for at least 15 years.

DMG has summarized the cost for operating this facility for five years. Costs include labor, non-labor, closure, post-closure, monitoring, leachate management, equipment replacement, county and department indirect, and funds for construction of a second five year cell.

Walton County would continue to manage the tires, grit, recycling and C & D landfill as currently managed.

B. Collection

DMG is providing a cost analysis including capital, labor and non-labor for five alternative collection programs for Walton County.

- Eight manned convenience centers using compactors.
- Eight manned convenience centers using present equipment.
- Six manned convenience centers using present equipment and eighteen unmanned sites.
- Six manned convenience centers using compactors and twelve unmanned sites using the best of the present equipment.
- County provide, by contract, curbside collection throughout the county.

**VII. ESTIMATED COST OF
ALTERNATIVE SYSTEMS FOR
COLLECTION AND DISPOSAL**

VII. ESTIMATED COST OF ALTERNATIVE SYSTEMS FOR COLLECTION AND DISPOSAL

This section provides estimated costs of alternative disposal and collection programs.

Disposal

- Cost Analysis for Lined Landfill On-Site

Labor	\$181,850
Non-Labor	<u>611,462</u>
Total	\$793,312
Cost per ton 1994	\$43.84

Note: DMG estimates the cost per ton would have been \$50.43 had the cost of capital been included.

The C & D landfill, tire disposal, grit disposal, and recycling programs would remain the same as the current program

A detailed breakout of costs associated with this alternative is provided on pages A-8 and A-9.

Collection

DMG is providing a cost analysis including capital labor and non-labor for manned convenience centers using compactors and for manned convenience centers using the present equipment.

- Cost Analysis for Eight Convenience Centers using Compactors (1993 dollars)

Capital

Site	
One half acre	\$1,000

Equipment	
Compactor 2 cubic yard hopper installed	\$8,000
Compactor container 40 cubic yard for garbage	4,500
Roll-off container compartmentalized for recyclables	<u>5,500</u>
Total per site	\$18,000
Buildings, Grounds and Fencing	
Guard shack (prefab)	\$2,000
Fencing 400' @ \$8.00/ft	3,200
Port-o-toilet	600
Gate 16' double wide	1,000
Concrete pads (for containers)	1,000
Site construction	1,000
Contingency 10%	<u>880</u>
Total per site	\$9,680
Eight Sites @ \$28,680	\$229,440
One extra compactor container	4,500
One extra recycling container	<u>5,500</u>
Total capital cost for eight sites	\$239,440

Estimated Capital Cost for Transportation Equipment to Transport Waste and Recyclables from Convenience Centers

One roll-off container truck \$100,000

Note: County may want to consider contracting with a private company for transportation.

Annual Cost

Labor per Site	
Site attendant (24 hrs/wk @ \$5.00/hr)	\$6,240
Fringe benefits @ 7.65% Social Security	<u>477</u>
Total Labor per site	\$6,717
Total Labor for 8 sites	\$53,736

Non-Labor per Site	
Utilities @ \$100/mo	\$1,200
Telephone @ \$30/mo	360
Pump Port-o-toilet	50
Equipment use	1,800
M & R equipment and site	1,000
Insurance	200
Misc (uniforms, etc.)	<u>300</u>
Non-Labor cost per site	\$4,910
 Total Non-Labor cost 8 sites	 \$39,280

Transportation of Waste	
Labor	\$21,553
Non-Labor (including \$10,000 equipment use)	30,000
County Indirect (Total)	<u>53,226</u>
Total	\$104,779

**Total Cost to Operate Eight Manned Convenience Centers
Using Compactors (Capital cost is not included) \$197,795**

- **Cost Analysis for Eight Manned Convenience Centers (Comparable to the site at Blue Mountain)**

Estimated Capital Investment and Annual Operating Cost for Eight Convenience Centers Utilizing the Present Equipment.

Capital

Site	
One half acre	\$1,000

Equipment	
Use best of present dumpsters	No Cost

Buildings, Grounds and Fencing	
Guard shack (prefab)	\$2,000
Access control	500
Port-o-toilet	600
Site construction	1,000
Contingency 10%	<u>410</u>
Total per site	\$4,510
Eight Sites @ \$5,510 per site	\$44,080
Estimated Capital Cost for Transportation	
Use present equipment	No cost
<u>Labor</u>	
Labor per Site	
Site attendant (24 hrs/wk @ \$5.00/hr)	\$6,240
Fringe benefits @ 7.65% Social Security	<u>477</u>
Total Labor per site	\$6,717
Total Labor for 8 sites	\$53,736
Non-Labor per Site	
Utilities @ \$50/mo	\$600
Telephone @ \$30/mo	360
Pump Port-o-toilet	<u>50</u>
Non-Labor cost per site	\$1,010
Total Non-Labor cost 8 sites	\$8,080
Estimated Transportation Cost for 8 Sites	
Two truck operators	\$27,810
Fringe benefits	<u>6,674</u>
Total labor cost	\$34,484

Non-Labor	
Includes all non-labor including \$50,000 for equipment replacement	\$93,000
County indirect (Total)	<u>53,226</u>
Total Non-Labor	\$146,226
Total Cost to Operate 8 Manned Sites	
With present equipment	\$242,526

- Cost Analysis for Six Manned Convenience Centers and Eighteen Unmanned Sites Using Present Equipment

Capital

Site	
One-half acre	\$1,000
Equipment	
Use present dumpster	No Cost
Buildings, Grounds and Fencing	
Guard shack (prefab)	\$2,000
Access control	500
Port-o-toilet	600
Site construction	1,000
Contingency of 10%	<u>410</u>
Per Site	\$4,510
Six sites at \$5,510 per site	\$27,060
Capital Cost for Transportation	
Use present equipment	No Cost

Labor

Labor per Site

Site attendant (24 hrs/week @ \$5/hr)	\$6,240
Fringe benefits @ 7.65% Social Security	<u>477</u>
Total labor per site	\$6,717

Total labor for six sites \$40,302

Non-labor per Site

Utilities @ \$50 per month	\$600
Telephone @ \$30 per month	360
Pump port-o-toilet	<u>50</u>
Non-labor cost per site	\$1,010

Total non-labor cost for six sites \$6,060

Estimated Transportation Cost

Labor

Two truck operators	\$27,810
Fringe benefits	<u>6,674</u>
Total labor cost	\$34,484

Non-labor

All non-labor including \$50,000 for equipment replacement	\$93,000
County indirect	<u>53,226</u>
Total non-labor	\$146,226

Total cost to operate six manned convenience centers and
eighteen unmanned sites \$227,072

- Cost Analysis for Six Manned Convenience Centers Using Compactors and Twelve Unmanned Sites Using the Best of the Present Equipment.

