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# Baker County

## Consolidated

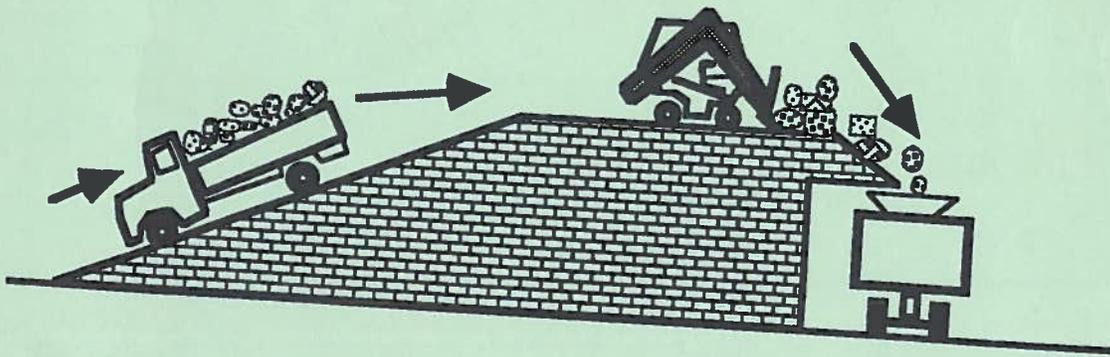
RECEIVED

MAR 11 1993

COMMERCIAL MANAGEMENT

# Solid Waste

# Management Plan



*Prepared with assistance from the Southwest Georgia Regional Development Center*

**A RESOLUTION TO SUBMIT THE  
BAKER COUNTY CONSOLIDATED  
SOLID WASTE MANAGEMENT PLAN  
FOR REVIEW AND RECOMMENDATION**

RECEIVED

MAR 11 1993

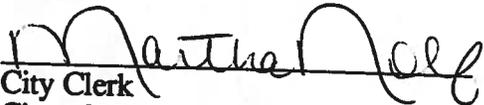
GOVERNMENTAL MANAGEMENT

WHEREAS, the Board of Commissioners of Baker County, Georgia and the Mayor and Council of Newton, Georgia have found it necessary to prepare a solid waste management plan for Newton and Baker County to meet the needs associated with the collection, disposal, and reduction of solid waste in the communities and to insure a planned orderly strategy for solid waste management policies that protect the public health, safety, and welfare;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of Baker County, Georgia and the Mayor and Council of Newton, Georgia that they shall submit for review, comment, and recommendation to the Southwest Georgia Regional Development Center this Baker County Consolidated Solid Waste Management Plan. We do hereby certify that the minimum public participation requirements have been satisfied in compliance with all applicable Georgia laws.

Adopted on the ninth day of February, 1993

Attest:

  
\_\_\_\_\_  
City Clerk  
City of Newton, Georgia

  
\_\_\_\_\_  
Mayor  
City of Newton, Georgia

**A RESOLUTION TO SUBMIT THE  
BAKER COUNTY CONSOLIDATED  
SOLID WASTE MANAGEMENT PLAN  
FOR REVIEW AND RECOMMENDATION**

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MAR 11 1993

CONSOLIDATED MANAGEMENT

WHEREAS, the Board of Commissioners of Baker County, Georgia and the Mayor and Council of Newton, Georgia have found it necessary to prepare a solid waste management plan for Newton and Baker County to meet the needs associated with the collection, disposal, and reduction of solid waste in the communities and to insure a planned orderly strategy for solid waste management policies that protect the public health, safety, and welfare;

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Adopted on the ninth day of February, 1993

Attest:

  
\_\_\_\_\_  
County Clerk  
Baker County, Georgia

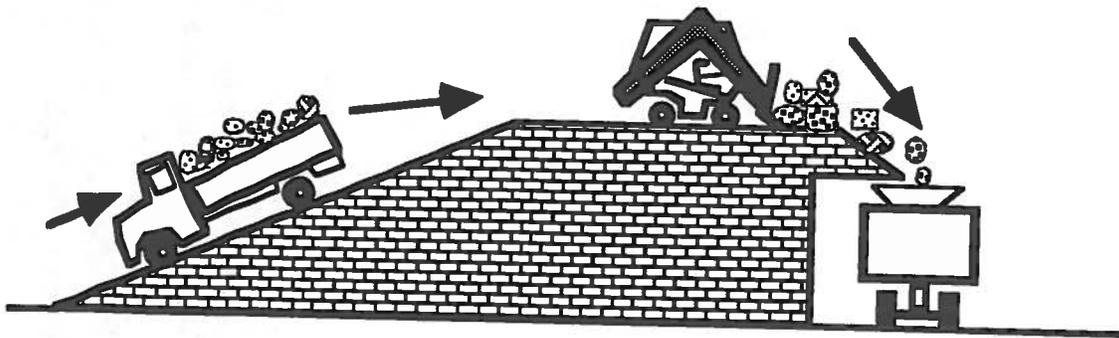
  
\_\_\_\_\_  
Chairman  
Board of Commissioners  
Baker County, Georgia

# Baker County

Consolidated

## Solid Waste

## Management Plan



*Prepared with assistance from the Southwest Georgia Regional Development Center*

# Baker County

## Solid Waste Management Plan

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# City of Thomasville

P. O. Box 1540

Thomasville, Georgia 31799

January 26, 1998

Southwest Georgia Regional Development Center  
P O Box 346  
Camilla, Georgia 31730-0346

Re: Solid Waste Disposal Services

Attn: Linda Kuller

The City of Thomasville, operator of the Thomasville - Thomas County Sunset Drive Municipal Solid Waste Disposal Facility, permit 136-012D(SL), currently receives MSW from the following counties and cities located therein:

Thomas Mitchell

Colquitt Baker

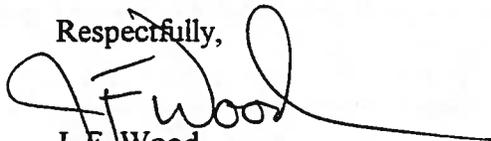
Additional minor quantities are received from Brooks.

In calendar year 1997, a total of 109,606.63 tons of waste was received.

By law, the current vertical expansion permit will expire on July 1, 1998. Excess capacity in that area remains but will become non usable.

New cells fully meeting sub title D requirements are currently under construction and will be utilized for disposal, with the closure of the vertical expansion area. The current permit for the Phase IV disposal area provides for 4,000,000 cubic yards of waste disposal. At the current rate of fill, this phase has 20 years of capacity. The facility master plan utilizing additional adjacent acreage which is similar in soil and groundwater and thus considered capable of being permitted under current regulations, expands the capacity of the landfill to 50 years and greater, dependent upon rate of fill. Thomasville is willing to accept MSW from the region and seeks additional customers.

Respectfully,



J. F. Wood

Landfill Operations Engineer

## SOLID WASTE DISPOSAL AND RECYCLING FACILITY AGREEMENT

THIS AGREEMENT, made and entered into the 15<sup>th</sup> day of JANUARY, 1997, by and between the City of Thomasville, Georgia (hereinafter called City) and Thomas County, Georgia (hereinafter called County) to be effective as of the date first above written.

### WITNESSETH:

WHEREAS, County and City have in joint cooperation operated a municipal solid waste disposal and recycling facility since 1973; and

WHEREAS, County and City desire to continue to jointly cooperate in the operation of a solid waste disposal and recycling facility for the in full compliance with all laws and regulations.

NOW, THEREFORE, in full recognition of the mutual benefits to be derived by each of the Parties hereto, and the mutual covenants herein contained, the Parties hereto agree as follows:

-1-

### LAND

**SOURCE AND TITLE:** The County shall dedicate the whole of Thomas County Land Lot 143 as further described in Exhibit A, owned by the County, for the purpose of solid waste disposal and recycling operations. There shall be no direct financial compensation to County for said land. Title to the property shall remain in the name of the County.

**USE OF PROPERTY:** Said land shall be used on an as needed basis for the operation of solid waste disposal and recycling facilities. City shall provide County with plans for solid waste disposal and recycling facilities initially and from time to time as the need dictates construction of said facilities and as the original plan may be amended. The City shall cause no waste to be disposed of within 200 feet of the boundaries of these lands after the date of this agreement. Portions of said land, not required at any point in time for active disposal use, may be used by the County, City or jointly, for other purposes provided such does not interfere with ongoing disposal operations; use of the land for future disposal and recycling operations; and is not in conflict with permitting requirements. Any income generated from said use, except income generated from the harvesting and sale of timber, shall enure to the benefit of the solid waste disposal and recycling facility fund. After termination of all disposal activity, recycling activity, by product extraction and expiration of all post monitoring requirements, the land shall be used for whatever purpose the law allows and the County may so desire.

-2-  
OPERATIONS

**PERMITS:** The City shall obtain all regulatory permits required for the conduct of respective solid waste disposal and recycling operations current or future. The City shall be responsible for construction and operation of the facility(s) within permit requirements. Any major change in the method of disposal and/or significant capital construction shall be presented to the County for their review and joint discussion with the City.

**STAFF AND EQUIPMENT:** The City shall be responsible for staffing the solid waste disposal and recycling facility. All equipment and machinery currently located at the solid waste disposal and recycling facility shall be utilized in future solid waste disposal and recycling facility operations as long as the equipment has a useful life. The City shall have the responsibility of determining staffing requirements and equipment needs.

**HOURS OF OPERATION:** The City shall ensure that solid waste disposal and recycling facility hours of operation meet the needs of all major solid waste disposers of the solid waste disposal and recycling facility.

**DISPOSAL FEE REQUIRED:** All materials, public or private, being delivered to the solid waste disposal and recycling facility shall be charged a fee for disposal. The only exception shall be when clean rubble that is suitable for erosion control or clean dirt suitable for cover is received, it may be designated as an operational material and accepted without charge.

**TYPE OF WASTE ACCEPTED:** Only municipal solid waste, construction demolition waste and inert waste for which the facility(s) are permitted shall be solicited. No hazardous waste or other prohibited waste shall be accepted.

**QUANTITY OF WASTE ACCEPTED:** The City shall limit the acceptance of municipal solid waste at the facility to an average of 800 tons per day. Should opportunities or circumstances develop that would cause such daily average to be exceeded, the City and County agree to review and re-evaluate the operation of the landfill and make a good faith determination as to whether a higher daily average would be in the best interest of the City and the County.

-3-  
USERS

**CITY, COUNTY AND MUNICIPALITIES WITHIN THOMAS COUNTY:** Any solid waste and recycling facility operated under this agreement, shall be available for the use of County, City and other municipalities contained therein and the citizens thereof.

**OUTSIDE OF THOMAS COUNTY:** City shall market capacity of the solid waste disposal and recycling facility, thus distributing fixed costs over increased volume of waste thereby decreasing unit cost to all citizens of Thomas County. Waste generated by entities considered by

the State of Georgia to lie within that region construed as Southwest Georgia, waste generated by Florida entities bordering Thomas, Brooks or Grady Counties and waste delivered by any customer desiring to deliver less than 50 tons per day shall be accepted by the City without further consultation. The City shall consult with and shall reach agreement with the County on any potential non regional customers with greater than 50 ton per day requirements to evaluate the best interests of both parties.

-4-

#### FINANCIAL MATTERS AND FEES

**FUNDS AND ACCOUNTS:** The City shall maintain separate accounting records for all solid waste disposal and recycling facility financial matters. All funds held for the solid waste disposal and recycling facility account shall be maintained in separate bank accounts designated by City.

**REPORTS AND AUDITS:** The City shall provide at any time requested by County, the status of current operating budgets. Quarterly summaries of operating accounts shall be provided to the County along with copies of such operational reports as required by regulatory authority. The solid waste disposal and recycling facility account shall be audited as required by law annually and a copy of that audit provided to the County at such time it becomes available.

**FEE ESTABLISHMENT:** Not less than annually, the City shall evaluate all current operational costs, support costs, capital costs, capital reserves and regulatory required reserves, to determine a total annual funding requirement. This shall be distributed over the estimated annual tonnage to be received to establish a base cost per ton, otherwise known as the base tipping fee. Said fee shall then be charged for the next year unless there is indication that review and a subsequent adjustment is required in the interim. In addition to the base fee, fees for materials other than that classed as municipal solid waste and that which may require special handling, including waste requiring delivery to the solid waste disposal and recycling facility outside of established operating hours, shall be established and published. All calculations used in the establishment of the base tipping fee shall be made available to the County for their review and discussion. This base fee shall be that charged to County, City and municipal governments located therein. All other users delivering waste, known to have originated within Thomas County may be assessed a surcharge in addition to base tipping fee if such is determined appropriate. All other governments and users delivering waste from outside Thomas County, shall be assessed a surcharge, the amount thereof dependent upon the market.

**FUNDING:** At the conclusion of each annual audit a determination will be made of fund availability. The determination shall include as a requirement that the solid waste disposal and recycling facility account shall carry sufficient cash or cash equivalent reserves to meet six months of anticipated operation, capital, reserves and regulatory reserve funding requirements. After said determination is made any excess funds shall be distributed equally to City and County. Should the determination indicate a shortfall of funds, then City and County shall contribute equally to said shortfall.

-5-  
LIABILITY

The City shall make all reasonable efforts to utilize state of the art equipment and technology and shall make all reasonable efforts to ensure that all permit requirements are complied with. In the event subsequent environmental damage occurs which is, directly attributable to solid waste disposal and recycling facility operations, funding of initial mitigation shall be the responsibility of solid waste disposal and recycling facility account reserves. In the event of costs exceeding those reserves, any federal or state funds available shall be applied. Any liability beyond this funding shall be divided equally between City and County.

-6-  
TERM OF CONTRACT

The term of this contract shall be to a point in time that is marked by the following whichever occurs first: after termination of all disposal activities, recycling activities, by-product extraction, expiration of all post monitoring requirements or the limit of time established by State of Georgia law on intergovernmental contracts, currently established at fifty (50) years. It is the intent that said site will be used as a solid waste disposal and recycling facility as long as it has a useful life or requires post monitoring as a solid waste disposal and recycling facility.

IN WITNESS THEREOF, this instrument has been and is executed on behalf of the City of Thomasville by the Mayor and on behalf of Thomas County, Georgia, by the Chairman of the Board of Commissioners of Thomas County.

City of Thomasville, Georgia

Thomas County, Georgia

By Camille L. Payne  
Camille Payne, Mayor

By John Bulloch  
John Bulloch, Chairman

Attest:

Lynne J. Quatney  
City Clerk

Attest:

Kathy Golden  
County Clerk

## EXHIBIT "A"

### Description of Landfill Operation Site

All that tract or parcel of land situate, lying and being in original land lot number 143 in the 13th land district of Thomas County, Georgia, containing 485 acres, more or less, and more particularly described as follows:

**BEGINNING** at a point where the south right-of-way margin of Sunset Drive intersects the original west line of said land lot number 143 and running thence southerly along the original west line of said land lot number 143 a distance of 4596.60 feet to the southwest corner of said land lot number 143; thence easterly, along the original south line of said land lot number 143 a distance of 4598.88 feet to the southeast corner of said land lot number 143; thence northerly along the original east line of said land lot number 143 a distance of 4597.66 feet to the northeast corner of said land lot number 143; thence westerly along the projection of the south margin of the projection of the right-of-way of Sunset Drive and continuing along the south margin of the right-of-way of Sunset Drive 4598.88 feet to the point of beginning.

\*Difference of 1.06 feet in the east and west lines of original land lot 143 results from the legal descriptions of two separate tracts contained therein.



**POULTRY COMPOSTING  
DEMONSTRATION PROJECT**

**A PROPOSAL TO**

**THE BAKER COUNTY  
BOARD OF COMMISSIONERS**



Prepared by:

SOWEGA Engineering, LLC  
158 East Lee Street  
P.O. Box 735  
Dawson, Georgia 31742  
(229) 995-6364  
(229) 995-4892



# Baker County Board of Commissioners

PO Box 607  
167 Baker Place  
Newton, Georgia 31770  
Baker

Phone (229) 734-3000  
Fax (229) 734-8822

County Manager Charley Duke  
County Clerk Molinda Werth

Chairman Lucius Adkins  
Vice-Chairman Tim Burch  
Harden Allen  
Stevie Donley  
Steven Kelley

March 22, 2002

Mr. Paul Burks  
Executive Director  
Georgia Environmental Facilities Authority  
2090 Equitable Building  
100 Peachtree St., NW  
Atlanta GA 30303

Dear Mr. Burks:

Please accept this letter as Baker County's strong support for the multi-jurisdictional demonstration project proposal "Poultry Litter Composting and Reuse" for GEFA's 2002 recycling and waste reduction grant program. Baker County is pleased to offer our services as the lead agency for this project.

As you know, Baker County is located in rural southwest Georgia and most of our population derives its income from agricultural operations, with poultry production being a major portion of our economic activity. With limited means to educate local poultry producers about the latest waste management and reduction programs we face a great challenge to improve environmental stewardship efforts and sustain the economic vitality that springs from our abundant natural resources.

This innovative project will demonstrate that poultry litter composting has the potential to reduce waste management costs while producing a more stable, usable and less odorous row crop input for the many farms across the region.

Please do not hesitate to contact me should you need additional information on this very worthwhile project.

Sincerely,  
*Lucius Adkins*  
Lucius Adkins  
Chairman

# This form can now be filled out online!

## GEORGIA ENVIRONMENTAL FACILITIES AUTHORITY RECYCLING AND WASTE REDUCTION GRANT PROGRAM APPLICATION

- 1. Name of Applicant(s): Baker County Board of Commissioners
- 2. Address: P.O. Box 607, Newton, Georgia 31770
- 3. Contact Person: Lucius Adkins, County Commission Chairman/Charlie Dukes, County Administrator
- 4. Telephone: (229) 734-3000 Fax: (229) 734-8822
- 5. Application prepared by (Name/Organization/Number/E-mail): J. Paul Rakel, Jr., P.E., SOWEGA Engineering, LLC  
(229) 965-6364 (Voice), (229) 895-4892 (fax), paulrakel@earthlink.net

6. Project, program or activity description (describe in one or two sentences):  
 Poultry litter composting demonstration project to encourage composting as an alternative for the treatment and disposal of poultry litter and mortality. Composted poultry litter is a more stable fertilizer/soil amendment and can be more easily transported. See attached project description.

7. Have you applied to other state or federal sources for funds for this project?  Yes  No

8. If yes, describe the source, amount, and status of that application.  
 \_\_\_\_\_

9. Amount of GEFA Grant Requested: \$ 250,000.00 10. Total Project Cost: \$ 250,000.00

11. Expected project beginning date: July 1, 2002  
 Expected completion date: June 30, 2003

12. **Certification:** I, the undersigned authorized representative of the applicant, certify that to the best of my knowledge the information in the application is true and correct, the document and project has been duly authorized by the governing body of the applicant, and, if funded, the applicant will carry out the project activities in the manner described in this application. I also certify that the applicant shall maintain accounting records in accordance with generally accepted governmental accounting principles and that the funds awarded will be included in those audits or financial statements that cover all or part of the project duration period noted above. I further certify that the applicant has a Service Delivery Strategy and that the proposed project is not inconsistent with the strategy. I also further certify that the applicant has an approved and locally adopted solid waste management plan and this project as proposed is consistent with the plan. (Solid waste management plans will be reviewed by the Department of Community Affairs for proposed project consistency).

13. W. Lucius Adkins 3-25-02  
 Official Signature Date

Name (please print) Lucius Adkins

Title Chairman, Baker County Commission

14. Mail an original and 4 copies to:  
 Georgia Environmental Facilities Authority  
 2090 Equitable Building  
 100 Peachtree Street, NW  
 Atlanta, Georgia 30303-1911

RECEIVED

GEFA Use Only

Date Received: MAR 29 2002

Mail  GA Environmental Facilities Authority

Approved: \_\_\_\_\_  
 Denied: \_\_\_\_\_  
 Solid Waste Plan Status: \_\_\_\_\_  
 QLG Status: \_\_\_\_\_  
 SDS Status: \_\_\_\_\_  
 RWR Grant Number: \_\_\_\_\_

Revised 12/01

15. Describe the areas to be serviced under this grant. Include the following information:

- a) names of counties, municipalities, towns, etc:  
Baker County (Lead), Mitchell County, Stephens County
- b) current population estimates:  
Baker County: 4,074; Mitchell County: 23,932; Stephens County: 25,435
- c) area descriptions including which areas are rural, urban and suburban:  
All of the areas are considered rural
- d) approximate square mileage of service area.