Capital (Compactor Site)

Site

One half acre \$1,000

Equipment

Compactor 2 cubic yard hopper installed \$8,000
 Compactor container 40 cubic yards for garbage 4,500
 Roll-off container compartmentalized for recyclables 5,500
 Total per site \$18,000

Buildings, Grounds and Fencing

Guard shack (prefab) \$2,000
 Fencing 400' @ \$8.00/foot 3,200
 Port-o-toilet 600
 Gate 16' double wide 1,000
 Concrete pads (for container) 1,000
 Site construction 1,000
 Contingency 880
 Total per site \$9,680

Six Sites @ \$28,680 per site \$172,080

Twelve unmanned sites - no capital costs using present equipment.

Labor

Labor per Site

Site attendant (24 hrs/wk @ \$5.00/hr) \$6,240
 Fringe benefits @ 7.65% Social Security 477
 Total Labor per site \$6,717

Total Labor for 6 sites \$40,302

Non-Labor per Site	
Utilities @ \$100/mo	\$1,200
Telephone @ \$30/mo	360
Pump Port-o-toilet	50
Equipment use	3,333
M & R equipment and site	1,000
Miscellaneous (uniforms, etc.)	<u>300</u>
Non-Labor cost per site	\$6,243

Total Non-Labor cost 6 sites \$37,458

County Indirect \$53,226

Transportation of Waste

Six compactor sites	
260 load - garbage and recyclables @\$100/load (transportation only)	\$26,000
Twelve unmanned sites	
Labor	17,000
Non-labor (M & R)	15,000
Equipment use (truck)	5,000
Fringe benefits	<u>4,080</u>
Total labor cost	\$67,080

Total cost to operate six manned convenience centers using compactors and twelve unmanned sites using the present equipment:

Labor:	
Labor for six manned sites	\$40,306
Non-labor for six manned sites	37,458
Transportation of compacted waste and recyclables to landfill	26,000
Labor for twelve unmanned sites	17,000
Non-labor for twelve unmanned sites (M & R)	44,080
County indirect	<u>53,226</u>
Total	\$218,070

- **Estimated Cost to Provide Twice-Weekly Service House-to-House Curbside Collection in Unincorporated Areas of the County.**

DMG discussed with the present franchised collectors the cost per household presently charged, reviewed studies that DMG has performed on collection activities in other areas. DMG also reviewed a survey that was conducted on rural collecting as it related to population density.

DMG estimates the cost to the County to provide curbside collection utilizing contracted private collectors, with the County collecting the fees through a per household assessment, would be \$7.60 per household per month. This would be applicable to all households, except those in DeFuniak Springs, for a total of 10,164 households. The annual collection cost would be \$926,957.

Note: The Town of Freeport and Paxton are included as they provide no house-to-house collection; but they would have to agree to be included.

The following is a summary of costs per household per year for the six collection alternatives including the present system plus the associated disposal costs.

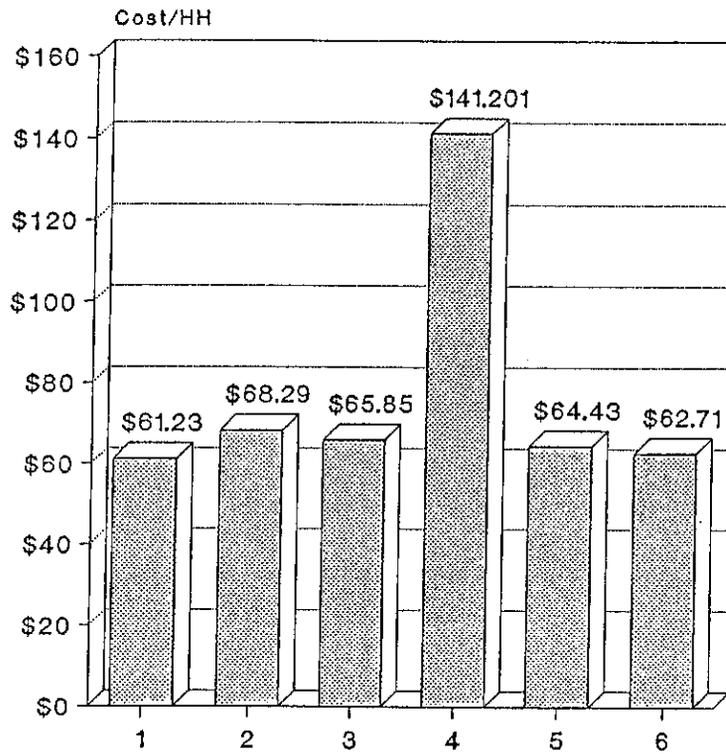
**Summary of the Estimated Collection Cost Per
Year Per Household for 1994**

System	Collection	Disposal	Total Cost	Number of Households	Cost Per Household
Eight manned compactor sites	\$197,795	\$190,020	\$387,815	6,334 *	\$61.23
Eight manned sites-present equip	242,536	190,020	432,556	6,334 *	68.29
Six manned sites and eighteen unmanned sites-present equip	227,072	190,020	417,092	6,334	65.85
House to house collection	926,957	508,200	1,435,157	10,164 **	141.20
Six manned compactor sites and twelve unmanned sites-present equip	218,070	190,020	408,090	6,334 *	64.43
Present dumpster program	239,821	157,400	397,221	6,334	62.71

*Households not using private collection including those in Paxton and Freeport.

**Households in unincorporated area, plus those in Paxton and Freeport.

Summary of the Estimated Collection Cost Per Year Per Household for 1994



1. Eight manned compactor sites
2. Eight manned sites-present equip
3. Six manned sites and eighteen unmanned sites-present equip
4. House to house collection
5. Six manned compactor sites and twelve unmanned sites-present equip
6. Present dumpster program

VIII. ADVANTAGES AND DISADVANTAGES OF ALTERNATIVE SYSTEMS COMPARED TO CURRENT SYSTEM

VIII. ADVANTAGES AND DISADVANTAGES OF ALTERNATIVE SYSTEMS COMPARED TO CURRENT SYSTEM

Disposal

Walton County operates a Class I (lined) landfill on present site.

Advantages

- The cost is somewhat less. Otherwise, DMG sees no advantage as long as the haul and disposal costs continue to be in line with the current contract.

Disadvantages

- The county has the responsibility for the unknown of operating a lined landfill where technology has not been proven over an extended period.
- The county would have the responsibility for monitoring, leachate collection, and treatment for at least thirty years after the site is closed.
- The county would be required to establish an escrow fund for closure and post-closure.
- The county would not have the lined cell in reserve in case the option of out-of-county disposal is eliminated or for any other reason in the future a decision were made to operate on-site.
- The county would be required to manage an undetermined amount of leachate during the operational life of the site.

Collection

Eight Manned Convenience Centers with Compactors and Recycling Containers

Advantages

- Control types of waste received.

- Eliminate fly breeding in containers.
- Increase recycling by encouraging people to bring their waste separated.
- Six to eight times as much waste can be hauled per trip compacted.

Disadvantages

- Less convenient to users.
- Capital investment increase.
- Annual operating cost increase.

Eight Manned Convenience Centers (Comparable to Blue Mountain)

Advantages

- Control type of waste received.
- Eliminate fly breeding as containers would be serviced more often.
- Less vandalism.
- Very little capital investment.
- Utilize present equipment.
- Increase recycling.

Disadvantages

- Less convenient to users.
- Cost would be greater.

Six Manned Convenience Centers and Eighteen Unmanned Sites Using Present Equipment

Advantages

- Almost 50% of the waste would be received at manned sites.
- Increased recycling.
- Less vandalism.
- Utilize present equipment.

Disadvantages

- Cost would be greater.
- Eighteen of the sites would be unmanned.

Six Manned Convenience Centers Using Compactors and Twelve Unmanned Sites Using Present Equipment

Advantages

- Fifty percent of the waste would be received at manned site.
- Fifty percent of the waste would be transported compacted.
- Twelve unmanned sites would provide adequate service for households not using compactor sites.
- Recycling container at each of the manned sites would increase recycling and reduce the amount of waste hauled out-of-county for disposal.
- The compactor container would be transported by private contractor with back-up equipment.
- The twelve unmanned sites could use the best of the present containers.

- The present transportation equipment would make less than half the number of trips presently made.
- Equipment replacement cost is included.

Disadvantages

- The initial capital cost would be greater.

Providing House-to-House Collection for Each Household in the Unincorporated Area

Advantages

- Generator would not be required to transport waste to container.
- A larger percentage of residential waste would be collected for proper disposal.
- A recycling program could be included.
- The county would not have to maintain a container program.

Disadvantages

- The population density in the northern part of the counts is extremely low for house-to-house collection.
- The cost to some households would be greater.
- This would be a major change.

**IX. DISPOSAL AND COLLECTION
RECOMMENDATIONS**

IX. DISPOSAL AND COLLECTION ALTERNATIVES

After completing the analysis, including a review of the advantages and disadvantages of each of the disposal and collection systems analyzed, DMG recommends the following:

Disposal

- The county continue to contract for haul and disposal of Class I waste to an out-of-county landfill.
- Keep the on-site lined cell in reserve as a back-up in case the out-of-county option is eliminated.
- Operate an on-site construction and demolition landfill at the present site.
- Continue the present grit management program.
- Continue the present method of tire disposal.

Collection

- Continue to franchise collection in the unincorporated area.
- Establish six manned convenience centers with compactors for waste and compartmentalized 40 cubic yard container for recyclables and twelve unmanned sites for waste collection. The manned sites would be located at or near the following sites which receive some 50% of the waste collected in this program: Blue Mountain, Kings Lake, Durwoods, Freeport, Black Creek, and Sandy Creek. The six sites to be eliminated would be those receiving the least amount of waste.

Funding Disposal

- Charge a per ton fee for all solid waste received at the scales.
- Charge a per tire fee for small tires received of ten or less and a per ton fee for volumes above ten and tires larger than auto tires.

- Make an assessment to all households and commercial facilities that use the container programs to pay for collection and disposal.

**X. METHOD TO FINANCE SOLID
WASTE MANAGEMENT PROGRAM**

Walton County
2005-08-31

X. METHOD TO FINANCE SOLID WASTE MANAGEMENT PROGRAM

DMG has developed programs of financing solid waste management using various methods, such as tipping fees, ad valorem taxes, special assessments, etc. It has been DMG's experience that the most successful method is to treat solid waste management as you would other utilities, such as water and sewer, and manage the system as an enterprise fund. Under this method of financing, the generator of waste is charged according to the volume generated and there is no double taxing or taxing of those who generate no waste. This method of financing encourages people to generate less waste and to remove recyclables at the site of generation

FUNDING FOR DISPOSAL

DMG recommends a per ton tipping fee for all waste received, except small tires (under ten).

The fee for waste collected from the Walton County dumpster program would be paid from a per household assessment.

DUMPSTER PROGRAM

Residential Waste

The owner of each household in Walton County would pay a special assessment to cover the dumpster program cost including the cost of disposal for household waste collected by the system. Those households in incorporated areas that provide residential collection and those households that utilized a franchised collector would not be billed the special assessment. The franchised collector would provide the county a certified list of households using their service on a date specified by the county so no special assessment would be sent to those households.

White goods and bulky items would be collected once a month on specified dates for each household requesting such service during the preceding 30 days. It is estimated this service would cost \$6.60 per year per household.

Those households hauling waste to the landfill, such as demolition, construction, trash, tires, etc., would pay the regular fee at the landfill.

Commercial Waste

Commercial facilities that utilize franchised collectors or municipal collection would pay for collection and disposal to the collector. The collector would provide the county with a certified list annually of those facilities they service. Those commercial facilities transporting their own waste to the landfill would pay the regular tipping fee. Those commercial facilities, usually small and located in the sparsely populated areas of the county, that do not use a private collector or transport their waste to the landfill would pay a special assessment to use the dumpster. The assessment would be based on the amount of waste generated by those facilities that was suitable for placing in the dumpster. DMG has evaluated waste generation rates for those primarily small rural commercial establishments that do not use bulk containers serviced by private collectors, such as service stations, mom and pop groceries, country stores, etc., to generate about four times the volume of waste on an average as a household.

Special Assessments

DMG will include a special assessment to recover the full cost including labor, benefits, county indirect, public works indirect, equipment use, etc., for the dumpster program including disposal of waste collected by the system.

The amount of the assessment will be based on the number of households and commercial facilities that are not utilizing other means of waste collection, such as private collectors or commercial facilities that haul their own waste.

**XI. RECOMMENDATION OF
FEES AND ASSESSMENTS**

XI. RECOMMENDATIONS OF FEES AND ASSESSMENTS

Assumptions Used in Establishing Assessments and Fees

- Population

DMG obtained demographic data from 1992 Florida County Profile; 1992 Florida Statistical Abstract; University of Florida, Bureau of Economics and Business research, Population Studies, March 1992; and West Florida Regional Planning Council, May 1987. This data was used in DMG's solid waste management software to project future population and solid waste generators.

- Households

DMG obtained data from the University of Florida, Bureau of Economics and Business research which listed 11,294 total households in 1990 and projected 11,576 households for 1991, and information provided by the county and municipalities. From this data, DMG estimated the number of households as follows:

Number of Households

	1990	1991	1992	1993	1994
DeFuniak Springs	2,085	2,137	2,190	2,245	2,301
Freeport	340	348	357	366	375
Paxton	239	245	251	257	263
Unincorporated Area	8,630	8,846	9,067	9,294	9,526
Total	11,294	11,576	11,865	12,162	12,465

- Commercial Facilities

A computer printout of the RRC-CAMA System, dated 6-8-93, was provided by the Walton County Property Appraiser. DMG used this data to establish the number of commercial facilities. DMG estimates the commercial facilities as follows:

<u>Location</u>	<u>Number of Facilities</u>
DeFuniak Springs	250
Freeport	42
Paxton	12
Unincorporated Areas	<u>396</u>
Total	700

- **Number of Households and Commercial Facilities Using Private Collectors**

DMG was provided data by Environmental Waste and Dayco, the two household collectors, and their data was used to establish the number of households and commercial facilities using private collectors.