This is a demonstration project. If successful, we hope to encourage this type of operation at poultry houses statewide.

16. Describe your current solid waste management system including your recycling and/or waste reduction program(s) and yard trimmings management program (if applicable). Include collection methods, materials collected, processing methods, marketing approaches and educational efforts.

Solid waste management of poultry consists of spreading the raw litter as a fertilizer/soil amendment on crop land. Most litter is applied on farms also growing poultry. Some litter is spread on adjoining farms.

17. Describe your community's policy(ies) and procedures for the purchase of products and materials made from recycled materials. Attach a copy of your community's "buy recycled" ordinance or procurement policy.

The county encourages the spreading of litter as a soil amendment or fertilizer as opposed to collecting it and placing it in a land fill. The litter is generally land applied using nitrogen as the limiting nutrient.

18. Explain how previous GIFA and other grant funding has been used to establish or implement your existing programs (if applicable).

None

19. Describe the project for which grant funding is being requested, *including how grant funds will be used to achieve or make progress toward local or state solid waste management/waste reduction goals.*

**Include cost estimates for materials, facilities, equipment, education, administrative, contractor and other direct costs. Cost estimates must match budget pages. Attach additional pages as needed.**

- a) If the project involves the use of scrap tire materials, describe the estimated quantity of scrap tire material to be used and the material that would have been used if scrap tires were not used.
- b) If the project is a demonstration project, describe the objective of the demonstration, including how this project will be used to remove impediments to the use of a specific product or material or will validate the feasibility of the use, identify the methods to be used to document project results and communicate results to other potential customers, and identify partners, such as end use markets or academic groups, participating in the project.
- c) For equipment purchases/capital costs, program elements that must be addressed shall include: how the purchase of the equipment relates to the ongoing program or the establishment of a new program; a description of how the equipment will be used; a complete description of plans to construct or retrofit; and a discussion of proposed recycled content products usage plan.
- d) If the project is a waste reduction program, describe target audience, method of outreach (e.g., workshops, peer matching, or networks), quantity/volume of targeted solid waste currently being disposed in a MSW landfill, and method to evaluate or track waste reduction efforts.

See the attached project description for the project cost estimates, justifications goals, objectives and rationale.

20. Provide a timetable for the development and implementation of the project for the term of the grant (one-year).

<u>MILESTONES</u>	<u>TARGET DATE</u>
1. Develop detailed action plan for the project	July 15, 2002
2. Identify demonstration sites	July 31, 2002
3. Identify composting systems for demonstration project	August 15, 2002
4. Construct concrete pads at demonstration sites	September 15, 2002
5. Deliver and Set-up Composting Equipment	October 1, 2002
6. Composting Operations	April 1, 2003
7. Laboratory Testing	April 1, 2003
8. Market Identification	April 30, 2003
9. Develop Promotional/Educational Materials	May 31, 2003
10. Final Report to GEFA	June 15, 2003

21. For multijurisdictional projects, identify the lead local government and individual heading the project, list each local government and the role each will have in the project.

The lead local government will be Baker County. The county will contract with SOWEGA Engineering, LLC for project management services. The project manager for SOWEGA Engineering, LLC will be J. Paul Raket, Jr. P.E. Stephens and Mitchell Counties will nominate poultry farms for the demonstration sites.

22. Has applicant entered into any written contract, written bid or written agreement to develop and/or implement a solid waste reduction program and/or recycling program? (include private waste management companies, processors, haulers, and end users). If so, please provide pertinent information or attach a copy of the document or summarize contract information.

No

23. List the anticipated and available markets (names of vendors) or uses for materials collected through the local government recycling programs. List any existing public or private recycling programs in the project area and discuss how these programs will be affected by the proposed project.

The available markets include farms not currently using poultry litter in the area. Composting will make transporting the litter to these farms easier. Other potential markets include state nurseries, GDOT road projects, GaDNR recreation sites and golf courses, as well as commercial markets for the fertilizer.

Organic fertilizers are becoming more popular and composted poultry litter is an excellent organic fertilizer.

We anticipate working with the UGA Extension Service as well as the UGA College of Agricultural and Environmental Sciences to further identify potential markets.

**DEMONSTRATION PROJECT  
FOR  
POULTRY LITTER COMPOSTING AND RE-USE**

**PROJECT SUMMARY:** Poultry litter, long used as a fertilizer and soil amendment, poses an environmental threat if application continues on the same land over a long period of time. Transport difficulties prevent more wide spread use of poultry litter as a fertilizer. Composting offers the potential of reducing transport costs and providing a more stable soil amendment. This project will conduct a pilot study of various composting techniques and evaluate which process offers the most feasible method of providing a transportable, stable fertilizer alternative.

**BACKGROUND:** Georgia is the largest poultry producer in the country. Along with that distinction comes the fact that Georgia is also the largest producer of poultry litter. In Southwest Georgia there are 600 growing houses that support the Cagle Poultry Processing Plant in Camilla. Each house grows out 23,000 broilers every 56 days. During that grow-out the chickens produce approximately 45 tons of litter. Each house will have approximately 5.5 grow-outs per year. Running the numbers through, poultry production in Southwest Georgia produces approximately 145,000 – 150,000 tons of chicken litter per year. That is equivalent to almost 250,000 cubic yards of litter.

In North Georgia the situation is even worse. North Georgia produces over three times the number of birds annually than Southwest Georgia. This means they also produce over three times the poultry litter. The problem in North Georgia is compounded by two factors: less cropland and longer term application. The soils in North Georgia that have been receiving poultry litter over the last 40+ years are now showing signs of being saturated with phosphorus.

**CURRENT SITUATION:** Poultry litter is removed from the growing houses after each grow-out and stockpiled near the houses. It is not protected from the environment or sitting on an impervious surface. Poultry litter is disposed of by spreading it on farm

field as a fertilizer and soil supplement usually in the early to mid fall. This is a beneficial use of the litter since it is a good source of nitrogen, phosphorus and potassium. However, due to transportation problems with the raw litter (odor, bulk, volume), land application is limited to the farms associated with the growing operations or adjacent farmland. Over time this can lead to over application of phosphorus and water quality problems.

**IDENTIFICATION OF THE PROBLEM:** Poultry litter is a good alternative to synthetic fertilizers. However, the key is applying at a rate that does not overload the soil with any one of the three main constituents, nitrogen (N), phosphorus (P) and potassium (K). According to the Agricultural Census of 1997 the 8 counties surrounding Mitchell County have approximately 775,000 acres of cropland. Of that value only 32,250 acres are associated with poultry production operations. The concern is whether these 32,250 acres can safely assimilate the loadings of N, P, and K.

Nitrogen is the first nutrient of concern. Over application of nitrogen can lead to leached nitrates polluting groundwater. The geology of southwest Georgia is karst with groundwater close to the surface in many locations. There are numerous limesinks and sinkholes throughout the region. These areas act as direct conduits into the aquifer. Therefore the potential of groundwater pollution from nitrogen is very real. Just such a nitrogen problem occurred several years ago south of Albany. There are some indications the source of the nitrogen was traced to an animal feed lot in the area.

Phosphorus is also a potential environmental problem. There is no evidence that phosphorus poses a health risk to humans, but phosphorus in sediment reaching surface waters has been known to lead to eutrophication and fish kills. Potassium has not been shown to cause an environmental hazard except when applied in very large amounts. In the case of poultry litter, the levels of nitrogen and phosphorus will act as the limiting factors in determining a land application program.

The first step in this process is to perform a nutrient balance for each of the elements. According to the Animal Waste Management Field Handbook (AWMFH) from the USDA Natural Resources Conservation Service (NRCS) approximately 1.94% of the weight of the litter produced is composed of nitrogen. For the 150,000 tons of litter produced annually in Southwest Georgia, this equates to approximately 5.8 million pounds of nitrogen. This value must be adjusted to reflect the amount of nitrogen available for plant uptake through mineralization.

Mineralization is the process whereby organic nutrients are biologically converted in the soil to the inorganic form which is soluble and available for plant uptake. Approximately 90% of the nitrogen in poultry litter is converted in the first year, 20% of the remaining in the second year and 12.5% of the remainder in the third. For example, if poultry manure is applied at a rate of 100 pounds total nitrogen per acre, 90 pounds (90%) would be available for uptake in the first year. In year 2, 20% of the remaining 10 pounds or 2 pounds would be available. A second application in the second year would make an additional 90 pounds available. Thus a total of 92 pounds would be available in the second year. In the third year 12.5% of the remaining 8 pounds from the first application is mineralized or another 1 pound. Therefore in the third year a total of 93 pounds of nitrogen is available for plant uptake (90 lbs yr 1 + 2 lbs yr 2 + 1 lbs yr 3). Therefore, after 3 years, 93% of the nitrogen applied annually is being converted to plant available nitrogen. Given sufficient time all of the nitrogen is converted to inorganic nitrogen for plant uptake. Since the conversion rate drops below 5% in the fourth year, three years is used as the period to estimate the nitrogen available to the plants. Therefore the estimated plant available nitrogen from the 150,000 tons of litter annually is:

$$150,000 \times 2,000 \text{ lbs/ton} \times 1.94\% \times 93\% = 5.4 \text{ million lbs.}$$

Typical crops in Southwest Georgia that would receive poultry litter include corn, soybeans, peanuts and cotton. The average nitrogen uptake rate for these plant types is 150 – 200 lbs/ac/yr. Using a value of 175 lbs N/ac-yr this equates to 31,000 acres per year to handle this level of nitrogen loading. The poultry farms in this region include an

estimated 32,000 acres of cropland, plenty of land available to handle the nitrogen loading.

A similar process is followed with phosphorus with 93% of the phosphorus in the litter is available for plant uptake. According to the AWMFH approximately 0.97% of the weight of fresh poultry litter is phosphorus. Therefore the plant available phosphorus from 150,000 tons of litter annually is:

$$150,000 \times 2,000 \text{ lbs/ton} \times 0.97\% \times 93\% = 2.7 \text{ million lbs.}$$

The average phosphorus uptake for the above plants is approximately 18 pounds per acre per year. Using this value, a total of 150,000 acres per year are needed to assimilate this phosphorus loading. There is not sufficient acreage on the poultry farms to handle this level of loading.

Phosphorus has become a problem in handling poultry litter in almost every region that has had poultry farming for an extended period. Poultry farms in the DelMarVa region around the Chesapeake Bay may no longer land apply their poultry litter due to phosphorus contamination. Similar problems have occurred in Texas, Tennessee, and Arkansas. Some areas in North Georgia where poultry farming has been underway for years are showing elevated levels of phosphorus in the soil. If disposal of poultry litter is limited to the existing poultry farms (using nitrogen as the limiting element in determining application rates) it is only a matter of time before Southwest Georgia will have the same problem.

In North Georgia the problem is even more difficult. Using the data from the 1997 agricultural census the North Georgia region including Stephens, Habersham, Banks, Hall, Franklin, Hart, White, Dawson, Jackson, Madison, Oglethorpe and Elbert Counties have approximately 192,500 acres of farmland, 33,900 acres associated with poultry production.. This region produced approximately 186,000,000 broilers in 1997. This yields over 725 million pounds of poultry litter. Using the above calculations it would

take over 70,500 acres of cropland to apply the litter using nitrogen as the limiting nutrient. When phosphorus becomes the limiting nutrient, the required acreage increases to almost 400,000 acres. There is not enough cropland in North Georgia to apply poultry litter using phosphorus as the limiting nutrient. This fact is born out by the fact that much of the crop land in North Georgia is showing signs of being overloaded with phosphorus.

**POTENTIAL SOLUTION:** There are over 700,000 acres of cropland in the 8 county region supporting the Cagle Poultry Processing facility. These 700,000 acres can easily accommodate the distribution of poultry litter from the growing houses in the region. The major problem with this distribution of the load is transportation. A ton of fresh poultry litter occupies approximately 1.5 cubic yards. Weight is not the limiting factor, volume is. It would take over 6,250 40-CY trucks to distribute the litter throughout the region. If the density of the litter could be increased, transportation costs would be significantly reduced.

For North Georgia alternate locations need to be found to safely dispose of the litter. This will require some form of packaging and transportation of the litter. In addition, a market needs to be developed to take the product. Composting offers the potential of reducing the volume of the litter, making it more easily transportable and, by reducing odors and eliminating parasites and pathogens, more acceptable as a form of fertilizer for the domestic market.

One method of reducing the volume of litter is through composting. Composting also offers the advantages of reducing odors, eliminating parasites and pathogens, and stabilizing the nutrients in the litter. Nitrogen in composted litter is more stable and less likely to leach into the soil and groundwater. Studies have shown that composted poultry litter is a better fertilizer and soil amendment. Finally fresh poultry litter is difficult to spread since it has a tendency to cake and clump. Composted litter is more uniform and more easily spread.

**DEMONSTRATION PROJECT:** This project will conduct a pilot study of composting at farms in Baker, Mitchell and Stephens Counties. The project will consist of

construction of a concrete pad to prevent nutrients from the raw litter leaching into the soil. Then a minimum of two different types of composting operations will be tested. Preliminary plans are to compare in-vessel composting with composting in specially designed bags and/or windrow composting. Items to be evaluated include:

1. Capital Cost
2. Operating Cost
3. Labor Costs
4. Process Speed
5. Process flexibility
6. Volume Reduction
7. Nutrient Stabilization
8. Transportation Costs

To encourage poultry farmers to switch to composting the process needs to present a value added to their compost. As with any recycling process, if there is no market for the end product, or the end product has no value added for the operator, then the project will fail. Key to the success of convincing the poultry farmers to incur the additional capital and O & M expenses to operating a composting operation will be for the farmers to see it is worth their while.

Upon completion of the demonstration project a final report will be prepared summarizing the findings. In addition educational and promotional materials will be prepared describing the benefits of composting and encouraging poultry farmers to begin composting operations. The information will also try to identify potential sources of capital to offset start-up costs and potential markets for the composted litter.

**PROJECT BUDGET:** The budget for this project will cover the cost of construction of the pole barn, procurement of pilot study composting equipment, engineering services to site the unit, oversee operations, prepare evaluations and feasibility studies, laboratory services and preparation of educational materials. The budget is as follows:

**TABLE I  
PROJECT BUDGET**

ITEM	DESCRIPTION	ESTIMATED COST
1.	1,800 SF CONCRETE PAD WITH 4' WALLS ON THREE SIDES	\$ 60,000
2.	COMPOSTING EQUIPMENT	
	In-Vessel type composting equipment	\$ 60,000
	Aerated Tube type composting equipment	\$ 30,000
	Mechanical Windrow Compost Turner	\$ 35,000
3.	LABORATORY TESTING OF RAW AND COMPOSTED LITTE	\$ 10,000
4.	ENGINEERING SERVICES FOR SITING, PROJECT COORDINATION, DATA GATHERING AND FINAL REPORT PREPARATION	\$ 45,000
5.	EDUCATIONAL, PROMOTIONAL MATERIALS	\$ 10,000
<b>ESTIMATED PROJECT BUDGET</b>		<b>\$ 250,000</b>

Labor for the composting operations will be provided by the poultry farmer and/or the equipment suppliers.

**PROJECT SCHEDULE:** The proposed project schedule envisions a year-long project. The first step will be to determine which composting techniques will be evaluated. There are many equipment manufacturers and this phase will seek to select the manufacturers that offer equipment at a reasonable cost that will require the least O & M input from the farmer. Also key in this phase is determining the level of manufacturer participation that will be offered to offset the cost of the project. Also during this phase we will be identifying the test sites in the various counties. Once the sites have been selected the concrete pads will be constructed. Selected manufacturers will then be invited to set up their equipment and begin operations. During the demonstration project the sites will be advertised to the local poultry producers and site visits and equipment demonstrations will be scheduled to spread the word about the project. Prior to commencing composting operations samples of the raw litter will be gathered and submitted to an agricultural laboratory for testing. After composting is complete samples will again be taken and tested. When the test results are received and analysis will be made examining the volume reduction, capital costs, O&M costs, and nutrient value. The nutrient value and volume reduction will be used to work with the agricultural community to determine potential markets for the organic fertilizer. The costs, value added and potential markets will be used to prepare educational materials for distribution within the poultry, agricultural and landscape gardening communities to create a market for the re-cycled litter/organic fertilizer.

### **PROJECT SCHEDULE**

<b>PHASE</b>	<b>START DATE</b>	<b>END DATE</b>
IDENTIFY DEMONSTRATION SITES	Jul-02	Jul-02
IDENTIFY COMPOSTING SYSTEMS	Jul-02	Aug-02
CONSTRUCT CONCRETE PADS	Aug-02	Sep-02
DELIVER & SET UP EQUIPMENT	Aug-02	Oct-02
COMPOSTING OPERATIONS	Oct-02	Apr-02
LABORATORY TESTING	Oct-02	Apr-02
MARKET IDENTIFICATION	Nov-02	Apr-02
PROMOTIONAL/EDUCATIONAL MATERIALS	Apr-02	Jun-02

**CONCLUSION:** Poultry litter poses a potential environmental problem if applied using nitrogen as the limiting nutrient. Application rates using phosphorus as the limiting nutrient are not currently feasible because of excessive transportation costs. Composting has the potential of reducing these costs while producing a more stable, usable and less odorous fertilizer. The results of this pilot study will be used to promote a waste reduction program for poultry litter throughout the eight county region.

# DRAFT

## Baker County Consolidated Solid Waste Management Plan

### Introduction

Under the Georgia Solid Waste Management Act of 1989, every county and city in the state is required to have or be a part of a solid waste management plan. The plan must also explain how the jurisdictions in the plan will reduce their per capita waste disposal by 25% before July of 1996 and demonstrate that the jurisdiction has adequate solid waste handling capacity for the next ten (10) years. This plan is intended to meet these state requirements for Baker County and the City of Newton. To the community the purpose of a plan is to answer three questions about its solid waste management; (1) where are we, (2) where do we want to be, and (3) how are we going to get there.

The Baker County Consolidated Solid Waste Management Plan is divided into five sections. The first section is this one, the *Information and Assessment*. This section of the plan and is intended to be a resource for decision making in the planning process. It is provided for the purpose of answering the all three questions in one context: where are we where do we want to be, and how are we going to get there. It is divided into seven elements of focus. These elements are as follows: Amount of Waste, Disposal, Land Limitations, Financing, Collection, Waste Reduction, and Education. The next section of this plan contains the *Goals and Policies of the plan*. Goals are listed in a plan to specifically answer the question: where do we want to be. Policies are one tool by which the plan specifically answers how are we going to get there. The counter part to policies are objectives. Objectives are intended measure the effectiveness of the plan. The Objectives of this plan are listed in the *Solid Waste Plan Work Schedule*. The fourth section of the plan is the *Update and Amendment Process*. This is very important to the plan because as time passes and more information is known plans may need to be changed. Section five of the plan is made up of *attachments* that are referred to in the information and assessment.

### Amount of Waste Element

Relative to most counties in Georgia, Baker County is considered moderately sized, rural, and sparsely populated. Since the early part of this century Baker County has lost population with each census. This is displayed in table 1 below. It is anticipated by many local officials that the population will continue to decline due to the closure of its largest manufacturing industry. The City of Newton, although in the past has had increases in population, will feel a decline due to the loss of the manufacturing industry located inside the city.

Baker County Historic Population			
			unincorporated
Year	City of Newton	Baker County	Baker County
1920	377	8,298	7,921
1930	517	7,818	7,301
1940	514	7,344	6,830
1950	503	5,952	5,449
1960	529	4,543	4,014
1970	624	3,875	3,251
1980	711	3,808	3,097
1990	703	3,615	2,912

Source: U.S. Census of Population

Table 1

Much of the land area in the county is consumed by large plantations. The four largest plantations are Ichaway, Pineland, Jo-So-Li, and Pinebloom. Baker County has the lowest population per square mile of the fourteen county Southwest Georgia Region. Table 2 on the next page shows the diversity in this relationship. This complicate solid waste management services because per capita cost is directly influenced by population concentration. However, much of the population settlement has occurred in dense pockets especially on the large plantations. Solid waste collection systems can be more effective and efficient in settlement pockets. Unfortunately, there will always be population that becomes isolated from available services.