- **Household Waste (does not include construction, demolition and yard waste)**

The household waste container program received 2,930 tons over the last 12 months with 6,087 households not utilizing collection service for an average of .48 tons per household. DMG understands that some waste received at the containers is from commercial facilities. DMG estimates that there will be some increase of household waste under the assessment method of financing, so .6 tons per household is used. Since households will be paying an annual amount and will not limit waste to the extent they might be using the per bag fee. Construction, demolition and yard waste would be transported directly to the landfill and a tipping fee per ton would be charged as there is no equatable method of including this type of waste in the assessment fee as the volume generated per household varies greatly. As far as household waste, the volume is much more uniform.

- **Household Collection Rate**

Based on past experience, DMG estimates a first year special assessment collection rate of approximately 90% and recommends fees be adjusted to compensate for a 10% non-collection of fees.

- **Commercial Waste**

DMG reviewed the volume of waste collected per month from 90 commercial facilities in Walton County. The average commercial facility not using private collection, primarily small, "mom and pop" type facilities, is

estimated to be generating four times the amount of waste generated per household.

DMG recommends the following fees and assessments for disposal and collection in 1994:

Disposal

Recommended Fees for Solid Waste Disposal (1994)

	Tons	Fee	Receipts	Cost	Deficit/ Surplus
Garbage	19,242	\$50	\$962,100	\$899,322	\$62,778
C&D	3,012	21	63,252	63,215	37
Grit	850	21	17,850	-	17,850
Tires	707	90	63,630	63,630	0
Recycling	-	-	-	10,220	(10,220)
Total	23,811		\$1,106,832	\$1,036,387	\$70,445

Note: If a decision was made to charge the same fee for all waste except tires, the fee would be \$40.86 to recover the full cost.

Collection

Recommended Assessments for those Households and Commercial Facilities that use the Container System

	Cost for Cont. Prog.	Disposal Cost	Total Cost	Units	Cost per Year
Households	\$211,528	\$190,000	\$401,528	5,701	\$70.43
Commercial Facilities	6,542	5,400	11,942	41	291.27

Note: Cost shown is for six manned compactor sites and twelve unmanned sites using the best of the present equipment.

**XII. SPECIAL ASSESSMENT
IMPLEMENTATION PLAN**

XII. SPECIAL ASSESSMENT IMPLEMENTATION PLAN

JAY BERTOCH TO WRITE THIS SECTION.

XIII. TECHNICAL DATA SUMMARY

XIII. TECHNICAL DATA SUMMARY

The following appendices provide detail cost information that has been summarized in the report. Appendix I provides the decimal equivalent labor distribution and resulting salary costs by labor category for the current disposal and collection programs on page A-1. Non-labor costs are provided by line item on page A-2.

Appendix II provides facility cost input modules for the current recycling and collection programs, as well as for the current disposal system and disposal using the recently constructed lined landfill. These costs were entered into DMG's solid waste model to provide five year costs with a 4% inflation factor.

Appendix III provides costs for each facility operation for five years utilizing the Appendix II input data for:

- The current disposal strategy
- The disposal strategy using the Walton County lined landfill
- The tire disposal strategy
- The current container program strategy.

Pages A-19 and A-25 provide summaries of all disposal costs (except tire) for the disposal strategies.

APPENDICES

APPENDIX I
CURRENT DISPOSAL AND COLLECTION COSTS

WALTON COUNTY, FL
SOLID WASTE
Salary Summary Sheet

Name/Position Salary	Total Hrs or Percent	General & Admin	Fee #1 DISPOSAL TRANSFER	Fee #2 C & D LANDFILL	Fee #3 RECYCLING	Fee #4 CONTAINER PROGRAM	Fee #5 NON USER FEE
1. LANDFILL SUPV \$19,282	1 \$19,282	0 \$0	0.9 \$17,354	0.03 \$578	0.05 \$964	0.02 \$386	0 \$0
2. ASST LANDFILL SUPV \$19,843	1 \$19,843	0 \$0	0.9 \$17,859	0.03 \$595	0.05 \$992	0.02 \$397	0 \$0
3. SECRETARY \$11,440	1 \$11,440	0 \$0	0.9 \$10,296	0.03 \$343	0.05 \$572	0.02 \$229	0 \$0
4. SCALE OPER-2 \$29,828	1 \$29,828	0 \$0	0.54 \$16,107	0.02 \$597	0.03 \$895	0.01 \$298	0.4 \$11,931
5. TRUCK OPER-2 \$27,810	1 \$27,810	0 \$0	0 \$0	0 \$0	0 \$0	1 \$27,810	0 \$0
6. BOBCAT OPER \$17,971	1 \$17,971	0 \$0	0.9 \$16,174	0 \$0	0 \$0	0.1 \$1,797	0 \$0
7. EQUIPMENT OPER \$17,992	1 \$17,992	0 \$0	1 \$17,992	0 \$0	0 \$0	0 \$0	0 \$0
8. DUMPSTER ATTEND-PT \$14,144	1 \$14,144	0 \$0	0 \$0	0 \$0	0 \$0	1 \$14,144	0 \$0
9. DUMPSTER SITE MGR \$13,624	1 \$13,624	0 \$0	0 \$0	0 \$0	0 \$0	1 \$13,624	0 \$0
10. EQUIPMENT OPER \$18,200	1 \$18,200	0 \$0	0.3 \$5,460	0.5 \$9,100	0.2 \$3,640	0 \$0	0 \$0
11. ENV CONTROL OFC-2 \$34,944	1 \$34,944	0 \$0	0.47 \$16,424	0.24 \$8,387	0 \$0	0.24 \$8,387	0.05 \$1,747
12.	1 \$0	1 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
13.	1 \$0	1 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
14.	1 \$0	1 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total Cost	\$225,078	\$0	\$117,665	\$19,600	\$7,063	\$67,071	\$13,678
Percent	100.00%	0.00%	52.28%	8.71%	3.14%	29.80%	6.08%

WALTON COUNTY, FL
SOLID WASTE
Departmental Cost Distribution

1992/93 Fee Study

		General & Admin	Fee #1 DISPOSAL TRANSFER	Fee #2 C & D LANDFILL	Fee #3 RECYCLING	Fee #4 CONTAINER PROGRAM	Fee #5 NON USER FEE
Grand Total	1645904						
Salary & Wages	225078	0	117665	19600	7063	67071	13678
Distribution %	100.00%	0.00%	52.28%	8.71%	3.14%	29.80%	6.08%
Benefits	53224	0	27824	4635	1670	15860	3235
Services & Supplies							
TRAVEL/PER DIEM	1000	0	523	87	31	298	61
COMMUNICATIONS	2000	0	1046	174	63	596	122
UTILITIES	4000	0	2091	348	126	1192	243
RENTALS/LEASES	5000	0	2614	435	157	1490	304
REPAIR/MAINT	40000	0	14000	2000	4000	20000	0
PRINT/OFFC SUPPLIES	2500	0	1307	218	78	745	152
OPER SUPPLIES	40000	0	14000	2000	4000	20000	0
MISC	400	0	209	35	13	119	24
MACH/EQUIP	25000	0	0	0	0	0	25000
PROF SERVICES	25000	0	20750	4250	0	0	0
LANDFILL EXPANSION	405000	0	0	0	0	0	405000
EQUIP REPLACEMENT	61898	0	0	0	11898	50000	0
		0	0	0	0	0	0
		0	0	0	0	0	0
		0	0	0	0	0	0
		0	0	0	0	0	0
		0	0	0	0	0	0
Dept Totals	890100	0	202029	33782	29099	177372	447818
G&A Distribution %		100.00%	52.28%	8.71%	3.14%	29.80%	6.08%
G&A Distribution			0	0	0	0	0
Ctywide Overhead							
COUNTY INDIRECT	139884		73128	12181	4390	41684	8501
			0	0	0	0	0
			0	0	0	0	0
			0	0	0	0	0
			0	0	0	0	0
			0	0	0	0	0
Total	139884		73128	12181	4390	41684	8501
Agency Admin							
PW OVERHEAD	98726		72363	14821	0	11542	0
OTHER HAUL/DISP	517194		517194	0	0	0	0
			0	0	0	0	0
Total	615920		589557	14821	0	11542	0
Grand Totals	1645904		864714	60785	33489	230598	456319

APPENDIX II
FACILITY COST INPUT MODULES

RECYCLING COST INPUT MODULE
(R-W-CONV)

CHARACTERISTICS OF FACILITY

First Date of Operation..... 1993
 Last Date of Operation..... 1999
 Percent of Total Waste Processed..... 100.00

PERCENT OF TOTAL WASTE STREAM RECYCLED AT FACILITY

Paper..... 0.0	Glass..... 28.00
Metal..... 33.0	Plastic..... 22.00
Rubber..... 0.0	Textile..... 0.00
Wood..... 0.0	Food..... 0.00
Yard..... 0.0	Misc..... 0.00

FACILITY LABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

POSITION	NUMBER	F/V	TONS/WORKER	SALARY	TOTAL COST
Landfill Supervisor	0.050	F	476,207.800	19,282	964
Asst. Landfill Supv.	0.050	F	476,207.800	19,843	992
Secretary	0.050	F	476,207.800	11,440	572
Scale Operator	0.030	F	793,679.667	29,828	895
Equip Operator	0.200	F	119,051.950	18,200	3,640
Equipment Operator		F		17,992	
Fringe Benefits	1.000	F	23,810.390	1,670	1,670
Total Labor Costs (rounded to nearest BY dollar): \$					8,733

FACILITY NONLABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

DESCRIPTION	UNITS	F/V	TONS/UNIT	UNIT COST	TOTAL COST
Travel & Per Diem	1.000	F	23,810.390	31.00	31
Communications	1.000	F	23,810.390	63.00	63
Utilities	1.000	F	23,810.390	126.00	126
Rental & Leases	1.000	F	23,810.390	157.00	157
Repair & Maintenance	1.000	F	23,810.390	4,000.00	4,000
Printing/Offc Suppl	1.000	F	23,810.390	78.00	78
Operating Supplies	1.000	F	23,810.390	4,000.00	4,000
Miscellaneous	1.000	F	23,810.390	13.00	13
Countywide Indirect	1.000	F	23,810.390	4,390.00	4,390
Blds/Equip Replace	1.000	F	23,810.390	11,898.00	11,898
Total NonLabor Costs (rounded to nearest BY dollar): \$					24,756

FACILITY DEPRECIATION SCHEDULE:

No Depreciation Information for Facility: R-W-CONV

RECYCLING REVENUE INPUTS FOR BASE YEAR (\$/TON)

Paper.....	0.00
Glass.....	0.00
Metal.....	50.19
Plastic.....	0.00
Rubber.....	0.00
Textile.....	0.00
Wood.....	0.00
Food.....	0.00
Yard.....	0.00
Misc.....	0.00

**CONTAINER PROGRAM COST INPUT MODULE
(C-W-CONT)**

CHARACTERISTICS OF FACILITY

First Year of Operation..... 1993
 Last Year of Operation..... 1999
 Percent of Total Waste Processed..... 12.00

FACILITY LABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

POSITION	NUMBER	F/V	TONS/WORKER	SALARY	TOTAL COST
Landfill Supervisor	0.020	F	142,862.500	19,282	386
Asst Supervisor	0.020	F	142,862.500	19,843	397
Secretary	0.020	F	142,862.500	11,440	229
Scale Operators	0.010	F	285,725.000	29,828	298
Truck Operators	1.000	F	2,857.250	27,810	27,810
Bobcat Operator	0.100	F	28,572.500	17,971	1,797
Dumpester Atttdts-PT	1.000	F	2,857.250	14,144	14,144
Dumpester Site Mgr	1.000	F	2,857.250	13,624	13,624
Env. Ctrl, Off [2]	0.240	F	11,905.208	34,944	8,387
Fringe Benefits	1.000	F	2,857.250	15,860	15,860
Total Labor Costs (rounded to nearest BY dollar): \$					82,931

FACILITY NONLABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

DESCRIPTION	UNITS F/V	TONS/UNIT	UNIT COST	TOTAL COST
Travel & Per Diem	1.000 F	2,857.250	298.00	298
Communications	1.000 F	2,857.250	596.00	596
Rental & Leases	1.000 F	2,857.250	1,490.00	1,490
Repair & Maintenance	1.000 F	2,857.250	20,000.00	20,000
Printings/Office Supp	1.000 F	2,857.250	745.00	745
Operating Supplies	1.000 F	2,857.250	20,000.00	20,000
Miscellaneous	1.000 F	2,857.250	119.00	119
Equipment Replacemnt	1.000 F	2,857.250	50,000.00	50,000
Countrywide Indirect	1.000 F	2,857.250	41,684.00	41,684
PW Indirect	1.000 F	2,857.250	11,542.00	11,542
Utilities	1.000 F	2,857.250	1,192.00	1,192