# DRAFT

Land and Water Area	City of Newton	uninc. Baker County	Baker County	Southwest Georgia Region	State of Georgia
Total area in square miles	2.9	344.3	347.2	6,005.6	58,909.6
Land area in square miles	2.9	344.2	347.1	5,920.1	58,055.8
Water area in square miles	0.0	0.8	0.8	85.1	853.4
Population per square mile of land	242.4	8.5	10.4	54.1	111.6

Source: 1990 U.S. Census of Population

Table 2

The City of Newton is where the county's population is most concentrated. There are other points of population concentration in Baker County. As mentioned, much of these are located within the large plantations. Opportunities are present for the city and/or the county to offer solid waste collection services to these plantations and other areas of population concentration. However, these services must be paid for on a user fee basis because it would not be equitable to offer subsidized services to select portions of the county population.

## Source Breakdown

### *Residential*

The clear majority of all the waste generated in Baker County comes from households. Many of these households have no recourse other than to burn their garbage or to dispose of it illegally. This is because the county does not provide its residents with any form of solid waste disposal. A significant portion of this plan is dedicated to ways in which the county commission can remedy this problem.

### *Commercial*

Commerce accounts for a very small portion of the Waste Stream in Baker County. Much of the commerce conducted by Baker County residents is in the surrounding counties. One reason for this is that many residents work outside of the county. Another reason is scale. The local businesses can not afford to carry the variety large inventories demanded by the 1990's consumer.

### *Industrial*

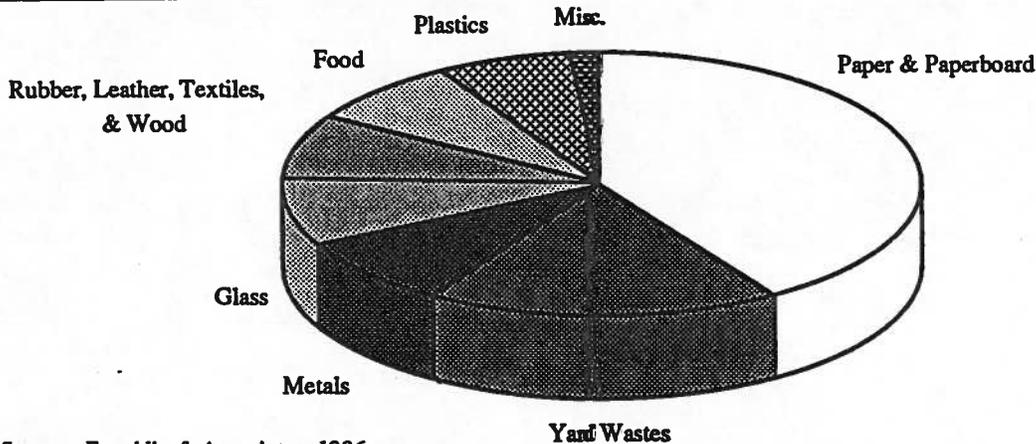
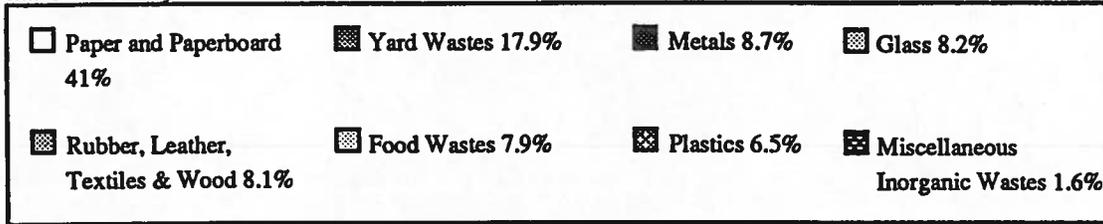
The remaining industries in Baker County are Agriculture and Agriculture Support. Since the closing of Newton Manufacturing, there has been a sharp decline in the amount of solid waste generated by the community's industrial sector. Newton manufacturing was a textiles plant. The bulk of its waste was cardboard, plastic packing materials, and clothing scraps. Eventually another company will purchase the Newton Plant and reopen it. At that time the amount of waste generated in the City of Newton will rise considerably.

Relative to the level of productivity, agricultural industries are very efficient when it comes to solid waste. Apart from normal household garbage and agriculture chemical containers, most of agricultural waste is either composted, burned as boiler fuel, or eaten by an animal.

# DRAFT

## Composition

The graph below gives a visual description of the average community waste stream. It is from this survey conducted in 1986 that the estimated waste reduction potential for each of the options in the waste reduction element are based. For the purposes of this plan it is assumed that the waste composition for baker county is similar to that of this national survey.



Source: Franklin & Associates, 1986

When looking at weight paper and paper board combined with yard waste makes up the majority of the average waste stream. For an effective recycling program these are wastes on which to concentrate first. Add in metals and glass to the system and the system is targeting over 75% percent of an average community's generated waste.

### Amount by Weight

The only recorded solid waste disposal weights are for the City of Newton. The city has disposed of there waste in the Dougherty County Landfill since their contract ended with Mitchell County in 1988. For the past two years Dougherty County has recorded these weights. Other than the City of Newton there is no other organized form of garbage collection and disposal operating in Baker County. Therefore, only estimations can be made as to the actual amount of waste being generated by Baker County residents in the unincorporated areas and disposed in the surrounding five counties.

1993 Estimated Waste Generation			
	City of Newton	Baker County	uninc. Baker County
Time Period			
Tons per Day	1.6	8.3	6.7
Tons per Business day	2.4	12.0	9.6
Tons per Month	50.1	253.1	203.0
Tons per Year	601.5	3,037.4	2,435.9

*Table 3*

Table 3, shown above, was generated by assuming that residents in the unincorporated areas of Baker County generate a similar weight per capita as the residents of Newton. This is a fair assumption, however, it is for conceptual purposes only. This assumption may change when the county begins to offer a form of garbage collection to its residents. It is predicted that a fee based system will not take in this much. Many residents will continue to dispose of their waste as they always have until persuaded otherwise

### Yard Waste and Trees

The bulk of the yard waste generated in Baker County is burned by the individual resident whom generates it. This practice is accepted by the Environmental Protection Division of the Georgia Department of Natural Resources. However, this is not very safe where population is more concentrated. The City of Newton once Baker County Consolidated Solid Waste Management Plan  
Information and Assessment Section

# DRAFT

conducted a regular yard waste pick-up. Once the Mitchell County disposal contract came to a close they no longer provided this service to its residents, sighting that it would help keep the cost of garbage service lower. If the county developed a compost site and the city collected yard waste once again, it would be of great service to the residents of Newton. It would prevent house fires and contribute to the beautification of the city.

## **Construction and Demolition Waste**

Due to the consistent population decline seen in Baker County since 1920, there has not been a great demand for new housing. Subsequently, construction waste is not a significant portion of the waste stream. However, throughout the county are remnants of many abandoned structures. These have become an eyesore to residents and do nothing to promote the county's image or public safety. If there were means to dispose of the materials from these structures, the solid waste committee believes, the owners may have them cleared away. Most demolition waste can be disposed in an inert landfill. An inert landfill could easily be permitted in Baker County. All that is required is a drafted site plan and a permit by rule. This could be accomplished for less than \$3,000 and the cost of land.

## **Special Target Wastes (large amounts from a single source)**

As mentioned before, the industry in Baker County is either agriculture or agriculture support. These industries are very clean in regards to the amount of solid waste produced. However, agricultural chemical containers make up a large portion of this class of waste. The Baker County Commission is looking to the State of Georgia to develop a program that could assist agriculturally endowed counties in re-cycling these containers. A pilot program was attempted in Tift County, however, the results have not been reported as of yet.

There is a significant amount of junk vehicles, old appliances, and tin cans that exist in Baker County. These items could all be recycled. If gathered, the junk vehicles and old appliances could be picked up by a scrap metal dealer. That same dealer could also accept the steel containers from the restaurants and the elementary school in Newton.

## **Imported or Exported Waste**

It is safe to assume that no waste is imported into Baker County other than what is brought in from out of county consumption of goods. It is suspected that most of the waste generated in Baker County that is being properly disposed is going to neighboring counties. Most of the waste generated in Baker County is being exported through the neighboring counties' open collection containers or through collection of the City of Newton into Dougherty County. There is no official landfill in Baker County.

# DRAFT

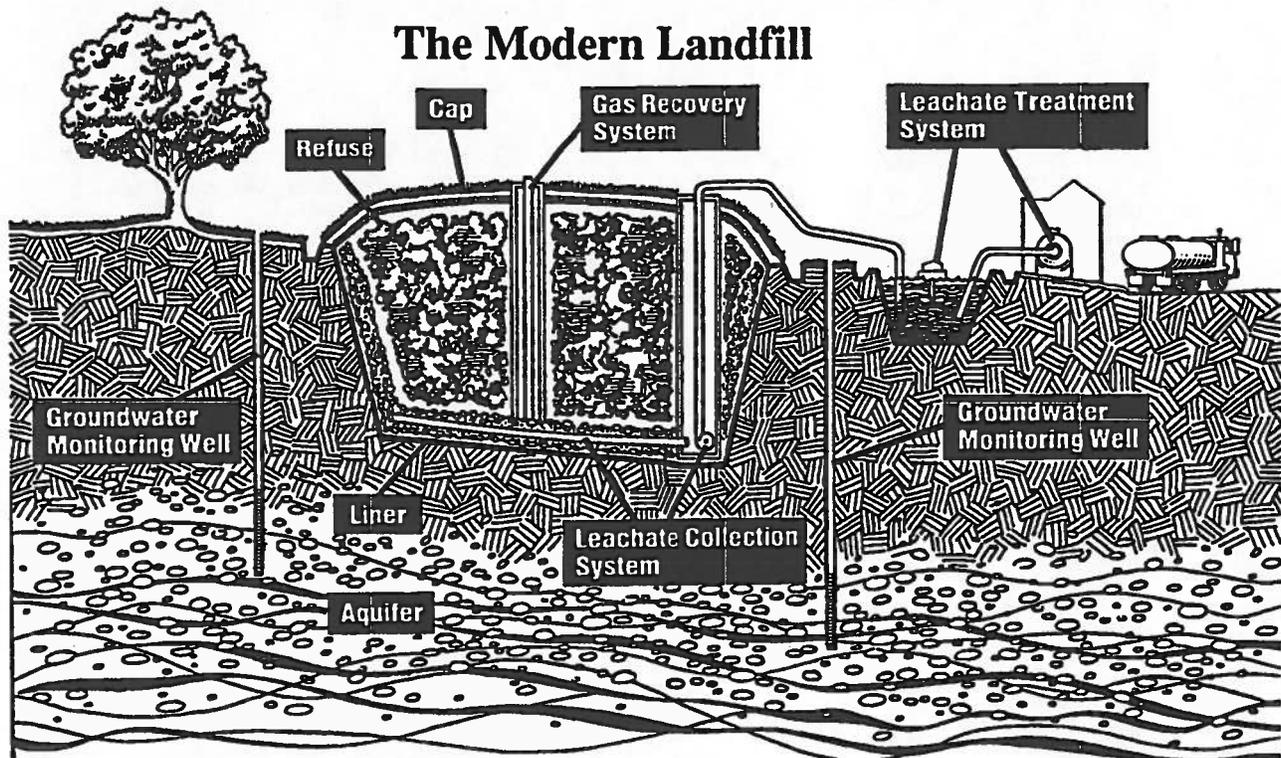
## Disposal Element

Solid waste management has become a service that demands greater scale to be conducted efficiently. With the Subtitle (d) restrictions of the Federal Resource Conservation and Recovery Act of 1986 firmly in place, it is not feasible for one county in the State of Georgia to manage a single jurisdictional landfill. For this reason, a solid waste authority has been formed in our fourteen county region. However, until the Southwest Georgia Solid Waste Authority is actively in the waste disposal business several counties in the region are faced with the dilemma of what to do with their garbage in the mean time. Baker County is one such county that has no formal waste disposal system to offer its residents. The Georgia Solid Waste Management Act of 1989 has made the community more aware of its needs. Therefore as a benefit to its citizens, the Baker County Commission is looking for a neighboring county that will allow Baker County citizens the privilege of using a sanitary solid waste landfill.

### Landfill Options

It is not feasible to place a Solid Waste Landfill in Baker County from either an environmental or economic standpoint. This is mostly due to the new design regulations and land requirements for building a landfill. The United States Resource Conservation and Recovery Act of 1986 (RCRA) promulgated new regulations for the way solid waste is handled in the United States. Prior to the adoption of this legislation, garbage was merely buried under the soil. This system is beginning to cause many health problems around disposal sites. It is anticipated that many more of these existing landfills will soon begin to show similar hazards. Such hazards go far beyond foul smell and unsightly mounds made by garbage. These un-checked facilities are poisoning groundwater and emitting harmful methane gas.

Under Subtitle (d) of RCRA, features of the modern landfill include; a solid clay base above the aquifer table, a high density polyethylene (HDPE) liner surrounding the bottom and sides of the fill, a leachate collection system within the fill, a gas recovery system, and a groundwater monitoring system.

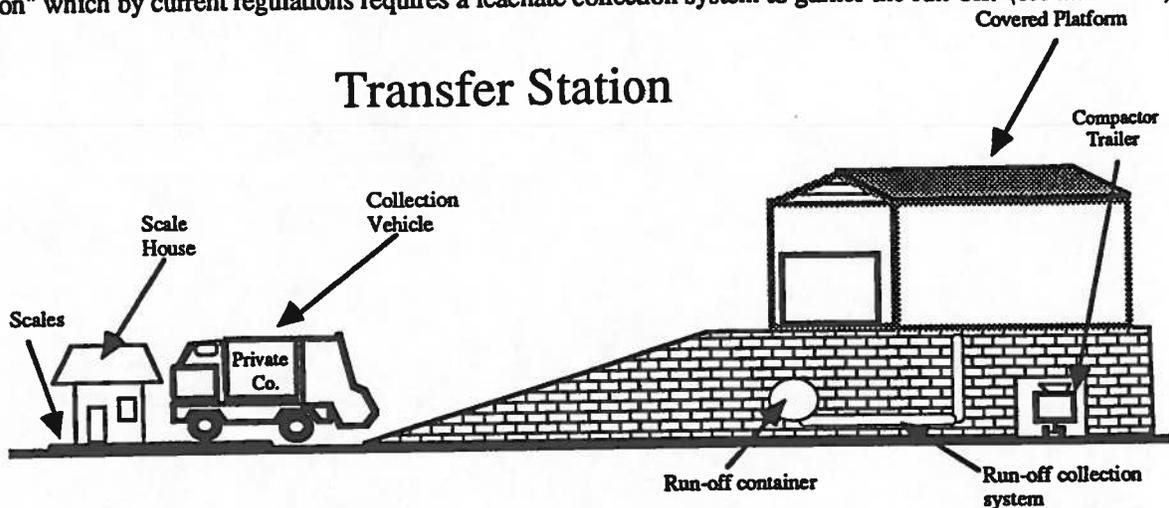


With all of these components in unison, undesirable elements and garbage/refuse particles are pumped to a leachate treatment plant for final disposal. At the same time, the methane gas emanating from the buried refuse is being disposed of through either recovery/collection, on-site burning, or recoverable sale to private companies. A facility with this level of sophistication is most feasible on a large scale due to the enormous amount of start-up costs. As more customers participate in a solid waste landfill facility these start-up costs are spread more thinly. This brings down the cost per ton for disposal thus lowering the user fees and taxes required to support such a facility.

# DRAFT

## *Volume Reduction*

Since the nearest landfill to Baker County is 13 miles one way, collection systems in the county can be most efficient when consolidated and possibly compacted. The Baker County Commission realizes this which is why collection point has been considered. This collection point would be a place where different collection vehicles could compile their garbage into one vehicle. However, by definition this facility would be considered a "transfer station" which by current regulations requires a leachate collection system to garner the run-off. (see illustration)



Run-off from the bay area, once rinsed down, must be collected and treated as leachate. This leachate run-off is considered to be hazardous waste. Since, there is no sewage treatment facility in Baker County this leachate run-off would have to be exported to another county in order to be properly treated and disposed. Finding a county that will accept hazardous waste from another county is considered to be more difficult than finding a county that will accept another county's garbage. For this reason, the Baker County Solid Waste Committee considered only collecting household garbage and transporting this waste to a nearby landfill in a single packer-type vehicle much the same way the City of Newton is now. This system of collection and disposal is explained in the collection element of this plan

## *Baling, Shredding or Compacting*

The Baker County Solid Waste Committee has explored many alternative processing options for the waste that is generated in the county. Cardboard baling and compost shredding is considered and assessed in the waste reduction element of this plan. Compacting is seen to be feasible with standard garbage collection trucks. If waste is compacted in these vehicles there need be no other form of compactor equipment for household garbage.

## **Owner/Operator Options**

### *Contract Private*

A private landfill has been considered and there is a letter provided in the attachments section of this plan. However due to the small amount of waste generated in the county, the cost of transport to a private facility is expensive compared to using a more local public owned facility. A private facility will be sought, only as a last resort.

### *Single Jurisdiction*

As mentioned previously, it is not feasible for Baker County to operate its own landfill under the current solid waste landfill permitting requirements. The county commission has no intention of permitting a RCRA(d) solid waste landfill in Baker County.

### *Inter-County Landfill*

An inter-county landfill is the optimal decision for Baker County. Participating as a member in another county's landfill is the most feasible solution. This will be most efficient if an agreement is reached with the county landfill which is the closest to the City of Newton. This is because the Newton area is where the majority of the population is located in Baker County and it will enable the county and the city to pool some of its resources.

### *Multi-jurisdiction Intergovernmental Contract*

Baker County is the first in line to agree to a multi-county landfill. However, the county commission has yet to find a neighboring county that is willing to see the benefit in this concept.

# DRAFT

## *Regional Authority*

In 1990, the Southwest Georgia RDC developed an array of committees to study regional problems. One of the elements examined was solid waste. After a year, the Solid Waste committee recommended that an appointed Solid Waste Task Force be developed to examine the potential for regional solutions. This Task Force subsequently recommended the establishment of a Regional Solid Waste Authority. After obtaining legal assistance, the Southwest Georgia Solid Waste Authority was formed. All fourteen counties in the region have become members of the Authority. Baker County joined the Southwest Georgia Regional Solid Waste Authority in June, 1992. A sample copy of the Resolution to join the Authority is available in the Appendix. Two members were appointed to the Authority, one from Baker County and one from the City of Newton.

The Authority's objective is to develop economical solutions to the region's impending solid waste disposal dilemma. Few of the counties in the region have the population base, solid waste volume or the administrative ability to efficiently operate a Subtitle D landfill. The Authority is presently working to develop the most economical and environmentally sound solid waste operations possible for interested members. To initiate this effort, the Authority requested RFQ's from interested consultants in July 1992. The RFQ's will be considered during August, after which time the Authority chose a qualified consultant to prepare a regional disposal strategy. The consultant is expected to develop a regional strategy within four months. Upon acceptance of the strategy, the Authority would pursue revenue raising, siting or purchase of an existing permitted site and site construction. Revenue bonds could potentially be raised in 90 days. Construction of a Subtitle D facility would take approximately 9-12 months. If a site has to be permitted from scratch, it would take an estimated year to two years to permit a regional landfill. According to DNR, permit requests from regional facilities will receive priority.

It will be possible, if the Authority purchases a site under permit, or permitted but in appeals, that a Subtitle D facility could be constructed by the first several months of 1994. If however it must purchase the land and site a landfill, a facility may not be constructed until the beginning of 1995.

## **Incineration**

Incineration has been considered. However until a solid waste incinerator can be developed that is environmentally safe and economically feasible to operate on the low volume that is generated in Baker County, this method of disposal is far out of reach for consideration. Even if it were possible to develop such a facility, there would be some ash residual that would need to be taken to a permitted solid waste landfill. Also, the run-off from the scrubbers that filter the effluent must be treated in a proper facility of which does not exist in Baker County.

There has never been any type of waste incinerator located in Baker County and the county commission does not intend to entertain the idea in the near future.

# DRAFT

## Land Limitations Element

### Slope

Slope is not considered as an environmental limitation in Baker County. The terrain is relatively flat with a grade rarely reaching above 3%. Along the river and creek corridors are the only real slopes. One would have to be a fool to permit any type of solid waste handling facility in one of these locations.

### Ground Water

Groundwater is the greatest reason why permitting a solid waste landfill would be environmentally unfeasible in Baker County. The county lies extremely close to four major groundwater aquifers. Placing these systems in jeopardy places the entire economic base of Baker County in jeopardy. Table 4 displays the dependency on groundwater sources in Baker County as compared to the Southwest Georgia Region and State.

Water Use in 1987		Southwest	State
Table 4 (million gallons/day)	Baker County	Georgia Region	of Georgia
Total water use (mg/d)	38.34	672.72	5,814.56
water from a groundwater source (mg/d)	87.1%	52.2%	20.8%
water from a surface water source (mg/d)	12.9%	47.8%	79.2%
Public use (mg/d)	0.3%	5.9%	15.5%
Commercial and domestic use (mg/d)	0.6%	1.6%	2.3%
Industrial and mining use (mg/d)	0.0%	18.8%	11.8%
irrigation withdrawal (mg/d)	98.9%	51.4%	12.5%
livestock use (mg/d)	0.3%	0.4%	0.8%
Thermo-Electric Power withdrawal (mg/d)	0.0%	21.9%	57.1%
Population served by public supply (mg/d)	750	233,190	4,910,930
Per capita use of public supply (gallons/day)	133.33	170.08	183.02

Source: Georgia Department of Natural Resources, Environmental Protection Division pp116-117 County Guide

### Soil Permeability

The majority of the soils in Baker County are well drained. This makes this county prime location for high productive agriculture. However, it makes the least likely place to site a landfill. Even though the RCRA(d) permitting requirements have strict lining requirements, there is still the possibility of a leak. Added to that is the volatility of the waste that has been sitting on top of the HDPE containment lining for any length of time. This will make even the slightest leak extremely hazardous. Soil types are another reason why siting a solid waste landfill in Baker County is so unrealistic.

Provided below is a list of the general soil types that exist within the county. This list is accompanied by a map of the different geotechnical areas of the county. The map is located in the attachments section of this plan.

### Soil Types

#### NEARLY LEVEL COILS ON FLOOD PLAINS

**Meggett-Muckalee:** Poorly drained soils that have a loamy surface layer and a clayey subsoil or soils that are mainly loamy throughout.

#### NEARLY LEVEL SOILS ON STREAM TERRACES

**Wahee-Hornsville-Bigbee:** Somewhat poorly drained and moderately well drained soils that have a loamy surface layer and a clayey subsoil, and excessively drained soils that are sandy throughout.

#### NEARLY LEVEL SOILS ON LOW LYING AREAS OF UPLANDS

**Pelham-Bonneau-Grady:** Poorly drained and moderately well drained soils that have a sandy surface layer, a thick, sandy subsurface layer, and a loamy subsoil; and poorly drained soils that have a loamy surface layer and a clayey subsoil.

#### NEARLY LEVEL TO GENTLY SLOPING SOILS ON UPLANDS

**Orangeburg-Red Bay-Grady:** Well drained soils that have a sandy surface layer and a loamy subsoil, on ridge tops and hillsides; and poorly drained soils that have a loamy surface layer and a clayey subsoil, in depressions.

**Orangeburg-Lucy-Grady:** Well drained soils that have a sandy surface layer and a loamy subsoil or a sandy surface layer, a thick, sandy subsurface layer, and a loamy subsoil, on ridge tops and hillsides; and poorly drained soils that have a loamy surface layer and a clayey subsoil, in depressions.

# DRAFT

## Soil Types cont.

### NEARLY LEVEL TO GENTLY SLOPING SOILS ON UPLANDS cont.

**Norfolk-Wagram-Grady:** Well drained soils that have a sandy surface layer and a loamy subsoil or a sandy surface layer, a thick, sandy subsurface layer, and a loamy subsoil, on ridge tops and hillsides; and poorly drained soils that have a loamy surface layer and a clayey subsoil, in depressions.

**Tifton-Norfolk-Grady:** Well drained soils that have a sandy or loamy surface layer and a loamy subsoil, on ridge tops and hillsides; and poorly drained soils that have a loamy surface layer and a clayey subsoil, in depressions.

**Wagram-Troup-Lucy:** Well drained soils that have a sandy surface layer, a thick, sandy subsurface layer, and a loamy subsoil, on ridge tops and hillsides.

### Animal and Plant Habitats

Baker County thrives on its natural diversity. In it are some of Georgia's premier hunting and fishing grounds. A sign of the pristine natural diversity is the location of a state biological research station in the county. Provided in the two tables to follow, is a list of the rare plant occurrences and a list of the rare animal occurrences sighted within the county.

Table 5

Rare Plant Occurrences in Baker County	
common name	scientific name
Buckthorn	Bumelia thornei
Pondberry	Lindera melissifolia
Giant Spiral Ladies Tresses	Spiranthes longilabris
Boykin Lobelia	Lobelia boykinii
Elliot Croton	Croton elliotii
Awed Meadowbeauty	Rhexia aristosa
Wagner Spleenwort	Asplenium heteroresiliens

Source: Georgia Department of Natural Resources, 1989

Once again, the information provided gives another as to why a solid waste landfill facility would not be appropriate in Baker County. A solid waste landfill could easily leak leachate run-off into either the ground water or worse yet the surface water. This mishap would have a drastic impact on the plant and animal life in the nearby area. Tourism in Baker County thrives on the rich hunting grounds. These hunting grounds would not be as bountiful if they were disturbed by either groundwater or surface water pollution.

Table 6

Rare Animal Occurrences in Baker County	
common name	scientific name
Barbour's Map Turtle	Graptemys barbouri
Alligator Snapping Turtle	Macrolemys temminckii
Black-Crowned Night Heron	Nycticorax nycticorax
Spotted Bullhead	Ictalurus serracanthus
Red-Cockaded Woodpecker	Picoides borealis
Bachman's Sparrow	Aimophila aestivalis
Gopher Tortoise	Gopherus polyphemus
Eastern Starhead Topminnow	Fundulus escambiae
Golden Topminnow	Fundulus chrysotus
Brown Darter	Etheostoma edwini
Gulf Darter	Etheostoma swaini

Source: Georgia Department of Natural Resources, 1989

### Development Regulations

There are no formal development regulations of any type in Baker County. Baker County needs to develop subdivision regulations. However since the majority of the land is under plantation ownership, there is not the perception of any threat or danger to the general public. A lack of subdivision regulations creates extreme difficulty in the provision of government services such as waste collection. Conversely without and development regulations, the county has no legal means of preventing a private company from siting a landfill within the county.

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## Financing Element

### Cost Accounting and Fee Setting

Baker County does not currently offer any collection or drop-off service for solid waste or recyclables. Persons in the unincorporated areas must dispose of their own refuse. The City of Newton collects household refuse twice weekly from 279 residential units and 35 commercial units. Household customers pay variable rates based on the number of persons in a household. Businesses pay variable rates based on the quantity and number of collection pick-ups. Wastes are stored in 30 and 55 gallon cans, except at the school and downtown where dumpsters are used. Present collection equipment consists of 1987 twenty yard International® compacting truck. The Collection Department also has twenty rear loading containers of between four and eight cubic yards for commercial collection. These containers are between two and eight years old. Two 40 mile (80 round trip) trips are made weekly to the Dougherty County landfill.

### *Baker County*

The Baker County Commission is concerned with the continual population decline. The commission feels that in order to attract more residents to the county, more services should be offered. This will improve the quality of life which in turn will attract more residents. More residents will mean greater property development and a larger labor pool. The larger labor pool will attract industry and the increase in property development will increase the tax base so that the cost of services can be spread across more people and subsequently become lower.

One of the ways the commission can increase its services is to provide its citizens with the means of disposing garbage. Another way in which to increase services is to also provide a level of garbage collection service to the residents of the unincorporated areas.

So that they may meet one of these needed services, the Baker County Commissions have submitted to the Mitchell County Commissioners a proposal to participate in the Mitchell County Landfill. For provision of this service, the all Baker County residents including the City of Newton will pay the same tipping fee required of all Mitchell County residents and businesses. On top of the tipping fees the Baker County Commission will assist in the administration of the landfill by paying an annual fee of \$1000.00 to the Mitchell County Commission. This will lower the costs of solid waste management for the City of Newton and provide all of the county residents a legal means of solid waste disposal. The Baker County Commissioners also intend to permit and develop an inert landfill and a compost facility within Baker County at or adjacent to the public works department.

In order to provide the residents of the unincorporated areas of the county with a level of collection the commissioners intend to set up a collection system. This system would consist of three to four collection sites that would be open 1 to 2 times per week on a regular basis so that customers could rely on a set schedule. One full time county employee would operate the collection system. His or her job would consist of driving the packer truck to each site where it will be parked during the hours of operation. While in operation at each site, this person will collect from waste disposal customers \$2.00 for every bag of household garbage 32 gallons or greater and \$1.50 for every bag under 32 gallons. The sites will be fenced and locked when closed. The following chart (table 7) provides an estimation of the costs involved in implementing this system.

Alternative #1 Estimated Costs	
<b>Fixed Costs</b>	
16 Yard Packer	\$45,000
One Ton Pick-up	\$10,000
Collection Sites	
Paving	\$9,000
Fencing	\$3,000
Landscaping	\$4,500
Recycling Receptacles	\$500
<b>Total Start-up Costs</b>	<b>\$72,000</b>
<b>Variable Cost (annual estimates)</b>	
Labor	\$24,375
Fuel and lubrication	\$1,276
Maintenance	\$300
Disposal	\$22,438
<b>Total Annual Costs</b>	<b>\$48,389</b>

Table 7

# DRAFT

For efficiency, the garbage in the packer truck will be taken to the landfill when the load has reached capacity. If this occurs while the collection station is in operation then the attendant will call for another county employee to temporarily operate the site while he or she drives the truck to and from the landfill. The temporary attendant will operate the site by placing the bags that are brought into the site in a containment area rather than directly in the packer truck. This method enables the site to remain consistent in its operation. As soon as the truck returns to the site the two employees will load the other bags of garbage into the packer truck before the temporary attendant leaves the site.

Each of the three collection sites will need to be at least a quarter acre in size. The majority of the site should be fenced. For aesthetic quality, there should be landscaping around the perimeter of the fence. There should be a paved driveway from the road through the entrance and out a separate exit back to the road. This will allow customers to drive through the collection site, drop off their waste and recyclables, pay the attendant, and leave in one direction without creating a "gaggle" of customers. Within the fenced perimeter there will be receptacles for recyclable materials. These receptacles will be small enough for an employee to dump the contents within them into a pick-up truck during periodic collections. Both entrances to the collection site will have the capability of being locked after hours of operation. A large sign will be posted that will list each site's hours of operation, fees for disposal, and warning of the penalty for illegal disposal.

### City of Newton

Currently in Georgia, many solid waste collection systems are being subsidized by property taxes. In some respects, this may be viewed as equitable. The wealthier land owners are assisting the less endowed by paying for their garbage collection. If this were completely true, it would be a respectable gesture on the part of the city residents. However, those who have less will tend to throw away less. Therefore, if the system was viewed more like a utility rather than a right of the people then it would be just as equitable.

In Newton the solid waste collection system is structured more like a utility than a general purpose government service. It is evident in the table below that there are different disposal classes that are graduated on the anticipated amount of waste to be generated by the customer. However, the system is also being subsidized by the city property taxes. This can be seen at the bottom line of this chart.

<b>Collection and Disposal for Newton</b>									
Collection Revenues	Collection Fee	Number of Customers	Monthly Revenue	Annual Revenue	Percent of Total Revenue				
Pineland Plantation	\$400.00	1	\$400	\$4,800	14.9%				
Baker Elementary	\$125.00	1	\$125	\$1,500	4.7%				
Pinebloom Plantation	\$125.00	1	\$125	\$1,500	4.7%				
Baker Co. Commission	\$50.00	1	\$50	\$600	1.9%				
Large Businesses	\$10.00	7	\$70	\$840	2.6%				
Small Businesses	\$6.75	23	\$155	\$1,863	5.8%				
Large Households (3 + persons)	\$7.00	116	\$812	\$9,744	30.3%				
Medium Households (1-2 persons)	\$5.00	138	\$690	\$8,280	25.8%				
Small Households (1 person 65+)	\$3.00	27	\$81	\$972	3.0%				
County Household Drop-off	\$5.00	34	\$170	\$2,040	6.3%				
<b>Total</b>		<b>349</b>	<b>\$2,678</b>	<b>\$32,139</b>					
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">average monthly collection fee =</td> <td style="text-align: right; padding: 2px;">\$7.67</td> </tr> <tr> <td style="padding: 2px;">city population =</td> <td style="text-align: right; padding: 2px;">703</td> </tr> </table>						average monthly collection fee =	\$7.67	city population =	703
average monthly collection fee =	\$7.67								
city population =	703								
Collection Costs	Per Month	Per Year	Per Ton	Per Customer <i>per month</i>	Per Person				
Salaries	\$2,000	\$24,000	\$41.87	\$5.73	\$2.84				
Benefits	\$400	\$4,800	\$8.37	\$1.15	\$0.57				
Gas	\$350	\$4,200	\$7.33	\$1.00	\$0.50				
Maintenance	\$201	\$2,410	\$4.20	\$0.58	\$0.29				
Insurance	\$200	\$2,400	\$4.19	\$0.57	\$0.28				
<b>Disposal Costs</b>									
Solid Waste Landfill	\$621	\$7,452	\$13.00	\$1.78	\$0.88				
Solid Waste Tons Disposed	47.77	573.25		0.14	0.07				
<b>Total Cost</b>	<b>\$3,772</b>	<b>\$45,262</b>	<b>\$78.96</b>	<b>\$10.81</b>	<b>\$5.37</b>				
<b>Net revenue gained or (lost) (\$1,094) (\$13,123) (\$22.89) (\$3.13) (\$1.56)</b>									

Table 8

# DRAFT

If there were across the board increases in the collection fees it would take nearly a 40% increase to make the system self sustainable at current costs. Shown below in table 9 is the result of three different rates of fee increases given current costs.

<b>Newton Collection Fee Increases</b>					
Net revenue gained or (lost)	Per Month	Per Year	Per Ton	Per Customer	Per Person
@ a 35% increase	(\$132)	(\$1,582)	(\$2.76)	(\$0.38)	(\$0.19)
@ a 40% increase*	\$10	\$122	\$0.21	\$0.03	\$0.01
@ a 45% increase*	\$223	\$2,672	\$4.66	\$0.64	\$0.32

\*All revenue gained can be placed into an enterprise fund for future collection equipment.

Table 9

The following tables, 10 through 12, have been provided in order to view the impact that each fee increase may have on each class of customer.

<b>35% increase</b>					
Collection Customers	Collection Fee	Number of Customers	Monthly Revenue	Annual Revenue	Percent of Total Revenue
Pineland Plantation	\$540.00	1	\$540	\$6,480	14.8%
Baker Elementary	\$170.00	1	\$170	\$2,040	4.7%
Pinebloom Plantation	\$170.00	1	\$170	\$2,040	4.7%
Baker Co. Commission	\$67.50	1	\$68	\$810	1.9%
Large Businesses	\$13.50	7	\$95	\$1,134	2.6%
Small Businesses	\$9.50	23	\$219	\$2,622	6.0%
Large Households (3 + persons)	\$9.50	116	\$1,102	\$13,224	30.3%
Medium Households (1-2 persons)	\$6.75	138	\$932	\$11,178	25.6%
Small Households (1 person 65+)	\$4.00	27	\$108	\$1,296	3.0%
County Household Drop-off	\$7.00	34	\$238	\$2,856	6.5%
<b>Total</b>		<b>349</b>	<b>\$3,640</b>	<b>\$43,680</b>	

Table 10

<b>40% increase</b>					
Collection Customers	Collection Fee	Number of Customers	Monthly Revenue	Annual Revenue	Percent of Total Revenue
Pineland Plantation	\$560.00	1	\$560	\$6,720	14.8%
Baker Elementary	\$175.00	1	\$175	\$2,100	4.6%
Pinebloom Plantation	\$175.00	1	\$175	\$2,100	4.6%
Baker Co. Commission	\$70.00	1	\$70	\$840	1.9%
Large Businesses	\$14.00	7	\$98	\$1,176	2.6%
Small Businesses	\$9.50	23	\$219	\$2,622	5.8%
Large Households (3 + persons)	\$10.00	116	\$1,160	\$13,920	30.7%
Medium Households (1-2 persons)	\$7.00	138	\$966	\$11,592	25.5%
Small Households (1 person 65+)	\$4.50	27	\$122	\$1,458	3.2%
County Household Drop-off	\$7.00	34	\$238	\$2,856	6.3%
<b>Total</b>		<b>349</b>	<b>\$3,782</b>	<b>\$45,384</b>	

Table 11

Making the system self supportive will free up tax dollars so that they may be used to further improve the quality of life for city residents. This is why the City of Newton must increase its collection revenues by at least 40% in order to be more responsible to the taxpayers. The only way in which the system could break even without a fee increase would be to take on more customers. This could be effective up to the point where more labor would be needed. Since labor is the largest portion of the system's cost, having to hire more labor would tip the balance backward towards the "red."

# DRAFT

		45% increase				
Collection	Customers	Collection Fee	Number of Customers	Monthly Revenue	Annual Revenue	Percent of Total Revenue
Pineland Plantation		\$580.00	1	\$580	\$6,960	14.5%
Baker Elementary		\$182.00	1	\$182	\$2,184	4.6%
Pinebloom Plantation		\$182.00	1	\$182	\$2,184	4.6%
Baker Co. Commission		\$72.50	1	\$73	\$870	1.8%
Large Businesses		\$14.50	7	\$102	\$1,218	2.5%
Small Businesses		\$10.00	23	\$230	\$2,760	5.8%
Large Households (3 + persons)		\$10.50	116	\$1,218	\$14,616	30.5%
Medium Households (1-2 persons)		\$7.50	138	\$1,035	\$12,420	25.9%
Small Households (1 person 65+)		\$4.50	27	\$122	\$1,458	3.0%
County Household Drop-off		\$8.00	34	\$272	\$3,264	6.8%
<b>Total</b>			<b>349</b>	<b>\$3,995</b>	<b>\$47,934</b>	<i>Table 12</i>

### Enterprise Funds

The City of Newton's garbage packer was paid for in 1991. The annual average capital cost expended was \$17,000 during the payment period. No money is currently being set aside in an enterprise fund for a garbage truck replacement or any other collection equipment. As shown earlier in table listing net revenue gained, a 45% across the board increase in collection fees for the City of Newton will produce a substantial enterprise fund within a number of years. This fund would lower the burden on the city's annual budget to replace the collection equipment when needed. With this money in an interest bearing account the city would not have to produce a large payment in any future budget year for equipment replacement. Doing this would contribute to ensuring the city's economic stability.

An enterprise fund will be created in the county collection system as soon as customer participation is realized. Until then the cost of equipment will be amortized through a lease purchase plan. The terms of the lease will be included in the fee setting calculations.

### Revenue Generation and Financing Potential

No matter how much money one earns, how much property one owns, or how much one makes use of Local, State, and Federal Services, every person feels that they pay their fair share of taxes and do not wish to be taxed more. In recent years the reduction in federal support has prompted the states to reduce their support for local municipalities. Subsequently, local governments have been forced to either reduce services and capital purchases or raise taxes. Since raising taxes is so un-popular, many responsible local officials have been voted out of office and replaced with politicians with the desire to downsize local government services and keep taxes at a minimum. In the end many governments are finding that cutting taxes to the point where community facilities and services can no longer meet their demand has led to the decline in the community's overall quality of life. Therefore, almost every government has had to bite the bullet and raise local taxes to remedy their situation. Those communities that have not raised taxes to meet their needs have seen that the result will eventually lead to a decline in population. If raising taxes makes people vote with their wallets, lowering the quality of life makes people vote with their feet.

Baker County has constructed a mixture of tax increases and government downsizing. However, government operations are not immune from inflation. Much of the increase in taxes has been a result of costs rising while the net property digest has remained moderately low. Table 13 below is used to describe the revenue generation potential of the county.

Baker County Economic Change 1981 vs. 1991			
Indicator	1981	1991	%tge Change
Millage Rate	13.68	22.3	63%
Net Property Digest	\$73,960,000	\$79,172,000	7%
Taxable Sales	\$8,196,000	\$8,820,000	8%
Adjusted Gross Income	\$11,113,000	\$18,776,000	69%
State Economic Rank	147	150	

Source: Georgia Department of Revenue

Table 13

Overall, the millage rate increases have not been a burden on the public. As you can see in the table above, the millage rate increase has kept pace with the increase in adjusted gross income while property values have remained relatively constant. This indicates that taxes have increased at the same level as the common resident's

# DRAFT

ability to pay. In general Baker County residents are paying the same proportion of their income to property taxes as they were ten years ago.