Total NonLabor Costs (rounded to nearest BY dollar): \$ 147,666

FACILITY DEPRECIATION SCHEDULE

No Depreciation Information for Facility: C-W-CONT

**LINED LANDFILL COST INPUT MODULE
(L-W-D-LLWC)**

CHARACTERISTICS OF FACILITY

First Year of Operation.....	1993
Last Year of Operation.....	1999
Operating Capacity (Tons/Day).....	100
Landfill Section Length (yds).....	0.00
Landfill Section Width (yds).....	0.00
Landfill Section Depth (yds).....	0.00
Total Landfill Volume (cys).....	350,000.00
Current Utilization (% Total Volume).	0.00
Percent Allowed for Cover (%).....	20.00
Compacted Waste Density (lb/cy).....	1,000.00

% OF WASTE ACCEPTED AT FACILITY AFTER RECYCLING & RECOVERY

Paper.....	95.00	Glass.....	95.00
Metal.....	80.00	Plastic.....	90.00
Rubber.....	0.00	Textile.....	100.00
Wood.....	10.00	Food.....	100.00
Yard.....	0.00	Misc.....	53.00
Ash.....	0.00		

FACILITY LABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

POSITION	NUMBER	F/V	TONS/WORKER	SALARY	TOTAL COST
Landfill Supervisor	0.900	F	21,225.644	19,282	17,354
Asst Landfill Supv	0.900	F	21,225.644	19,843	17,859
Secretary	0.900	F	21,225.644	11,440	10,296
Scale Operators	0.540	F	35,376.074	29,828	16,107
Equipment Operator	0.300	F	63,676.933	18,200	5,460
Equipment Operator	0.300	F	63,676.933	17,992	5,398
Equipment Operator	1.000	F	19,103.080	17,971	17,971
Equipment Operator	1.000	F	19,103.080	17,971	17,971
Env Control Officer	0.470	F	40,644.851	34,944	16,424
Bobcat Operator	0.900	F	21,225.644	17,971	16,174
Frinse Benefits	1.000	F	19,103.080	33,843	33,843
Total Labor Costs (rounded to nearest BY dollar): \$					174,856

FACILITY NONLABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

DESCRIPTION	UNITS	F/V	TONS/UNIT	UNIT COST	TOTAL COST
Utilities/Telephone	1.000	F	19,103.080	6,000.00	6,000
M&R(Bldg,Grd,Equip)	1.000	F	19,103.080	35,000.00	35,000
Supplies/Trav/Etc	1.000	F	19,103.080	12,000.00	12,000
Monit (gas,H2O) old	1.000	F	19,103.080	20,750.00	20,750
Professional Svcs	1.000	F	19,103.080	10,000.00	10,000
Leachate Mgmt	1.000	F	19,103.080	20,000.00	20,000
Surface Water Mgmt	1.000	F	19,103.080	2,000.00	2,000
Cell Constr-2nd 5yr	1.000	F	19,103.080	120,000.00	120,000
O&M Lagoon	1.000	F	19,103.080	1,000.00	1,000
Monitor (gas,H2O,Le)	1.000	F	19,103.080	37,000.00	37,000
Reserve for Closure	1.000	F	19,103.080	18,136.00	18,136
Reserve for Post Clo	1.000	F	19,103.080	39,857.00	39,857
Equipment Use Allow	1.000	F	19,103.080	75,000.00	75,000
Reserve Funds @ 10%	1.000	F	19,103.080	36,599.00	36,599
Indirect-All Sources	1.000	F	19,103.080	154,602.00	154,602

Total NonLabor Costs (rounded to nearest BY dollar): \$ 587,944

FACILITY DEPRECIATION SCHEDULE

No Depreciation Information for Facility: L-W-D-LLWC

**CURRENT WASTE DISPOSAL
COST INPUT MODULE
(L-W-D-OCLL)**

CHARACTERISTICS OF FACILITY

First Year of Operation.....	1993
Last Year of Operation.....	1999
Operating Capacity (Tons/Day).....	100
Landfill Section Length (yds).....	0.00
Landfill Section Width (yds).....	0.00
Landfill Section Depth (yds).....	0.00
Total Landfill Volume (cys).....	350,000.00
Current Utilization (% Total Volume).	0.00
Percent Allowed for Cover (%).....	20.00
Compacted Waste Density (lb/cy).....	0.00

% OF WASTE ACCEPTED AT FACILITY AFTER RECYCLING & RECOVERY

Paper.....	95.00	Glass.....	95.00
Metal.....	80.00	Plastic.....	90.00
Rubber.....	0.00	Textile.....	100.00
Wood.....	10.00	Food.....	100.00
Yard.....	0.00	Misc.....	53.00
Ash.....	0.00		

FACILITY LABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

POSITION	NUMBER	F/V	TONS/WORKER	SALARY	TOTAL COST
Landfill Supervisor	0.900	F	21,225.644	19,282	17,354
Asst. Landfill Supv.	0.900	F	21,225.644	19,843	17,859
Secretary	0.900	F	21,225.644	11,440	10,296
Scale Operators	0.540	F	35,376.074	29,828	16,107
Env. Control Officer	0.470	F	40,644.851	34,944	16,424
Bobcat Operator	0.900	F	21,225.644	17,992	16,193
Equipment Operator	0.300	F	63,676.933	18,200	5,460
Equipment Operator	1.000	F	19,103.080	17,992	17,992
Frinse Benefits	1.000	F	19,103.080	27,824	27,824
Total Labor Costs (rounded to nearest BY dollar): \$					145,508

FACILITY NONLABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

DESCRIPTION	UNITS F/V	TONS/UNIT	UNIT COST	TOTAL COST
Travel & Per Diem	1.000 F	19,103.080	523.00	523
Communications	1.000 F	19,103.080	1,046.00	1,046
Utilities	1.000 F	19,103.080	2,091.00	2,091
Rental & Leases	1.000 F	19,103.080	2,614.00	2,614
Repair & Maintenance	1.000 F	19,103.080	14,000.00	14,000
Printing & Office Su	1.000 F	19,103.080	1,307.00	1,307
Operating Supplies	1.000 F	19,103.080	14,000.00	14,000
Miscellaneous	1.000 F	19,103.080	209.00	209
Professional Svcs	1.000 F	19,103.080	20,750.00	20,750
County-wide Indirect	1.000 F	19,103.080	73,128.00	73,128
P W Indirect	1.000 F	19,103.080	72,363.00	72,363
Haul & Disp Services	1.000 F	19,103.080	517,194.00	517,194
Total NonLabor Costs (rounded to nearest BY dollar): \$				719,225

**C&D LANDFILL COST INPUT MODULE
(L-W-D-C&D)**

CHARACTERISTICS OF FACILITY

First Year of Operation.....	1993
Last Year of Operation.....	1999
Operating Capacity (Tons/Day).....	50
Landfill Section Length (yds).....	0.00
Landfill Section Width (yds).....	0.00
Landfill Section Depth (yds).....	0.00
Total Landfill Volume (cys).....	100,000.00
Current Utilization (% Total Volume).	0.00
Percent Allowed for Cover (%).....	10.00
Compacted Waste Density (lb/cy).....	1,000.00