To raise revenue for the needed government services indicated in this plan, the county will need to mix tax increases with new user fees. To pay for disposal privileges for the entire county the commission will need to pay the participation fee with their general revenue. Collection costs and disposal tipping fees for county and city solid waste management systems must be paid for through user fees. The inert landfill development and operation will be provided through the county's general revenue and subsidized by user fees. Costs of the county-wide recycling system will be borne by the county through general revenue and any return from the recycled products will revert back into the recycling program budget. The compost site will be developed and maintained with the same funds as the inert landfill. However, it will be up to the City of Newton and other organizations to pay for the collection of the compostable materials. It is important to realize that the city residents are county residents as well and pay no less in taxes to the county commission than do the residents in the unincorporated areas. When providing services at the county level the city residents should not be charged for a service the is offered to residents in the unincorporated county for free.

# DRAFT

## Collection Element

### Baker County Proposed Solid Waste Collection System

Currently, Baker County's only solid waste collection system in operation is provided by the City of Newton to city residents, businesses, some unincorporated county residents and two plantations. The county has no active landfill of any type. A report was provided to the Baker County Solid Waste Committee. It listed a number of alternatives that would enable the county to provide a disposal service to all residents and perhaps some level of collection service as well. From this report a most favored alternative was chosen. That alternative is presented in this element of the plan.

#### **Basic Needs**

The Baker County Commission has seen the need to provide all county residents and businesses with the means of disposing of solid waste. At a minimum, each and every resident should be given a convenient and equitable means of disposing of household garbage. In order to make this system equitable, it must be paid for through user fees by the amount of waste disposed. In order to make this system convenient, there must be several collection sites located throughout the county. This system must also incorporate a avenue for recycling and waste diversion.

#### ***The Roving Packer Truck***

If the greatest need for the system is to collect household waste then, given the population of the county, a 16 to 20 yard packer truck is the most that will be required to administer the task under this system. With a rural population of 3,856 that has had no means of garbage collection or disposal since 1980, the volume of waste will be low enough for a roving packer truck to efficiently provide service. This system would consist of three to four collection sites that would be open 1 to 2 times per week on a regular basis so that customers could rely on a set schedule.

#### ***Labor Required***

One full time county employee would operate the collection system. His or her job would consist of driving the packer truck to each site where it will be parked during the hours of operation. While in operation at each site, this person would collect waste customers \$2.00 for every bag of household garbage 32 gallons or greater and \$1.50 for every bag under 32 gallons. The sites would be fenced and locked when closed.

#### ***Capital Requirements***

Each of the three collection sites will need to be at least a quarter acre in size. The majority of the site should be fenced. For aesthetic quality, there should be landscaping around the perimeter of the fence. There should be a paved driveway from the road through the entrance and out a separate exit back to the road. This will allow customers to drive through the collection site, drop off their waste and recyclables, pay the attendant, and leave in one direction without creating a "gaggle" of customers. Within the fenced perimeter there will be receptacles for recyclable materials. These receptacles will be small enough for an employee to dump the contents within them into a pick-up truck during periodic collections. Both entrances to the collection site will have the capability of being locked after hours of operation. A large sign will be posted that will list each site's hours of operation, fees for disposal, and warning of the penalty for illegal disposal.

#### ***Method for Waste Disposal***

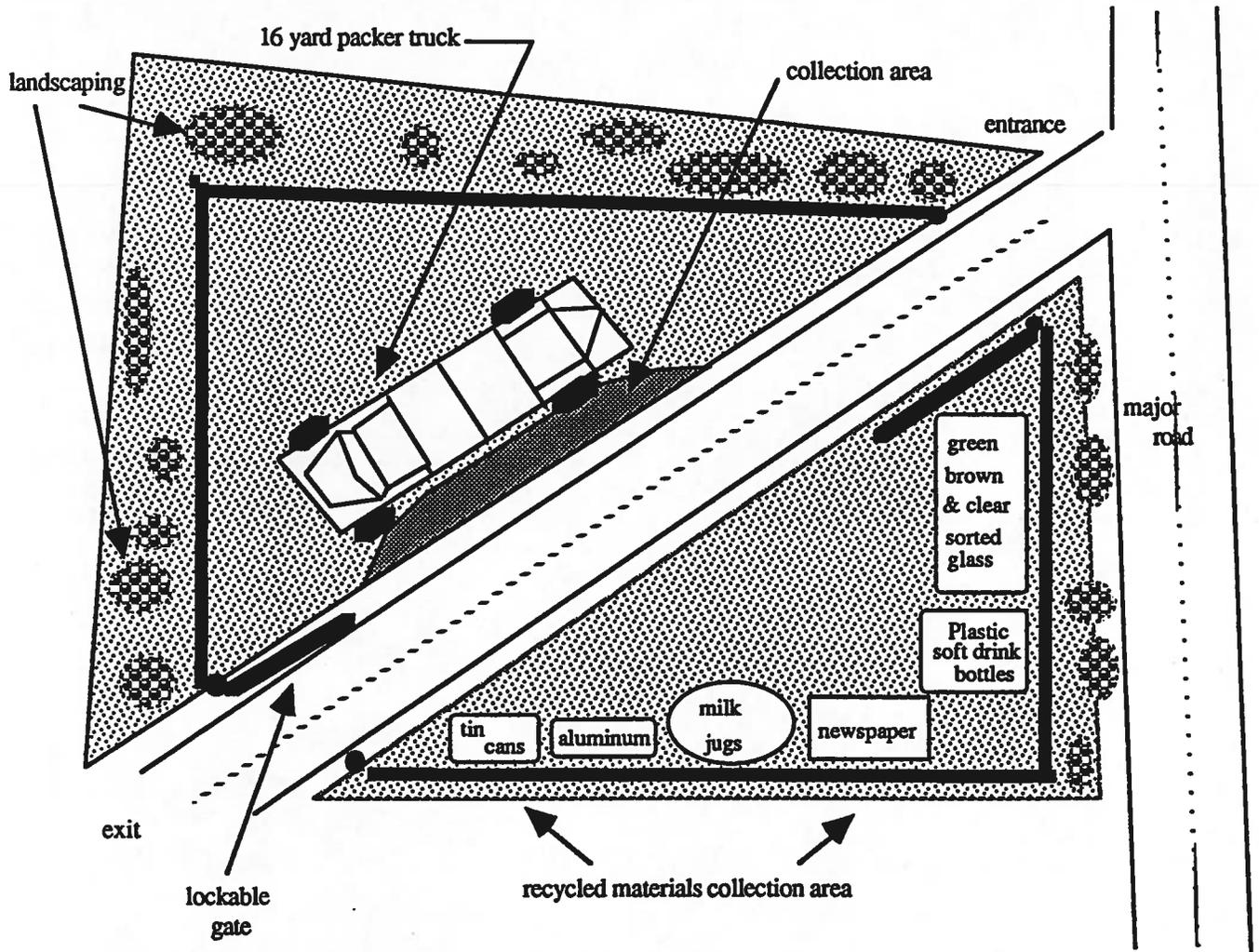
For efficiency, the garbage in the packer truck will be taken to the landfill when the load has reached capacity. If this occurs while the collection station is in operation then the attendant will call for another county employee to temporarily operate the site while he or she drives the truck to and from the landfill. The temporary attendant will operate the site by placing the bags that are brought into the site in a containment area rather than directly in the packer truck. This method enables the site to remain consistent in its operation. As soon as the truck returns to the site the two employees will load the other bags of garbage into the packer truck before the temporary attendant leaves the site.

#### ***Recycling***

At the site there would be recycling bins that would be handled by a different collection route. As an incentive to recycle, each person who brings in a bag of recyclables would be allowed to dispose of all other bags of household garbage at a cost of only \$1 per bag. The temporary attendant will collect recyclables from each site and bring them to a processing area at the county public works department.

# DRAFT

The following picture is provided to give a visual description of the aforementioned collection system.



The estimated costs of this system are displayed in table 7 in the financing element of this plan.

## The City of Newton

The City of Newton will continue their solid waste collection system as it currently runs. However, there will be some changes and additions. These are as follows; (1) if the county reaches a disposal agreement with Mitchell County, the city will dispose of its waste there, (2) when the county develops an inert landfill and compost facility, the city will incorporate yard waste pick-up into their collection system once again, and (3) when the county begins its recycling program, city collection will make adjustments to meet the required perimeters. For further information on the proposed county-wide recycling system refer to the waste reduction element of this plan.

# DRAFT

## Waste Reduction Element

Currently, a very small portion of Baker County's waste stream is being recycled. The majority of this is happening in two places. The IGA in Newton is baling cardboard which is picked-up by a materials broker in Albany, GA. The residents and employees of the Ichaway Plantation are operating a comprehensive recycling program. They are gathering all cardboard, aluminum cans, HDPE & PETE plastic containers, green, brown & clear glass, newspaper, and white office paper from their households and operations then hauling the materials to a recycling company in Albany. The plantation estimates the total waste reduction to approximately one ton per month. Combined with the IGA the total is a little more than two tons per month. There are a few other waste reduction activities going on in the county, however, there is little potential for measurement of these activities at this time. In the City of Newton, some residents are conducting home composting individually. Because there is no official yard waste pick-up in the City, a municipal composting program has not been pursued.

### Basic Needs

The County Commission needs to become a center point for much of the solid waste recycling operations in the county for two reasons. One, to bring down the cost of recycling for those who are currently in practice. And the other, to initiate programs that will increase the participation, amount of waste reduced, and the number of recycling alternatives. This will work more efficiently if it is coordinated within the new county solid waste collection system.

For every form of waste reduction there must be a market or else the material becomes waste once again. To meet the available markets, recyclable materials must be relatively pure, feasibly transportable, and in significant quantity. If they do not meet these requirements then the cost of recycling will far outweigh the cost of disposal. This is why it is best to choose from a number of waste reduction methods only those which economic and social benefits outweigh the cost of operation. The purpose in this portion of the report is to provide as many waste reduction options as possible. It is from these options that a county wide comprehensive waste reduction program will be based.

### Waste Reduction Options

#### *Yard waste Composting*

**17.9% for the City**

**5.1% for the County**

The City of Newton can begin collecting yard waste again. This will not only contribute to meeting the 25% waste reduction goal by June of 1996, but, make the city safer and cleaner as well. Since yard waste is not collected, people are reluctant to do as much yard maintenance as they would likely do if the city did pick up yard waste. Therefore many lots in the city tend to be overgrown which looks unsightly and creates a public hazard. For those who do maintain their property, some are composting, however, many are not. The result of this is either big debris piles that sit around and contribute to an unsightly appearance or much of the yard debris in the city is burned by the owner. Burning yard waste is an acceptable practice for an individual. However, the smoke that is generated creates a public nuisance and sometimes the burning may get out of control and cause damage to other things such as houses and trees. Because of the hazards involved in private burning, the city should seriously consider reestablishing their yard waste collection service and develop a municipal composting facility to put this waste to its proper re-use.

The rest of Baker County is more rural, therefore, there is less danger in burning yard debris outside the city. However, the county public works department should participate with the city municipal yard waste composting facility. Otherwise, the only option for disposal of limbs and debris collected from public easements is an inert landfill. Inert disposal is permitted however it does not contribute to the overall waste reduction effort.

#### *White Goods and Scrap Metal Collection* **3.6% for the City** **3.2% for the County**

The county, with participation from the City of Newton, can create a white goods holding facility. At this facility white goods such as washers, dryers, refrigerators, and other predominantly metal household appliances can be collected along with other scrap metal items and picked up by a scrap metal dealer on a contractual basis. These items could be brought to one, several, or all of the solid waste collection stations. The materials could be gathered by a county public works truck with a knuckle boom loader and brought to a central facility where the private scrap dealer could pick them up. The dealer may even grant a return to the county for these materials. There are many scrap dealers to choose from in the area. The closest is most likely in Camilla.

Since the City of Newton would be in close approximation to the white goods holding facility, it is not necessary for the city to collect these materials at a separate site. However, if the city were to collect these items by the curbside with the knuckle boom loader used for yard waste collection and take them to the county's facility it would be a great service to the city residents. If the city does this they should assess a small collection fee on the individual's sanitation bill to cover the cost of the operation and prevent it from being a burden on the average tax payer. Provision of this service on a county wide basis will curb a large amount of these materials from being disposed of improperly throughout the rural landscape of the county.

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## **Tin Can Collection                      2.8% for the City                      2.1% for the County**

In coordination with the white goods and scrap metal collection, the city and county can collect tin cans have them picked-up by the same scrap metal dealer. Tin cans can be gathered at the new county collection sites, drop off bins in the city, the elementary school lunch room, restaurants, and the plantations. A county public works employee can pick the cans up on a once a week collection route. This will be most cost effective if conducted with existing labor and equipment that is currently under utilized.

## **Aluminum Can Collection                      2.3% for the City                      1.7% for the County**

There has always been a strong market for aluminum cans because it easier, costs less, and produces a more refined product when aluminum is recycled rather than when it is mined from Bauxite. Throughout Baker County there are likely to be many individuals who are collecting aluminum cans and returning them for cash at scrap metal dealers in Albany, Bainbridge, and Camilla. The reason for collecting aluminum cans in a municipal system is to increase participation in this practice.

## **Sorted Glass Collection                      7.8% for the City                      5.9% for the County**

Unsorted glass has a very weak to almost non-existent market. Therefor, in order to feasibly and successfully recycle glass containers they must be sorted into the three different colors. At times the market demand for green, brown, or clear glass may fluctuate. This may resort in a stalled market for one or two of these colors of glass. Clear glass has the most constant demand since it can be easily colored in the manufacturing process. If all three colors of glass are collected through the chosen waste reduction system, most likely, there will be times when an allotment of green or brown glass may have to stored until a market opens. For any of the options chosen there will need to be a storage facility, however, for sorted glass collection there should be the need for a larger area.

Two make a pure product for nearby markets the glass will need to be more than just sorted. All metal lids and plastic rings must also be removed. Paper labels can stay, but, polystyrene sleeves should be removed. Crushing the glass will lower the cost of transport, however, the process can be a safety hazard and also reduce the market value. (many recycling processors would rather crush the glass them selves to be assured of limited contamination)

Consistent markets for glass may be limited to Albany and Bainbridge. Also due to the lower market value, revenue of these items may not always cover the cost of transport. Remember, recycling does not always cover its costs. However, what it saves from landfill disposal and the benefits to the environment will make it more profitable.

## **Sorted Plastics Collection                      0.8% for the City                      0.6% for the County**

Plastics recycling will cost money and for the quantity collected in Baker County, there would not be any return. The benefit to undertaking a plastics recycling program is that it reduces the amount of waste going to a landfill. The organization running the landfill benefits the most from plastics recycling because plastics make up a large volume relative to the amount of their weight. Since landfills normally assess fees by weight and have a limited capacity, it is in the best interest of the landfill owner to take waste that is heavy and takes up little space.

Baker County does not own a landfill. Therefor from an economic standpoint, the county should not pursue plastics recycling because the costs will far outweigh the economic benefits. However, if the public sees a social benefit to recycling plastics then only particular types of plastic containers should be chosen for collection. The only types of plastic that are being recycled feasibly in the tri-state area are PETE<sup>1</sup> and HDPE<sup>2</sup> containers and LDPE<sup>4</sup> bags. PETE collection should be limited to only plastic soft drink bottles and separated into clear and green colors before transporting. HDPE collection should be limited to only milk jugs with caps removed. LDPE bags are collected by the stores that use them and should be left to them to handle and collect.

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<sup>1</sup> PETE stands for Polyethylene Teraphthalate, a form of plastic that is often labeled with a #1 in the triangular recycling symbol. This number one grade plastic is found in soft drink bottles and plastic jars and many other forms of clear plastic containers.

<sup>2</sup> HDPE stands for High Density Polyethylene, a form of plastic that is often labeled with a #2 in the triangular recycling symbol. This number two grade plastic is found in milk jugs, detergent bottles, and many other forms of opaque or colored plastic containers.

<sup>4</sup> LDPE stands for Low Density Polyethylene, a form of plastic that is often labeled with a #4 in the triangular recycling symbol. This number four grade plastic is found in plastic shopping bags and many clear, colored and opaque malleable plastic container lids.

# DRAFT



**Common Symbols  
Indicating a  
Container is Recyclable.**

As previously mentioned, plastics are light in weight and high in volume. Because of the large volume they tend to fill transport vehicles rather quickly and in the end do not amount to much weight. To move them with a maximum level of efficiency they must be baled. Once sorted plastics can be compressed and baled in most any down stroke baler. This will enable them to be moved and marketed much more effectively.

**Newspaper Collection                      8.9% for the City                      6.8% for the County**

Because Baker County has no local paper, one would immediately say that newspapers cannot play a vital role in a county wide recycling effort. However, the opposite may hold true. Unlike some communities where many households subscribe to only a small local paper. Baker County residents subscribe to many different papers, much of which are rather large. Therefore, the amount of newspapers in the Baker County waste stream could amount to a significant portion of a comprehensive waste reduction program.

Collection and transportation of newspapers to a processing facility can be expensive and like plastics the return will be little or nothing for the materials. However, newspapers are much heavier than plastics and will amount to a greater reduction on a weight based scale. Since there is little hope of a return the best market for newspaper will be the closest one. Processing may be a factor however if the market does not accept newsprint with the clay lined "slicks" in them.. In this case a decision will have to be made between simplicity and proximity.

**Office Paper Collection                      3.0% for the City                      1.4% for the County**

Office paper is somewhat more valuable than newspaper if it is one distinct color. Therefore, processing is very important to this system. White office paper is the most prominent and in highest demand. Collection of office paper would be conducted at the direct source. There would be no need to place receptacles at the solid waste collection sites. Most office paper will be found in the City of Newton and the plantation offices. If this waste reduction option is chosen it will demand a separate collection route.

**Cardboard Collection                      15.0% for the City                      4.6% for the County**

Cardboard is the most valuable of all of the paper products. This is currently the most substantial for of recycling going on in the county. Without a baler, there is no chance of optimizing a market. A cardboard baler will be located at the Mitchell County landfill and in Camilla at the vocational center. There is no return offered at theses markets, however, for the City of Newton this could lower the cost of disposal l by dedicating one commercial collection route to cardboard only.

**Fee Based Tire Handling                      1.5% for the City                      1.5% for the County**

There is no money in tire recycling, it costs money to recycle tires. There is no option. The county must offer its residents a tire handling service. This service should be given for a fee. At \$2.00 per tire the county could pay for the collection, transportation and disposal of tires. Otherwise, residents will either have to haul there tires to another county or dispose of the illegally.

<b>Waste Reduction Potential</b>				
<b>Waste Reduction Options</b>	<b>County potential % of waste reduction</b>	<b>City potential % of waste reduction</b>	<b>Uninc. potential % of waste reduction</b>	<b>Total Potential Tonnage</b>
Yard Waste Composting	5.1%	17.9%	2.0%	156.4
White Goods & Scrap Metal	3.2%	3.6%	3.1%	96.2
Tin Cans	2.1%	2.8%	2.0%	64.6
Aluminum Cans	1.7%	2.3%	1.6%	53.1
Sorted Glass	5.9%	7.8%	5.5%	179.9
Sorted Plastics	0.6%	0.8%	0.6%	18.5
Newspaper	6.8%	8.9%	6.2%	205.3
Office Paper	1.4%	3.0%	1.0%	42.4
Cardboard	4.6%	15.0%	2.0%	138.9
Tires	1.5%	1.5%	1.5%	45.6
<b>Total Waste Reduction Potential</b>	<b>32.9%</b>	<b>63.6%</b>	<b>25.4%</b>	<b>1,000.8</b>

Table 14

# DRAFT

## A Suggested County-Wide Waste Reduction Strategy

Once markets have been identified and each waste reduction option is assessed a logical waste reduction strategy should be mapped out. While there is a compulsion to do everything at once, it is not prudent to over extend the county's financial and labor resources in an attempt to be environmentally assertive. It is because the recycling market is so inconsistent that the best waste reduction strategy is one which starts small and builds on its success. This is why this waste reduction strategy designed to incorporate the options with the least start-up costs in the first years and then build from there.

### *The First Year*

In the First year the county will launch a campaign to gather much of the scrap metal in the county and have it picked-up by a scrap metal dealer on a monthly basis. The county will also pass a resolution on to confront tire disposal and will operate a tire handling program at the public works department along with appliances and scrap metal. Although it does not amount to a significant portion of the waste stream, batteries should also be collected along with tires. However, there need not be a fee for batteries because there is some return that may be generated.

The city will operate a separate commercial collection route that will pick up only cardboard and transport it to either the vocational center in Camilla or the baler facility at the Mitchell County Landfill. As soon as school is in session the city in cooperation with the elementary school and local churches will begin collecting tin and aluminum cans. These will be either processed by the county contacted scrap metal dealer or taken to the nearest recycler that pays a return on for the material. By the end of August the city in cooperation with the county will purchase a knuckle-boom loader for picking up yard waste set out by city residents. For two days out of the week the knuckle-boom loader will be used by the county public works department to pick-up debris that protrudes on public easements. This waste will be gathered at a facility near the county public works department where it will sit until ground into mulch where it will then become compost. The compost will be used for city and county beautification projects and offered to the public for no charge.

### *The Second Year*

By this time the county will have established its collection system and be prepared to have a recycling drop-off system. At the collection sites, the county will begin collection of newspaper and sorted glass along with tin and aluminum. These items will be collected by a county public works employee, stored at the public works department, combined with materials collected from the city and later transported individually when the quantities are large enough. In the City of Newton there will be recycling drop-off bins located in several parts of town that will be maintained by the county. Suggested sites are; County Courthouse, Elementary School, IGA parking lot, and County Health Department parking lot.

### *The Third Year*

The only item to be added to the program in the third year is white office paper. This can be conducted either by the county or the City of Newton. Each business in the city and county should be surveyed to see if they are discarding a sufficient amount of white office paper. The businesses that are will be given a receptacle for this material. This will be collected separately by either the county or the city.

### *The Fourth Year*

If by this time the city and county have not reached a 25% reduction in the amount of waste discarded then the county should add plastics recycling to its waste reduction system. At each collection site as well as in the City of Newton, milk jugs, clear soft drink bottles, and green soft drink bottles will be collected. This may have minimal impact, however, it would be revered as a good faith gesture on the part of the community. A down stroke baler may be needed for this if one has not yet been acquired for cardboard and paper.

If by chance the city has not reached its 25% per capita goal then the city could attempt a more effective materials recovery system by going to a curbside collection of recyclable materials. This will most likely increase participation However, unless it can be incorporated into the current system with existing labor this will cost the collection customer \$2 - \$3 more per month to operate.

Table fourteen (shown on a previous page) show the estimated potential for waste reduction that each of the recycling options will contribute. On the next page table (table 15) is provided to demonstrate the progression of the suggested recycling strategy. This table assumes at least 85% participation based on 1993 estimates.

# DRAFT

<b>Suggested Waste Reduction Strategy</b>					
<b>Waste Reduction Options</b>	<b>Date Attempted</b>	<b>County cumulative % of waste reduction</b>	<b>City cumulative % of waste reduction</b>	<b>Uninc. cumulative % of waste reduction</b>	<b>Total annual cumulative Tonnage</b>
White Goods & Scrap Metal	Mar-93	3.2%	3.6%	3.1%	96.2
Cardboard	Mar-93	7.7%	18.6%	5.1%	235.1
Tires	Mar-93	9.2%	20.1%	6.6%	280.7
Tin Cans	Jul-93	11.4%	22.9%	8.5%	345.3
Aluminum Cans	Jul-93	14.7%	27.3%	11.6%	446.8
Yard Waste Composting	Aug-93	19.9%	45.2%	13.6%	603.2
Sorted Glass	Feb-94	25.8%	53.0%	19.1%	783.1
Newspaper	Mar-94	32.5%	61.9%	25.3%	988.4
Office Paper	Mar-95	33.9%	64.9%	26.3%	1,030.8
Sorted Plastics	Jun-96	34.5%	65.7%	26.9%	1,049.2
<b>Total Waste Reduction Potential July, 1996</b>		<b>34.5%</b>	<b>65.7%</b>	<b>26.9%</b>	<b>1,049.2</b>

*These estimates are based on 1993 projected weights and the assumption of at least 85% participation.*

*Table 15*

# DRAFT

## Solid Waste Education Element

In order for any chosen system of collection and recycling to work efficiently in the county and the city is to educate the population. In general people will follow any new system or regulation as long as they are informed of why there is the need for change and see how there efforts effect the overall goal. There are many low cost methods of capturing the public's attention.

### **Citizens Advisory Committee on Solid Waste**

The best place to begin a solid waste education system is with the participants of the Baker County Solid Waste committee. Having become well informed on the many facets of solid waste management, the committee would be a good source for educating the public. With the local teachers assisting, the committee could reach many members of the public. Unfortunately, this committee will have very little funding at first. By the turn of the next budget year, more funds may be available.

### **School System Program**

The primary point of educating the public is through the minds of the youth. The elementary school in Newton is an optimal place to begin a solid waste education program.

### **Flyers and Handouts**

Including Flyers with tax notices is another way in which the committee will reach more residents. These flyers will contain details of the new solid waste collection and recycling systems. More specific information can be provided at the Court House. During elections, these handouts can be distributed at the voting precincts.

### **Litter Control Program**

A litter control program, such as Adopt-A-Mile, will be organized by this committee. The county may also pass legislation to prohibit junk cars and the existence of dilapidated abandoned buildings. Clean-ups can be organized to eliminate the "un-official landfills" of waste strewn throughout the county.

### **Media Relations**

Media relations are difficult since there are many different sources for which Baker County residents receive their news. Public Service Announcements, Press Conferences, Paid Advertisement, News articles, and Interviews will have minimal effect at capturing the public's attention.

# DRAFT

## Baker County Consolidated Solid Waste Management Plan

### Goals and Policies

#### Goals to Address the Amount of Waste

- Goal 1:** Have full knowledge of what and how much is being disposed in all landfill facilities located in Baker County and how much it is costing the taxpayer.
- Policy 1.1:** Begin and continue to weigh and categorize all solid waste collected in Baker County and disposed in any landfill facility.
- Policy 1.2:** Continue to adhere to all State and Federal full cost accounting and reporting requirements for any solid waste management services provided in the county.
- Goal 2:** Remove as many recyclable items as possible from the waste stream prior to landfill disposal.
- Policy 2.1:** By July of 1996, allow only materials that cannot be recycled feasibly to be discarded into any solid waste landfill facility.
- Goal 3:** Achieve a balanced, affordable solid waste management plan implementation strategy, while meeting the goals and requirements of the Solid Waste Management Act.
- Policy 3.1:** Follow the adopted Waste Reduction Element.

#### Goals to Address Collection

- Goal 4:** Insure that solid waste management collection systems will be adequate to meet a ten year handling capability identified in this plan.
- Policy 4.1:** Do a full assessment of the city's and the county's solid waste collection systems, evaluate their performance, assess the cost of improvements and report them publicly every four years.
- Goal 5:** Insure the efficient and effective collection of solid waste, recyclable, and compostable materials within the entire community.
- Policy 5.1:** Pilot new recycling programs prior to the completion of solid waste collection system assessment and evaluation.
- Policy 5.2:** Replace collection equipment at anytime the costs of repair exceed the return of practical use.
- Policy 5.3:** No longer collect yard waste when it is co-mingled with non-biodegradable waste.

#### Goals to Address Disposal

# DRAFT

**Goal 6:** Insure that solid waste management disposal systems will be adequate to meet a ten year handling capacity identified in this plan.

**Policy 6.1:** Use the most efficient and cost effective equipment possible for disposal operation so as to lower the cost of transport to any solid waste disposal facility.

**Policy 6.2:** Divert all organic and compostable yard waste to an operational composting site within the county.

**Policy 6.3:** Divert inert waste, too large for composting, to an inert landfill site within the county.

**Policy 6.4:** Initiate recycling programs as soon a reasonable means of collection, processing, and distribution are available.

**Goal 7:** Insure that solid waste treatment and disposal facilities meet regulatory requirements and are in place when needed to support and facilitate effective solid waste handling programs today and for the subsequent ten year period covered within this plan.

**Policy 7.1:** The Baker County Commission will be responsible for providing its residents with legal membership to a landfill with permitted capacity.

**Policy 7.2:** The Baker County Commission assumes full responsibility for any solid waste diversion service within the county.

**Goal 8:** Insure that proposed solid waste handling facilities are located in areas suitable for such development and are compatible with surrounding uses.

**Policy: 8.1** The Baker County Commission will site, permit, and operate an inert landfill for the use of all county residents.

**Policy: 8.2** If a regional landfill, privately or publicly operated, has available capacity and the cost of transfer, transportation and disposal is less than a any other solid waste disposal facility then the Baker County Commission will become an active member of this facility.

# DRAFT

## Goals to Address Waste Reduction

**Goal 9:** Insure that the per capita amount of waste being received at disposal facilities during fiscal year 1992-93 will be reduced 25% by July 1, 1996.

**Policy 9.1:** Ban yard waste and inert debris from being exported to a landfill by diverting it to a composting facility or inert landfill within the County.

**Policy 9.2:** Enable the practice of recycling to be as easy as possible to all citizens through the county and its cities.

**Policy 9.3:** Initiate recycling programs as soon as reasonable means of collection, processing, and distribution are available.

**Policy 9.4:** Follow the adopted County-wide Recycling Program Strategic Plan.

## Goals to Address Education

**Goal 10:** Help residents achieve an understanding and awareness of the social and environmental issues, problems, concerns and needs associated with solid waste management, especially in terms of littering, waste reduction, recycling, disposal of household hazardous waste, composting, processing, and to increase support for effective solid waste management.

**Policy 10.1:** Support and assist a county, multi-county, or regional clean and beautiful commission to accomplish objectives listed in the solid waste plan work schedule.

**Policy 10.2:** Continue to issue press releases and flyer's pertaining to solid waste issues in Baker County.

Solid Waste Plan Work Schedule Collection Element	Ten Year Plan July 93' to July 2003										Who?	estimated cost	Possible Assistance Sources						
	1	2	3	4	5	6	7	8	9	10			Federal	State	Local				
<b>Baker County</b> Construct (4) household garbage manned collection stations w/recycling collection bins in unincorporated area. Employ or designate (2) workers to maintain and operate collection. Begin and implement cardboard collection and recycling program.	Δ																		
<b>City of Newton</b> Purchase knuckle-boom loader for yard waste collection. Continue to operate current system of collection. Re-evaluate collection system and make changes as needed. Enact improved collection system. Place a county resident household garbage dumpster and a recycling collection station in the city. Pick up yard waste separate from household garbage. Pick up corrugated paperboard from businesses separately.		Δ																	
<b>Baker County</b> Contract with Mitchell County to accept Baker County Waste Participate in Mitchell County Landfill Participate in Regional Solid Waste Landfill Implement tire collection and disposal program Site and Develop Inert Landfill and Compost Site Divert yard waste from landfill into a compost site or inert landfill.																			
<b>City of Newton</b> Dispose of waste in Mitchell County Landfill Divert Yard Waste and Inert Debris to Baker County Site																			

Legend page 26  
 One time Δ  
 Ongoing

**Solid Waste Plan Work Schedule**

Waste Reduction Element	Ten Year Plan July 93' to July 2003										Who?	estimated cost	Possible Assistance Sources			
	1	2	3	4	5	6	7	8	9	10			Federal	State	Local	
<b>Baker County</b> Develop Yard waste composting facility. Organize a Christmas tree chipping program. Use volume based collection fees to encourage participation in yard waste composting and recycling programs. Implement a county-wide recycling program to reduce waste going into the landfill by 25%.	Δ											County Commission	\$25,000		LDF	cities
A. Collect cardboard to bale at Mitchell County landfill.			Δ									County Commission	\$25,000			
B. Place new recycling bins in city and collection points in the county.												County Commission	\$9,000		LDF	
C. Change recyclables collected to match feasible markets.												County Commission	\$15,000			
D. Establish and promote office and commercial recycling programs.												County Commission	\$4,000			
E. Develop incentive programs for recycling at other businesses.												County Commission				
F. Make regulatory changes to encourage recycling.												County Commission				
G. Recycle leftover construction material.												County Commission				
Purchase recycled products when available.												County Commission				
Organize a cardboard recycling program for all county businesses.			Δ									County Commission	\$2,000		LDF	cities
Place recycling collection stations in schools and public offices.												County Commission	\$2,000			
Provide incentive to recycle at manned collection stations.												County Commission	\$50,000			
Construct processing facility for recyclables												County Commission				
<b>City of Newton</b> Place a recycling collection stations in the city. Purchase recycled products when available. Attempt a pilot curb-side recycling program. Pick up yard waste separate from household garbage. Pick up corrugated paperboard from businesses separately.	Δ											County Commission	\$2,000		LDF	city
												City of Newton	\$1,000			
												City of Newton	extra cost			
												City of Newton	extra cost			
												City of Newton				

Legend page 27  
 One time Δ  
 Ongoing



**Baker County**  
**Solid Waste Management Plan**  
**Updates and Amendments**

Changes to this plan are made through two different procedures depending on the portion of the plan to be altered. If the intent is to change the Information and Assessment portion of the plan then this is deemed an update and must follow the updating procedure. If the intent is to change any part of the Implementation Strategy then this is considered an amendment to the plan and formal amendment procedures must be followed. The two procedures for altering the plan are as follows:

**Update**

To update the Information and Assessment portion of the plan one must provide notice before the elected or appointed planning body with information to be added or update and the source from which this information has been provided. The elected or appointed planning body will insert this information into however many working copies that are in use with the government's jurisdiction and make notice of this information at the next scheduled meeting.

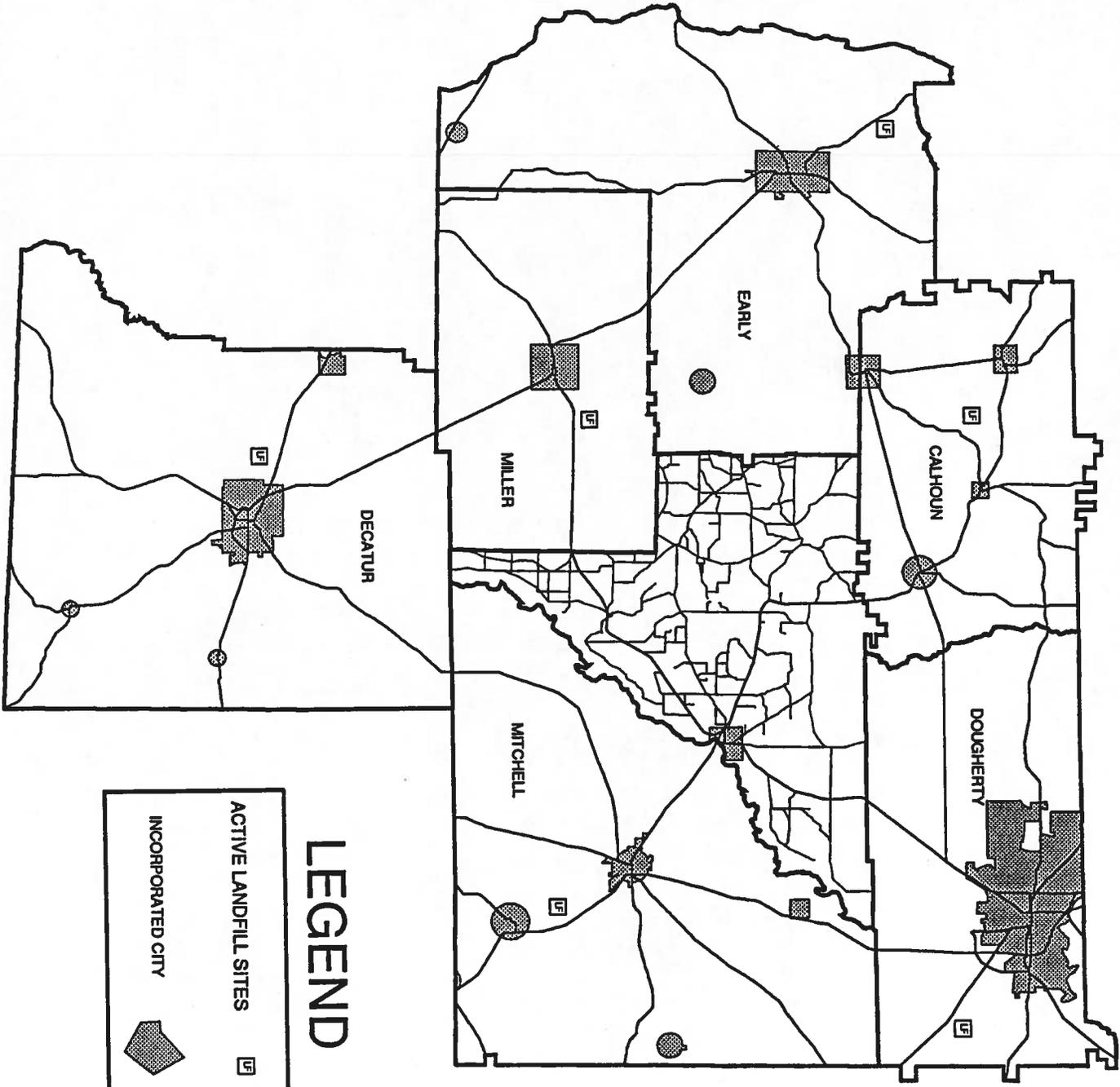
**Amendments**

To amend any part of the Implementation Strategy including but not limited to the Goals, Policies, or the Objectives of the Ten Year Work Schedule for any Individual Task one must do the following:

- 1) The applicant for amendment to the plan must submit a request in writing to the legislative body to make an amendment to the plan.
- 2) Upon receipt of such request, the legislative body will schedule an official public hearing that will be held by the legislative body and public notice will be given no less than 15 days nor more than 45 days prior to the official hearing date.
- 3) The public hearing notice will state the time place, and purposes of the hearing.
- 4) The public hearings will be convened at the advertised time and place and will be presided over by the appropriate officials.
- 5) The legislative body, at its official public hearing, will review any recommendations from the public, planning body, or the Regional Development Center and may choose to adopt the amendment, reject it or table the amendment for additional study.

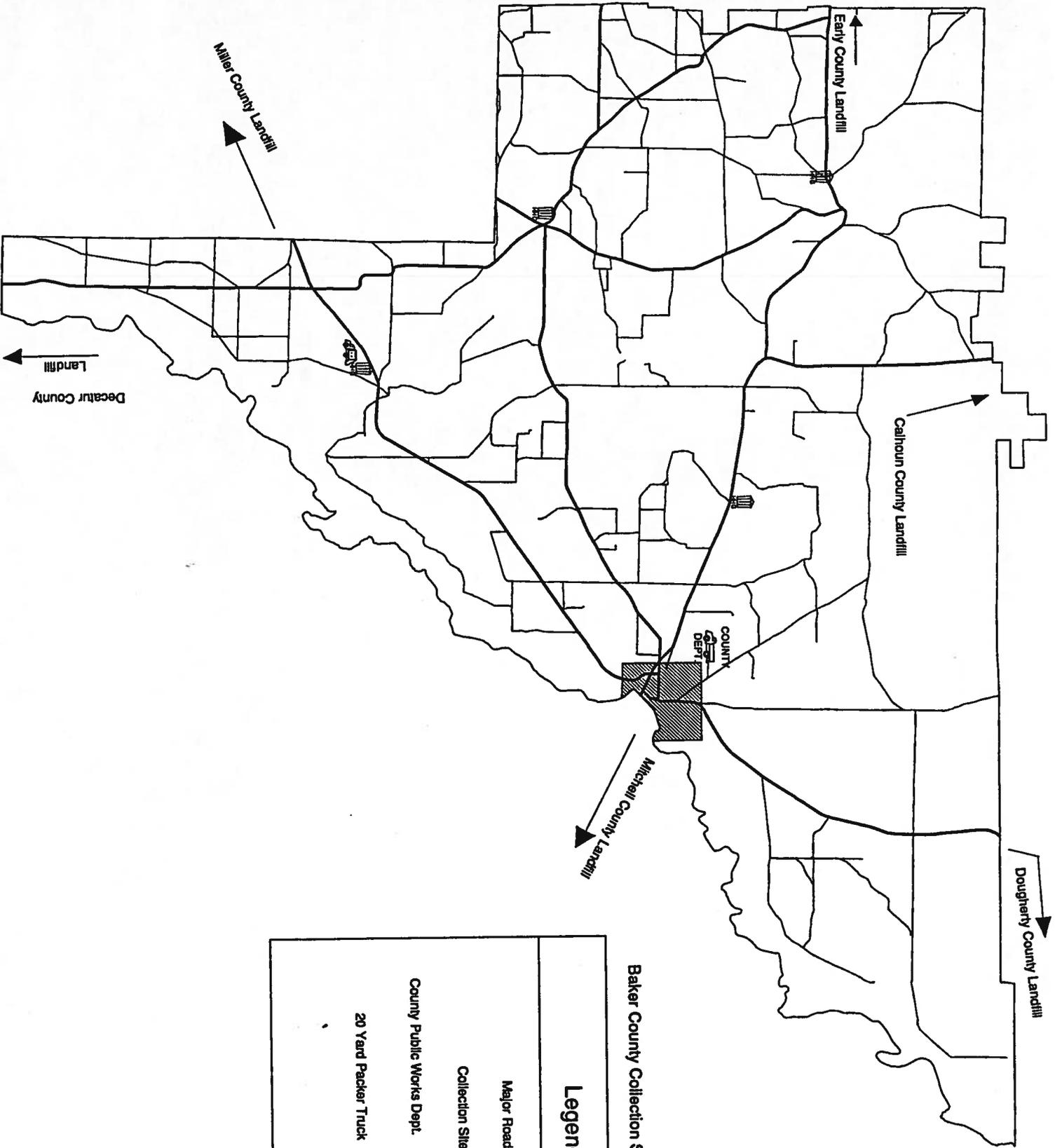


# LANDFILL SITES SURROUNDING BAKER COUNTY



## LEGEND

ACTIVE LANDFILL SITES	LF
INCORPORATED CITY	



Baker County Collection System Map

Legend	
Major Roads	
Collection Site	
County Public Works Dept.	
20 Yard Packer Truck	

**MITCHELL COUNTY BOARD OF COMMISSIONERS**

PHONE 336-2000 - P.O. BOX 187  
CAMILLA, GEORGIA 31730

Benjamin Hayward, Chairman  
Charles B. Lodge, Vice-Chairman

March 27, 2002

Bennett Adams, County Administrator  
Sheila H. Cannon, Clerk  
Robert C. Richardson, Jr., Attorney  
Bruce Shiver, Warden

Members of Board  
Reggie Bostick  
I.C. Cochran, Jr.  
Benjamin Hayward  
Charles B. Lodge  
W. Alton (Buddy) Snipes

Representative Richard Royal  
Room 135  
State Capital Building  
Atlanta, Georgia 30334

Dear Representative Royal:

Please find enclosed a letter of support for the "Poultry Litter Composting Project" that Jerry Usry is putting together for GEFA. It is my understanding that he will pick this letter and the Solid Waste Management section of the Mitchell County Comprehensive Plan, that is also enclosed, at your office.