% OF WASTE ACCEPTED AT FACILITY AFTER RECYCLING & RECOVERY

Paper.....	5.00	Glass.....	5.00
Metal.....	20.00	Plastic.....	10.00
Rubber.....	1.00	Textile.....	0.00
Wood.....	90.00	Food.....	0.00
Yard.....	100.00	Misc.....	30.00
Ash.....	0.00		

FACILITY LABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

POSITION	NUMBER	F/V	TONS/WORKER	SALARY	TOTAL COST
Landfill Supervisor	0.030	F	105,003.667	19,282	578
Asst Supervisor	0.030	F	105,003.667	19,843	595
Secretary	0.030	F	105,003.667	11,440	343
Scale Operators	0.020	F	157,505.500	29,828	597
Equipment Operator		F		17,992	
Env. Control Officer	0.240	F	13,125.458	34,944	8,387
Equipment Operator	0.500	F	6,300.220	18,200	9,100
Frinse Benefits	1.000	F	3,150.110	4,635	4,635
Total Labor Costs (rounded to nearest BY dollar): \$					24,235

FACILITY NONLABOR COSTS ARE EXPRESSED IN BASE YEAR (BY) 1993 DOLLARS

DESCRIPTION	UNITS	F/V	TONS/UNIT	UNIT COST	TOTAL COST
Travel & Per Diem	1.000	F	3,150.110	87.00	87
Communications	1.000	F	3,150.110	174.00	174
Utilities	1.000	F	3,150.110	348.00	348
Rental & Leases	1.000	F	3,150.110	435.00	435
Repair & Maintenance	1.000	F	3,150.110	2,000.00	2,000
Printings/Offc Suppl	1.000	F	3,150.110	218.00	218
Operating Supplies	1.000	F	3,150.110	2,000.00	2,000
Miscellaneous	1.000	F	3,150.110	35.00	35
Professional Svcs	1.000	F	3,150.110	4,250.00	4,250
Countrywide Indirect	1.000	F	3,150.110	12,181.00	12,181
P W Indirect	1.000	F	3,150.110	14,821.00	14,821

Total NonLabor Costs (rounded to nearest BY dollar): \$ 36,549

**APPENDIX III
STRATEGY REPORTS**

**CURRENT DISPOSAL STRATEGY
(S-A-PRES)**

DMG/GFRC
06/23/1993

WALTON COUNTY, FL
LISTING OF FACILITIES FOR STRATEGY: S-A-PRES

10:35:42
Page

S-A-PRES STRATEGY

L-W-D-C&D C & D LANDFILL
L-W-D-CRITGRIT DISPOSAL
L-W-D-OCLOUT OF CTY - LL
R-W-CONV GLASS/METALS/PLAST RECYCLING

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,973	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	1,148	1,165	1,182	1,199	1,216	0	0	0	0	0
Labor Costs	9,082	9,446	9,824	10,216	10,625	0	0	0	0	0
Non-Labor Costs	25,746	26,776	27,847	28,961	30,119	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	24,608	25,971	27,403	28,908	30,490	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	10,220	10,251	10,267	10,269	10,254	0	0	0	0	0
Net Cost/Proc. Ton	8.91	8.80	8.69	8.57	8.44	0.00	0.00	0.00	0.00	0.00

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-PRES Strategy

Facility PV in 1993 dollars: \$ 43,182

L-W-D-C&D: C & D LANDFILL
FACILITY COST FORECAST - CASH BASIS

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	3,012	3,056	3,101	3,145	3,190	0	0	0	0	0
Labor Costs	25,204	26,213	27,261	28,352	29,486	0	0	0	0	0
Non-Labor Costs	38,011	39,531	41,113	42,757	44,467	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	63,215	65,744	68,374	71,109	73,953	0	0	0	0	0
Net Cost/Proc. Ton	20.99	21.51	22.05	22.61	23.19	0.00	0.00	0.00	0.00	0.00

L-W-D-C&D: C & D LANDFILL
FACILITY COST FORECAST - CASH BASIS

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-PRES Strategy

Facility PV in 1993 dollars: \$ 287,144

L-W-D-GRIT: GRIT DISPOSAL
FACILITY COST FORECAST - CASH BASIS

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	850	863	875	888	900	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

L-W-D-GRIT: GRIT DISPOSAL
FACILITY COST FORECAST - CASH BASIS

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-PRES Strategy

Facility PV in 1993 dollars: \$ 0

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	18,094	18,361	18,629	18,896	19,164	0	0	0	0	0
Labor Costs	151,328	157,382	163,677	170,224	177,033	0	0	0	0	0
Non-Labor Costs	747,994	777,914	809,030	841,392	875,047	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	899,322	935,295	972,707	1,011,615	1,052,080	0	0	0	0	0
Net Cost/Proc. Ton	49.70	50.94	52.21	53.54	54.90	0.00	0.00	0.00	0.00	0.00

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-PRES Strategy

Facility PV in 1993 dollars: \$ 4,085,000

SOLID WASTE MANAGEMENT STRATEGY REPORT
FOR STRATEGY: S-A-PRES UNDER THE A-93-CS-CT ASSUMPTION SET

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Recycled	1,148	1,165	1,182	1,199	1,216	0	0	0	0	0
Tons Recovered	0	0	0	0	0	0	0	0	0	0
Tons Landfilled	21,956	22,280	22,605	22,929	23,254	0	0	0	0	0
Tons Remaining	707	718	728	739	749	25,570	25,922	26,274	26,625	26,977
Labor Costs	185,615	193,040	200,762	208,792	217,144	0	0	0	0	0
Non-Labor Costs	811,751	844,221	877,990	913,110	949,634	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	24,608	25,971	27,403	28,908	30,490	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	972,758	1,011,290	1,051,348	1,092,993	1,136,287	0	0	0	0	0
Avg. Net Cost/Ton	40.85	41.85	42.89	43.95	45.06	0.00	0.00	0.00	0.00	0.00

SOLID WASTE MANAGEMENT STRATEGY REPORT
FOR STRATEGY: S-A-PRES UNDER THE A-93-CS-CT ASSUMPTION SET

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Tons Recycled	0	0	0	0	0	0	0	0	0	0
Tons Recovered	0	0	0	0	0	0	0	0	0	0
Tons Landfilled	0	0	0	0	0	0	0	0	0	0
Tons Remaining	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Avg. Net Cost/Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Present Value Cost of Strategy (1993 dollars): \$ 4,415,327

Includes all Facilities in Strategy...