Sincerely,

  
Bennett Adams  
County Administrator

**MITCHELL COUNTY BOARD OF COMMISSIONERS**

PHONE 336-2000 - P.O. BOX 187  
CAMILLA, GEORGIA 31730

Benjamin Hayward, Chairman  
Charles B. Lodge, Vice-Chairman

March 28, 2002

Bennett Adams, County Administrator  
Sheila H. Cannon, Clerk  
Robert C. Richardson, Jr., Attorney  
Bruce Shiver, Warden

Members of Board  
Reggie Bostick  
I.C. Cochran, Jr.  
Benjamin Hayward  
Charles B. Lodge  
W. Alton (Buddy) Snipes

Mr. Paul Burks  
Executive Director  
Georgia Environmental Facilities Authority  
2090 Equitable Building  
100 Peachtree St. NW  
Atlanta, Georgia 30303

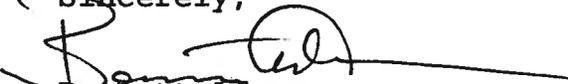
Dear Mr. Burks:

Please accept this letter as Mitchell County's strong support for the regional demonstration project proposal "Poultry Litter Composting and Reuse" for GEFA's 2002 recycling and waste reduction grant program.

This program could be very beneficial to Mitchell County since there are over 200 poultry houses in the County. These poultry houses support the Keystone Poultry Processing complex in Camilla, which is the largest employer in the County. Because of the importance that of the poultry industry to the Mitchell County economy, the County is interested in proactively addressing innovative poultry waste management strategies.

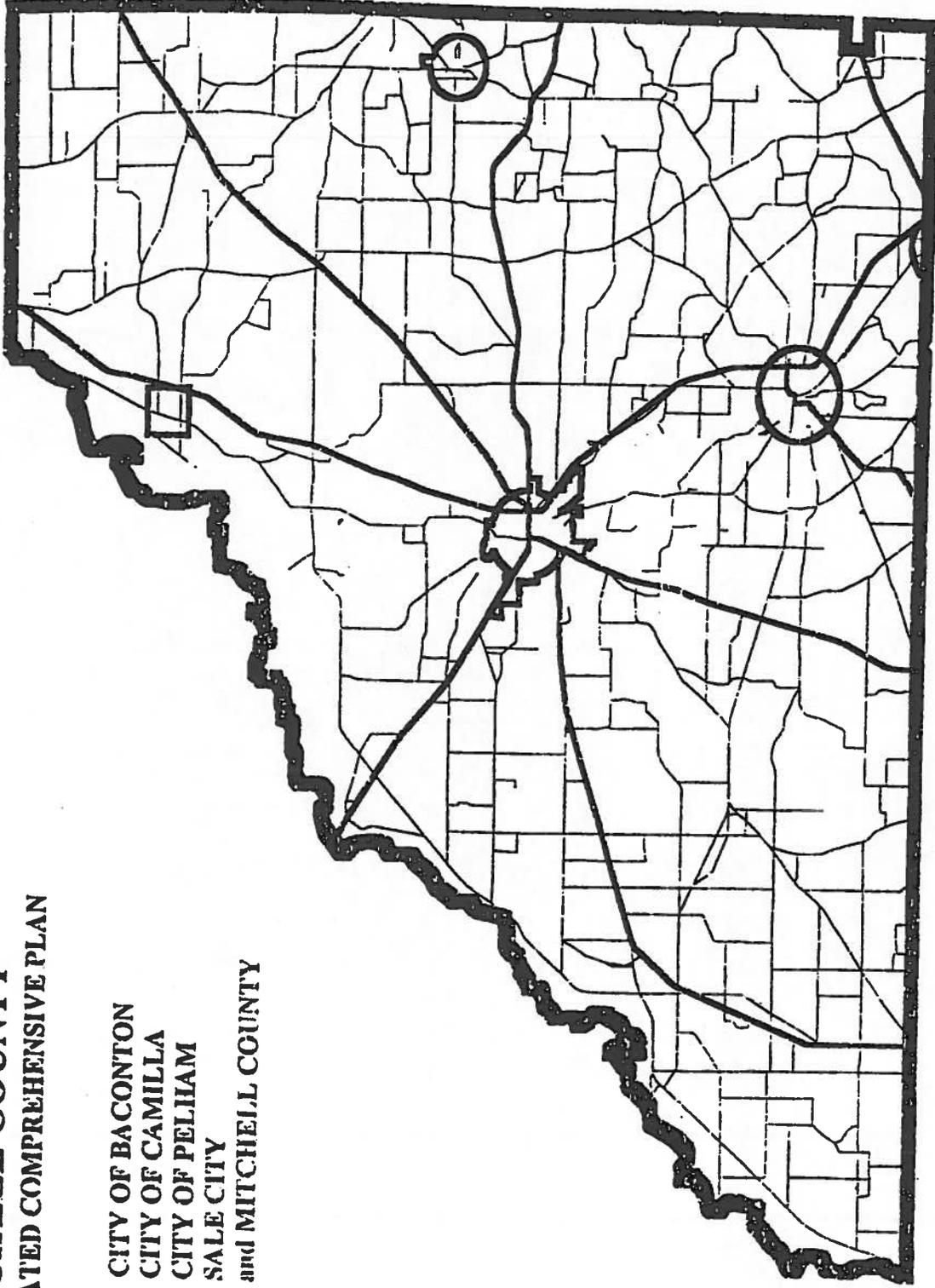
The demonstration project will show that poultry litter composting has the potential to reduce the waste management costs while producing a more stable, usable and less odorous fertilizer for poultry farms across the region.

Sincerely,

  
Bennett Adams  
County Administrator

# MITCHELL COUNTY CONSOLIDATED COMPREHENSIVE PLAN

Serving:  
CITY OF BACONTON  
CITY OF CAMILLA  
CITY OF PELLIAM  
SALE CITY  
and MITCHELL COUNTY



B. ADAMS

MITCHELL COUNTY

SOUTHWEST GEORGIA  
REGIONAL DEVELOPMENT  
CENTER

## **Solid Waste Collection Systems**

An in-depth assessment of these systems will be provided in the Mitchell County Consolidated Solid Waste Management Plan.

### **Baconton**

There are 263 garbage collection customers and all of them are city residents.

### **Camilla**

There are 2073 garbage collection customers, 56 of which are located outside the city limits. 247 are commercial customers only one of which is an out of town customer. There are 1771 residential customers, 55 are out of town.

The city has two garbage collection vehicles for residential routes. Both are twenty yard back-loading packers, one a 1984, the other a 1991. There is one commercial dumpster truck, a 1982 40 yard packer used regularly and a 1975 GMC 20 yard dumpster loader that is used as a back-up only. Yard waste is collected by means of a knuckle-boom loader with a 20 foot span on an International dump-truck.

### **Pelham**

There are 1351 garbage collection customers, 20 of which live outside the city limits.

### **Sale City**

There are 145 garbage collection customers and all of them are city residents.

### **unincorporated area**

There is no collection system that is provided by government for the unincorporated county other than for the few customers living near Pelham and Camilla. Hall-ing Refuse, a private collector services much of the northern end of the county. There are no county collection sites other than the the county landfill. Much of the county residential waste is dumped in Camilla or Pelham dumpsters. This will soon be of greater expense to the cities.

County collection sites are needed. However, these sites will need to be manned in order to prevent abuse to the facilities. This would also enable county residents to participate in a county wide recycling program.

## **Public Safety**

*The Following information is provided for an Inventory and Location of Disaster Relief Shelters in Mitchell County.*

### **Baconton**

Currently there are no disaster relief shelters located in Baconton.

### **Camilla**

There are two disaster relief shelters in the city. These are as follows:

- 1) Basement of the Post Office
- 2) Mitchell Baker High School

### **Pelham**

There are four disaster relief shelters in the city. These are as follows:

- 1) Basement of the Post Office
- 2) Pelham High School
- 3) Pelham Methodist Church
- 4) The First Baptist Church of Pelham

### **Sale City**

Currently there are no disaster relief shelters located in Sale City.

## **The Cost of Future Disposal of Solid Waste**

By 1993, all landfill trenches will have to meet current requirements under subtitle D of the Resource Conservation and Recovery Act of 1986 prior to excavation. For landfills that lie above significant aquifer recharge areas, this means each new trench will need a minimum of a 40 mil HDPE liner and a leachate collection system put in place before any waste can be disposed in it. Most of Mitchell County lies above a groundwater aquifer and serves as a significant ground water recharge area. Therefore, it is very likely that a liner and leachate collection system will be required. This will drive up the cost of landfill disposal far above \$10.00 per ton. It is estimated that RCRA(d) permitted landfill space will cost at a minimum \$45.00 per ton and this is a conservative estimate.

## **The Need for a Solid Waste Reduction System**

In order to bring down the cost of solid waste disposal in the future, steps need to be made now to establish a solid waste reduction system in Mitchell County to recycle the waste which we are currently throwing away. To have a successful recycling program there three factors which must be balanced. The first factor is to have a market for the recyclables. The second factor is how recyclables can be processed and moved to market. The third factor is how can these recyclables be collected for the least cost to the public. Once this system is established participant education and evaluation can be incorporated into the system.

### **Markets**

There exists, in the City of Camilla, a company that recycles scrap iron, aluminum radiators, AC radiators, car radiators, #1 and #2 grade copper, aluminum of all types, brass, tin cans, sorted glass, newsprint, and plastic. In the City of Albany there are two recycling companies as well. These companies recycle the aforementioned items, corrugated material, office paper, HDPE and PET plastic, ledger paper, and computer paper. The soil and water conservation service has grant funds available for community composting facilities. A use for organic compost can be easily found.

### **Processing and Collection**

The recycling company in Camilla has made an offer to provide curb-side collection of recyclables to several cities in Mitchell County at a minimum of \$1.90 per household. Another recycling company has made an offer to the City of Pelham to provide this service at \$2.50 per household. The Mitchell County Solid Waste Planning Committee has assessed the possibility of a county-wide recycling program that would take a more conservative route to solid waste reduction this is provided as an attachment.

### **Cost**

Due to the density of the urban population in the cities there is a high potential for curb-side recycling collection. However to assure a ample volume any recycling effort would be most efficient if combined with a county-wide effort in order to have the economies of scale needed to make the operation more feasible to the tax payer. For now, the monetary cost of a waste reduction program is greater than the return. However, there are several reasons why subsidizing this service to the public is necessary. These are some of the reasons:

- 1) It is beneficial to the environment to recycle materials than to generate them from raw materials.
- 2) The cost of disposal will never be this low again. Getting the public involved in recycling now will make it easier, more efficient, and cost effective in the future.
- 3) Because of the recent publicity, people are more aware of environmental concerns. The public wants the ability to recycle their waste, however, they want it to be made easy. Making the practice of recycling easily available to the public is a service which the public demands.
- 4) The Mitchell County landfill may run out of space before a new one can be permitted. If this happens the county will have to transport waste to a private landfill that will have the ability to set its own price per ton.
- 5) Georgia Law requires that all governments must reduce their waste by 25% per capita by 1996. The penalty for not reaching this goal is loss of solid waste permits and the ability to transport waste across county lines.

## What is Being Disposed

In 1986, Franklin and Associates, under contract of the U.S. Environmental Protection Agency, performed a survey of materials discarded into a municipal waste facility much like the one in Mitchell County. They found that on average the composition was made up of the following categories:

Paper and Paperboard = 41%
Yard Wastes = 17.9%
Metals = 8.7%
Glass = 8.2%
Rubber, Leather, Textiles and Wood = 8.1%
Food Wastes = 7.9%
Plastics = 6.5%
Miscellaneous Inorganic Wastes = 1.6%

It is safe to assume that the Mitchell County household garbage waste stream has a similar distribution.

## Current Cost of Landfill Operation

The cost of an unlined landfill with no leachate collection is relatively inexpensive compared to the maintenance cost of the next landfill to be permitted in Mitchell county. The operation costs here only encompass labor and equipment maintenance. The capital costs are for construction of a scale house and the setting of the scales.

Mitchell County Cost of Landfill Operation		
Month	Operation Cost	Capital Cost
Feb-91	\$13,403.00	
Mar-91	\$12,843.00	
Apr-91	\$10,920.94	
May-91	\$8,514.00	
Jun-91	\$8,664.69	
Jul-91	\$7,593.47	
Aug-91	\$10,727.00	\$5,800.40
Sep-91	\$12,027.71	
Oct-91	\$9,317.80	
Nov-91	\$14,025.00	\$6,400.56
Dec-91	\$10,892.89	
Jan-92	\$13,092.76	
Total Annual Cost		\$132,022.26
Average Monthly Cost		\$11,001.86

The operation and maintenance cost of the next Mitchell County Landfill will more than double because more costs will be incurred. There will be environmental monitoring expenses and disposal of the leachate that is collected will have a cost as well. The leachate collected through the leachate collection system will need to be treated, tested, and disposed as hazardous waste. The county will also be forced to absorb the increased cost of administration and reporting of this facility's operations. Please note that at the current charge of \$10.00 per ton for disposal barely covers the cost of operation. The county will be forced to raise this fee in the near future to build up capital to finance the next landfill. This fee will more than likely double.

## Amount of Waste/Disposal

### Estimated Solid Waste Disposal

Mitchell County		
Annual deposit	15,126.54	tons
92' Population Estimate	20,793	
annual per capita	0.73	tons
lbs. per person per day	3.99	lbs.
City of Camilla		
Annual deposit	6,072.56	tons
92' Population Estimate	5,264	
annual per capita	1.15	tons
lbs. per person per day	6.32	lbs.
City of Pelham		
Annual deposit	4,067.83	tons
92' Population Estimate	4,032	
annual per capita	1.01	tons
lbs. per person per day	5.53	lbs.
City of Baconton		
Annual deposit	202.28	tons
92' Population Estimate	696	
annual per capita	0.29	tons
lbs. per person per day	1.59	lbs.
Sale City		
Annual deposit	63.31	tons
92' Population Estimate	326	
annual per capita	0.19	tons
lbs. per person per day	1.06	lbs.
City of Meigs		
Annual deposit	732.29	tons
92' Population Estimate	1,120	
annual per capita	0.65	tons
lbs. per person per day	3.58	lbs.

The current tipping fee has been set at \$10.00 per ton. It is anticipated that this fee will increase within the year. There is no fee set for tire disposal.

The inert landfill is permitted and has been opened since January of 1992. The cost of disposing inert materials into the inert landfill is only \$5.00 per ton and will remain so as an incentive. A city or other single major disposer can save on disposal fees by diverting inert waste from their waste stream and disposing of it in the inert landfill. The City of Baconton has their own inert landfill, therefore their savings are even greater. Baconton has a permitted inert landfill at a site adjacent to their wastewater treatment facility. Sewage sludge, limbs and yard waste are currently deposited in this facility. Household garbage is no longer placed in the landfill.

### **unincorporated area**

Since there is no county sewage system except for what is provided by the City of Pelham to some of its fringe development and the prison system, the number of septic tank permits in the county is the same as the total household units minus the aforementioned exceptions. This number equates to 3,217 total septic tank permits.

### *The Following information is provided to give an inventory Urban Stormwater Run-off Facilities in Mitchell County*

#### **Baconton**

The Army Corps of Engineers installed a levy in 1988 to prevent stormwater overflow from Raccoon Creek from over flowing into the downtown area. There is still a need for another facility to handle stormwater run-off in the downtown area. A holding pond system is to be developed in the vicinity of downtown to remedy this problem. The county will be providing assistance in construction of this facility.

#### **Camilla**

Big Slough is a creek for which all stormwater must eventually drain to be diverted from the city. Often this creek system backs up during a torrential rain and thus causes the city stormwater run-off facilities to backup. A large retention pond is needed in the path of big slough to absorb the excess storm water and prevent storm flooding throughout the city.

#### **Pelham**

Since the City of Pelham is located high upon the Pelham escarpment storm water run-off is not a problem. Standing water rarely remains longer than an hour after any storm-surge.

#### **Sale City**

Sale City is Located upon the same escarpment as Pelham thus stormwater run-off is not a problem. However, Sale City has no storm drainage network so street wash is not manipulated and may cause hazards to automobile traffic during high rains.

### **unincorporated area**

Stormwater run-off is a problem on some of the unimproved county roads. Recently many culverts have been laid in some of these problem areas. However there are still many county roads that are often rendered unusable during and after high rains.

### **Floodplains**

For a visual image of Floodplain areas in the county and cities please see floodplain maps which are provided as an attachment to this element of the plan. For more precise depictions of flood hazard areas seek assistance from the Federal Emergency Management Association or the Southwest Regional Development Center in Camilla.

It is clear in the County map that the areas of greatest flood hazard potential lie between the southern portion of Baconton south to Camilla and through the basin of Big Slough. Due to the proximity on the escarpment, flood hazard areas are not as much a concern to Pelham and Sale City. However this is a major development concern in Baconton and Camilla.

### **Solid Waste**

#### **Current Landfill Capacity**

It is estimated that at least four years of handling capacity remain at the Mitchell County landfill. However, some believe this will be an over estimate in the long run. That is why a more accurate analysis is underway. This analysis will take into consideration current rates of disposal that have been recorded since the new computerized landfill scales were set in place.

## Notification of Solid Waste Management Plan Submittal And Public Hearing/Comment Opportunity

Date of Plan Submittal: 2/6/93

Submitting Local Government: Baker County and Newton, Georgia

Address: P. O. Box 10  
Newton, Georgia 31770

Phone: (912) 734-3000

Contact Person: Mr. Lucius Adkins

- New Solid Waste Management Plan (includes pre-existing)  
 Solid Waste Management Plan Amendment  
 Solid Waste Management Plan Update

Public Hearing Date and Time: 2/24/93 @ 1:00 p.m.  
Place of Public Hearing: Southwest Georgia RDC, Camilla, Georgia

### Description of General Nature of Plan:

The plan develops a county collection system which will tie into the Regional Solid Waste Authority. Until then, the county will take no action and the City of Newton will dispose into Dougherty County's landfill. The County will develop an inert landfill and begin a county wide recycling program.