**COUNTY LINED LANDFILL STRATEGY
(S-A-CNTYLL)**

DMG/GFRC
06/23/1993

WALTON COUNTY, FL
LISTING OF FACILITIES FOR STRATEGY: S-A-CNTYLL

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S-A-CNTYLL STRATEGY

L-W-D-C&D C & D LANDFILL
L-W-D-GRITGRIT DISPOSAL
L-W-D-LLWCCOUNTY-OWNED LL
R-W-COHV GLASS/METALS/PLAST RECYCLING

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	1,148	1,165	1,182	1,199	1,216	0	0	0	0	0
Labor Costs	9,082	9,446	9,824	10,216	10,625	0	0	0	0	0
Non-Labor Costs	25,746	26,776	27,847	28,961	30,119	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	24,608	25,971	27,403	28,908	30,490	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	10,220	10,251	10,267	10,269	10,254	0	0	0	0	0
Net Cost/Proc. Ton	8.91	8.80	8.69	8.57	8.44	0.00	0.00	0.00	0.00	0.00

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,727	43,240	43,752	44,265	44,779
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-CNTYLL Strategy

Facility PV in 1993 dollars: \$ 43,182

DMG/GFRC
06/23/1993

L-W-D-C&D: C & D LANDFILL
FACILITY COST FORECAST - CASH BASIS

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	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	3,012	3,056	3,101	3,145	3,190	0	0	0	0	0
Labor Costs	25,204	26,213	27,261	28,352	29,486	0	0	0	0	0
Non-Labor Costs	38,011	39,531	41,113	42,757	44,467	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	63,215	65,744	68,374	71,109	73,953	0	0	0	0	0
Net Cost/Proc. Ton	20.99	21.51	22.05	22.61	23.19	0.00	0.00	0.00	0.00	0.00

DMG/GFRC
06/23/1993

L-W-D-C&D: C & D LANDFILL
FACILITY COST FORECAST - CASH BASIS

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	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-CNTYLL Strategy

Facility PV in 1993 dollars: \$ 287,144

L-W-D-GRIT: GRIT DISPOSAL
FACILITY COST FORECAST - CASH BASIS

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	850	863	875	888	900	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

L-W-D-GRIT: GRIT DISPOSAL
FACILITY COST FORECAST - CASH BASIS

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-CNTYLL Strategy

Facility PV in 1993 dollars: \$ 0

L-W-D-LLWC: COUNTY-OWNED LL
FACILITY COST FORECAST - CASH BASIS

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	18,094	18,361	18,629	18,896	19,164	0	0	0	0	0
Labor Costs	181,850	189,124	196,689	204,557	212,739	0	0	0	0	0
Non-Labor Costs	611,462	635,920	661,357	687,811	715,324	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	793,312	825,044	858,046	892,368	928,063	0	0	0	0	0
Net Cost/Proc. Ton	43.84	44.93	46.06	47.22	48.43	0.00	0.00	0.00	0.00	0.00

L-W-D-LLWC: COUNTY-OWNED LL
FACILITY COST FORECAST - CASH BASIS

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-CNTYLL Strategy

Facility PV in 1993 dollars: \$ 3,603,467

DMG/GFRC
06/23/1993

SOLID WASTE MANAGEMENT STRATEGY REPORT
FOR STRATEGY: S-A-CNTYLL UNDER THE A-93-CS-CT ASSUMPTION SET

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	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Recycled	1,148	1,165	1,182	1,199	1,216	0	0	0	0	0
Tons Recovered	0	0	0	0	0	0	0	0	0	0
Tons Landfilled	21,956	22,280	22,605	22,929	23,254	0	0	0	0	0
Tons Remaining	707	718	728	739	749	25,570	25,922	26,274	26,625	26,977
Labor Costs	216,137	224,782	233,774	243,125	252,850	0	0	0	0	0
Non-Labor Costs	675,219	702,228	730,317	759,530	789,911	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	24,608	25,971	27,403	28,908	30,490	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	866,748	901,039	936,687	973,746	1,012,270	0	0	0	0	0
Avs. Net Cost/Ton	36.40	37.29	38.21	39.16	40.14	0.00	0.00	0.00	0.00	0.00

DMG/GFRC
06/23/1993

SOLID WASTE MANAGEMENT STRATEGY REPORT
FOR STRATEGY: S-A-CNTYLL UNDER THE A-93-CS-CT ASSUMPTION SET

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	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Recycled	0	0	0	0	0	0	0	0	0	0
Tons Recovered	0	0	0	0	0	0	0	0	0	0
Tons Landfilled	0	0	0	0	0	0	0	0	0	0
Tons Remaining	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Avs. Net Cost/Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Present Value Cost of Strategy (1993 dollars): \$ 3,933,793

Includes all Facilities in Strategy...

TIRE DISPOSAL STRATEGY

L-W-T-TD: TIRE DISPOSAL
FACILITY COST FORECAST - CASH BASIS

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,810	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Tons Processed	707	718	728	739	749	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	62,338	64,831	67,424	70,121	72,926	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	62,338	64,831	67,424	70,121	72,926	0	0	0	0	0
Net Cost/Proc. Ton	88.15	90.34	92.61	94.95	97.37	0.00	0.00	0.00	0.00	0.00

L-W-T-TD: TIRE DISPOSAL
FACILITY COST FORECAST - CASH BASIS

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Solid Waste (Tons)	27,329	27,680	28,032	28,384	28,735	29,087	29,439	29,790	30,141	30,492
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-TDONLY Strategy

Facility PV in 1993 dollars: \$ 283,157

CONTAINER PROGRAM STRATEGY

C-W-CONT: CONTAINER PROGRAM
FACILITY COST FORECAST - CASH BASIS

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Population	34,978	35,495	36,012	36,529	37,046	37,563	38,080	38,597	39,113	39,630
Solid Waste (Tons)	23,910	24,162	24,514	24,866	25,218	25,570	25,922	26,274	26,625	26,977
Labor Costs	86,248	89,698	93,286	97,018	100,899	0	0	0	0	0
Non-Labor Costs	153,573	159,716	166,104	172,748	179,658	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	239,821	249,414	259,391	269,766	280,557	0	0	0	0	0

C-W-CONT: CONTAINER PROGRAM
FACILITY COST FORECAST - CASH BASIS

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	40,147	40,663	41,180	41,696	42,213	42,729	43,246	43,762	44,278	44,794
Tons Processed	0	0	0	0	0	0	0	0	0	0
Labor Costs	0	0	0	0	0	0	0	0	0	0
Non-Labor Costs	0	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0	0	0	0
Debt - Interest	0	0	0	0	0	0	0	0	0	0
Debt - Principal	0	0	0	0	0	0	0	0	0	0
Generated Revenues	0	0	0	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0	0	0	0
Net Costs (LNPI-R)	0	0	0	0	0	0	0	0	0	0
Net Cost/Proc. Ton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Facility Impact Related to Others in S-A-CONT Strategy

Facility FV in 1993 dollars: \$ 1,089,342