Reviewing Regional Development Center: Southwest Georgia RDC

Contact Person: Bill Richard, Senior Planner

Address: P. O. Box 346  
Camilla, Georgia 31730

Phone: (912) 336-5616

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*Southwest Georgia*  
*Regional Development Center*

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MAR 11 1993

COMMERCIAL MANAGEMENT

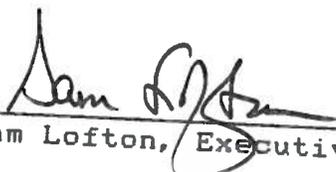
Southwest Georgia Regional Development Center  
Report of Findings and Recommendations  
Baker County, and Newton  
Solid Waste Management Plans

As required by the Georgia Solid Waste Management Act, the Southwest Georgia Regional Development Center Board of Directors conducted a public hearing on joint solid waste management plans submitted by Baker County for review under the local plan review requirements. The public hearing was conducted at 2:00 p.m. on February 24, 1993 at the Regional Development Center's conference room in Camilla.

The RDC sent out notices of the RDC's public hearing to all regional governments and potentially affected organizations. No potentially affected party attended the RDC's public hearing and no written comments or verbal comments were received regarding the Baker County Solid Waste Plans.

The Executive Board and staff having reviewed plans, a resolution was passed to "recommend" to DCA that the Baker County and Newton Solid Waste Management Plans have met the State's Minimum Planning Standards and Procedures for solid waste management.

Date: 2/24/93

  
\_\_\_\_\_  
Sam Lofton, Executive Director

*Serving the cities and counties of Southwest Georgia*

P. O. Box 346 • Camilla, Georgia 31730-0346 • (912) 336-5616 or 430-4315 • FAX (912) 336-5617



GEORGIA DEPARTMENT OF  
**COMMUNITY AFFAIRS**

Jim Higdon  
COMMISSIONER

Zell Miller  
GOVERNOR

June 22, 1993

Mr. Sam Lofton, Executive Director  
Southwest Georgia Regional  
Development Center  
Post Office Box 346  
Camilla, Georgia 31730

Dear Mr. <sup>SAM</sup>Lofton:

Our staff has reviewed the solid waste management plan for Baker County and the City of Newton and find the plan to be in compliance with the Minimum Planning Standards and Procedures for Solid Waste Management.

Please remind these local governments that eligibility for permits, grants, and loans for solid waste management is contingent upon official adoption of this plan. A copy of the adopted plan should be forwarded to the Department of Community Affairs.

As soon as we receive notification from your office that all local governments have adopted the plan, we will send each local government official notification of its eligibility to receive solid waste permits, grants and loans.

Sincerely,

Paul Radford, Director  
Governmental Management Division

PR/bht

cc: Honorable Michael B. Tabb, Chairman  
Baker County Board of Commissioners  
Honorable Be Be Johnson, Mayor  
City of Newton

*Southwest Georgia  
Regional Development Center*



July 14, 1993

Mr. Griff Doyle  
Office of Coordinated Planning  
Georgia Department of Community Affairs  
1200 Equitable Building  
Atlanta, Georgia 30303

RECEIVED

JUL 19 1993

GOVERNMENTAL MANAGEMENT

RECEIVED

JUL 16 1993

GOVERNMENTAL MANAGEMENT

Dear Griff,

Enclosed is a resolution executed by the Baker County Board of Commissioners officially adopting its Solid Waste Plan as reviewed and approved by the Georgia Department of Community Affairs.

We trust that this resolution is sufficient to allow Baker County to be in compliance with the Solid Waste Management Act.

If we can be of further assistance, please give us a call.

Sincerely,

Sam Lofton  
Executive Director

SL/ep

Enclosure

Copy to: Wayne Williams  
Mike Tabb

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*Southwest Georgia*  
  
*Regional Development Center*

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July 14, 1993

Mr. Griff Doyle  
Office of Coordinated Planning  
Georgia Department of Community Affairs  
1200 Equitable Building  
Atlanta, Georgia 30303

RECEIVED

JUL 19 1993

COMMUNITY AFFAIRS

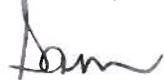
Dear Griff,

Enclosed is a resolution executed by the City of Newton officially adopting its Solid Waste Management Plan as reviewed and approved by the Georgia Department of Community Affairs and the Georgia Department of Natural Resources.

We trust that this resolution is sufficient to allow the City of Newton to be in compliance with the Solid Waste Management Act.

If we can be of further assistance, please give us a call.

Sincerely,



Sam Lofton  
Executive Director

SL/ep

Enclosure

Copy to: Wayne Williams  
Bebe Johnson

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*Serving the cities and counties of Southwest Georgia*

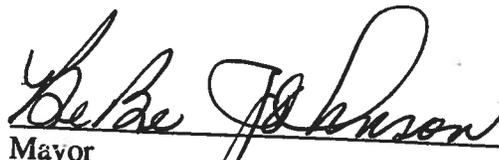
P. O. Box 346 • Camilla, Georgia 31730-0346 • (912) 336-5616 or 430-4315 • FAX (912) 420-4227

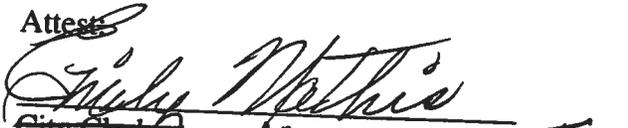
**A RESOLUTION  
ENTITLED A RESOLUTION APPROVING AND  
RATIFYING ADOPTION OF A  
SOLID WASTE MANAGEMENT PLAN FOR BAKER COUNTY;  
REPEALING PRIOR RESOLUTIONS IN CONFLICT;  
AND FOR OTHER PURPOSES**

BE IT RESOLVED by the Mayor and Council of Newton, Georgia and is hereby resolved by authority of the same:

SECTION I. The Mayor and Council having officially adopted on this Thirteenth day of July, 1993 the proposed Baker County Consolidated Solid Waste Management Plan in its entirety, and as approved by the Georgia Department of Community Affairs and the Georgia Department of Natural Resources pursuant to O.C.G.A. Volume X, Title 12, Article II, Part One, Conservation and Natural Resources, said is hereby confirmed and ratified.

SECTION II. All resolutions or parts of resolutions in conflict herewith are repealed.

  
\_\_\_\_\_  
Mayor  
Newton, Georgia

Attest:  
  
\_\_\_\_\_  
City Clerk  
Newton, Georgia  
MAYOR PRO TEM

**A RESOLUTION  
ENTITLED A RESOLUTION APPROVING AND  
RATIFYING ADOPTION OF A  
SOLID WASTE MANAGEMENT PLAN FOR BAKER COUNTY;  
REPEALING PRIOR RESOLUTIONS IN CONFLICT;  
AND FOR OTHER PURPOSES**

BE IT RESOLVED by the Board of Commissioners of Baker County, Georgia and is hereby resolved by authority of the same:

SECTION I. The Board of Commissioners having officially adopted on this Thirteenth day of July, 1993 the proposed Baker County Consolidated Solid Waste Management Plan in its entirety, and as approved by the Georgia Department of Community Affairs and the Georgia Department of Natural Resources pursuant to O.C.G.A. Volume X, Title 12, Article II, Part One, Conservation and Natural Resources, said is hereby confirmed and ratified.

SECTION II. All resolutions or parts of resolutions in conflict herewith are repealed.

  
Chairman  
Board of Commissioners  
Baker County, Georgia

Attest:

  
County Clerk  
Baker County, Georgia

# DataBase Template

1 of 7

**General Information**

Base Year: 1992 Year Date of Plan: 930722 Year/Mo/Day  
Date of Elig Letter

RDC: Southwest Georgia Name SW Plan Jurisdiction: Baker County Name

Local Govt Name: Baker County Name 1990 Pop: 2912 Number Est 1996 Pop: 2851 Number

Base Year Waste Disposed: 2450 Tons Pounds per Person per Day: 4.61 Pounds Recycling Credit: 0 Tons

Projected Waste Disposed: 2393 Tons Proj (1996) PPD: 4.60 Pounds Proj Tons w/25% Reduction: 1795 Tons

Residential Waste: \_\_\_\_\_ % Commercial: \_\_\_\_\_ % Industrial: \_\_\_\_\_ %  
Tons Tons Tons

Methodology: Est Tonnage Estimated or Actual Individual Government as % of Plan: 80.6 Population %

## Current Collection & Disposal Methods

Collection Provider: public: \_\_\_\_\_ private: \_\_\_\_\_  
Local Govt Name Hauling Company

Collection Method: residential: unknown commercial: unknown  
Curb, Box, Conv Center, Back Door Box, Roll-Off, Private (type unknown)

Initial Destination: Fill Life: 0 Final Destination: Douglas Co Life: 0  
Transfer or Fill Years Fill Site/Incinerator Name Years (incl V-Ex)

Type of Fills: MSW: Y Inert Waste: N C&D: N Vertical Ex: \_\_\_\_\_ Life: \_\_\_\_\_  
(Receiving Waste) Y or N Y or N Y or N Y or N Years

Date of Fill Site Closure (if different from Est Life): \_\_\_\_\_  
Year/Month

Waste Shipped: Imported User Assessment: \_\_\_\_\_ Tipping Fees: \_\_\_\_\_  
Imported or Exported Dollars Dollars Per Ton

## Proposed Collection & Disposal Methods

Collection Provider: public: Baker County private: \_\_\_\_\_  
Local Govt Name (for 1996) Planned Hauling Company (for 1996)

Collection Method: residential: conv center commercial: unknown  
Curb, Box, Conv Center, Back Door (1996) Box, Roll-Off, Private (for 1996)

Initial Destination: years 1-3: Fill years 4-6: Fill years 7-10: Fill  
Transfer or Fill Transfer or Fill Transfer or Fill

Final Destination: Douglas Co Life: 0  
Fill Site/Incinerator Name Years Projected

Application for Vertical Extension: \_\_\_\_\_ Approved: \_\_\_\_\_ Life: \_\_\_\_\_  
Y or N Y or N Years

Present Sub D Fill: \_\_\_\_\_ Life: \_\_\_\_\_ Est Cost: \_\_\_\_\_  
Name of Existing Sub D Years Dollars

Regionwide Sub D: Sub D SW-AT Completion: 9301 Life: \_\_\_\_\_ Est Cost: \_\_\_\_\_  
Name of Planned Sub D Year/Month Years Dollars

Const New Sub D: Mitchell Co Completion: 9301 Life: 3 Est Cost: \_\_\_\_\_  
Name of Planned Sub D Year/Month Years Dollars

Tipping Fees: 12.00 Estimated Closure Costs: 5 year: \_\_\_\_\_ 30 year: \_\_\_\_\_  
Dollars Per Ton Dollars Dollars

# DataBase Template

## Reduction Efforts

Current Collection Meth: curbside: \_\_\_\_\_ drop-off: \_\_\_\_\_ MRF: \_\_\_\_\_ reuse prog: \_\_\_\_\_ c/centr: \_\_\_\_\_  
(Recycling Only) Y or N Y or N Y or N Y or N Y or N

### Current Materials Reduced

Total Tons \_\_\_\_\_

tires: \_\_\_\_\_ aluminum: \_\_\_\_\_ newspaper: \_\_\_\_\_ cardboard: \_\_\_\_\_ other paper: \_\_\_\_\_  
Tons Tons Tons Tons Tons

glass: \_\_\_\_\_ plastic: \_\_\_\_\_ white goods: \_\_\_\_\_ yard trimmings: \_\_\_\_\_ other: \_\_\_\_\_  
Tons Tons Tons Tons Tons

Proposed Collection Meth: curbside: \_\_\_\_\_ drop-off: Y MRF: \_\_\_\_\_ reuse prog: \_\_\_\_\_ c/centr: Y  
(Recycling Only) Y or N Y or N Y or N Y or N Y or N

### Projected Materials Targeted for Reduction

Total Tons \_\_\_\_\_

tires: 22 aluminum: 42 newspaper: 167 cardboard: \_\_\_\_\_ other paper: 34  
Tons Tons Tons Tons Tons

glass: 145 plastic: 15 white goods: 73 yard trimmings: 125 other: 57  
Tons Tons Tons Tons Tons

Proposed Reduction Markets: local: N public: N private: Y  
Y or N Y or N Y or N

Composting Projects: municipal: N home: Y  
Y or N Y or N

## Education/Public Involvement

Current Reduction Education Programs: Georgia C & B: N Other: N Staffing: \_\_\_\_\_  
Y or N Y or N Paid or Vol

Proposed Reduction Education Programs: Georgia C & B: N Other: Y Staffing: Vol  
Y or N Y or N Paid or Vol

Funding Sources: public: Y private: N Amount: \_\_\_\_\_  
Y or N Y or N Dollars Allocated

## Financing Element

Current Collection Costs: \_\_\_\_\_ Current Disposal Costs: \_\_\_\_\_ Current Total Costs: \_\_\_\_\_  
Dollars Dollars Dollars

Collection per Capita: \_\_\_\_\_ Disposal per Capita: \_\_\_\_\_ Total Costs per Capita: \_\_\_\_\_  
Dollars Dollars Dollars

Proj Collection Costs: \_\_\_\_\_ Proj Disposal Costs: 22,438 Proj Total Costs: \_\_\_\_\_  
Dollars (1996) Dollars (1996) Dollars (1996)

Current Costs: Ed: \_\_\_\_\_ Reduction: \_\_\_\_\_ Projected Costs: Ed: \_\_\_\_\_ Reduction: 28,000  
Dollars Dollars Dollars (1996) Dollars (1996)

### Current Methods of Funding

General Fund: \_\_\_\_\_ SPLOST: \_\_\_\_\_ Ent Fund/User Fees: \_\_\_\_\_  
Dollars Dollars Dollars

Per Capita Fees: \_\_\_\_\_ Govt Grants: \_\_\_\_\_  
Dollars Fed \$ / State \$

### Proposed Methods of Funding

General Fund: \_\_\_\_\_ SPLOST: \_\_\_\_\_ Ent Fund/User Fees: \_\_\_\_\_  
Dollars Dollars Dollars

Per Capita Fees: \_\_\_\_\_ Govt Grants: \_\_\_\_\_  
Dollars Fed \$ / State \$

Projected Capitol/Equipment/Structural Costs (excluding Landfills): 122,000  
Dollars

# DataBase Template

2 of 2

Base Year: 1992 Year  
Date of Plan: 9/30/22 Year/Mo/Day  
Date of Elig Letter

RDC: Southern 6r Name SW Plan Jurisdiction: Sole County Name

Local Govt Name: North Name 1990 Pop: 703 Number Est 1996 Pop: 718 Number

Base Year Waste Disposed: 578 Tons Pounds per Person per Day: 466 Pounds Recycling Credit: 0 Tons

Projected Waste Disposed: 611 Tons Proj (1996) PPD: 466 Pounds Proj Tons w/25% Reduction: 458 Tons

Residential Waste: \_\_\_\_\_ %: \_\_\_\_\_ Commercial: \_\_\_\_\_ %: \_\_\_\_\_ Industrial: \_\_\_\_\_ %: \_\_\_\_\_  
Tons Tons Tons

Methodology: Actual Tonnage Estimated or Actual Individual Government as % of Plan: 19.4 Population %

## Current Collection & Disposal Methods

Collection Provider: public: North Local Govt Name private: \_\_\_\_\_ Hauling Company

Collection Method: residential: curb Curb, Box, Conv Center, Back Door commercial: box Box, Roll-Off, Private(type unknown)

Initial Destination: Fill Transfer or Fill Life: 0 Years Final Destination: North Co Fill Site/Incinerator Name Life: 0 Years (incl V-Ex)

Type of Fills: MSW: Y Inert Waste: N C&D: N Vertical Ex: \_\_\_\_\_ Life: \_\_\_\_\_  
(Receiving Waste) Y or N Y or N Y or N Y or N Years

Date of Fill Site Closure (if different from Est Life): \_\_\_\_\_ Year/Month

Waste Shipped: Export Imported or Exported User Assessment: \_\_\_\_\_ Dollars Tipping Fees: \_\_\_\_\_ Dollars Per Ton

## Proposed Collection & Disposal Methods

Collection Provider: public: North Local Govt Name (for 1996) private: \_\_\_\_\_ Planned Hauling Company (for 1996)

Collection Method: residential: curb Curb, Box, Conv Center, Back Door (1996) commercial: box Box, Roll-Off, Private (for 1996)

Initial Destination: years 1-3: \_\_\_\_\_ Transfer or Fill years 4-6: \_\_\_\_\_ Transfer or Fill years 7-10: \_\_\_\_\_ Transfer or Fill

Final Destination: North Co (Fill Site/Incinerator Name) Life: 0 Years Projected

Application for Vertical Extension: \_\_\_\_\_ Y or N Approved: \_\_\_\_\_ Y or N Life: \_\_\_\_\_ Years

Present Sub D Fill: \_\_\_\_\_ Name of Existing Sub D Life: \_\_\_\_\_ Years Est Cost: \_\_\_\_\_ Dollars

Regionwide Sub D: Sub 6 & Sub A 2 L Name of Planned Sub D Completion: 9/30 Year/Month Life: \_\_\_\_\_ Years Est Cost: \_\_\_\_\_ Dollars

Const New Sub D: North Co Name of Planned Sub D Completion: 9/30 Year/Month Life: 0 Years Est Cost: \_\_\_\_\_ Dollars

Tipping Fees: 12.00 Dollars Per Ton Estimated Closure Costs: 5 year: \_\_\_\_\_ Dollars 30 year: \_\_\_\_\_ Dollars

# DataBase Template

## Reduction Efforts

Current Collection Meth: curbside: \_\_\_\_\_ drop-off: \_\_\_\_\_ MRF: \_\_\_\_\_ reuse prog: \_\_\_\_\_ c/centr: \_\_\_\_\_  
(Recycling Only) Y or N Y or N Y or N Y or N Y or N

### Current Materials Reduced

Total Tons \_\_\_\_\_

tires: \_\_\_\_\_ aluminum: \_\_\_\_\_ newspaper: \_\_\_\_\_ cardboard: \_\_\_\_\_ other paper: \_\_\_\_\_  
Tons Tons Tons Tons Tons

glass: \_\_\_\_\_ plastic: \_\_\_\_\_ white goods: \_\_\_\_\_ yard trimmings: \_\_\_\_\_ other: \_\_\_\_\_  
Tons Tons Tons Tons Tons

Proposed Collection Meth: curbside: \_\_\_\_\_ drop-off: Y MRF: \_\_\_\_\_ reuse prog: \_\_\_\_\_ c/centr: \_\_\_\_\_  
(Recycling Only) Y or N Y or N Y or N Y or N

### Projected Materials Targeted for Reduction

Total Tons \_\_\_\_\_

tires: 9 aluminum: 14 newspaper: 53 cardboard: \_\_\_\_\_ other paper: 18  
Tons Tons Tons Tons Tons

glass: 47 plastic: 5 white goods: 21 yard trimmings: 107 other: 17  
Tons Tons Tons Tons Tons

Proposed Reduction Markets: local: N public: N private: Y  
Y or N Y or N Y or N

Composting Projects: municipal: N home: Y  
Y or N Y or N

## Education/Public Involvement

Current Reduction Education Programs: Georgia C & B: N Other: N Staffing: \_\_\_\_\_  
Y or N Y or N Paid or Vol

Proposed Reduction Education Programs: Georgia C & B: N Other: Y Staffing: PAID  
Y or N Y or N Paid or Vol

Funding Sources: public: Y private: N Amount: \_\_\_\_\_  
Y or N Y or N Dollars Allocated

## Financing Element

Current Collection Costs: 37,810 Current Disposal Costs: 7,152 Current Total Costs: \_\_\_\_\_  
Dollars Dollars Dollars

Collection per Capita: \_\_\_\_\_ Disposal per Capita: \_\_\_\_\_ Total Costs per Capita: \_\_\_\_\_  
Dollars Dollars Dollars

Proj Collection Costs: \_\_\_\_\_ Proj Disposal Costs: 5,725 Proj Total Costs: \_\_\_\_\_  
Dollars (1996) Dollars (1996) Dollars (1996)

Current Costs: Ed: \_\_\_\_\_ Reduction: \_\_\_\_\_ Projected Costs: Ed: \_\_\_\_\_ Reduction: 15,000  
Dollars Dollars Dollars (1996) Dollars (1996)

### Current Methods of Funding

General Fund: \_\_\_\_\_ SPLOST: \_\_\_\_\_ Ent Fund/User Fees: \_\_\_\_\_  
Dollars Dollars Dollars

Per Capita Fees: \_\_\_\_\_ Govt Grants: \_\_\_\_\_  
Dollars Fed \$ / State \$

### Proposed Methods of Funding

General Fund: \_\_\_\_\_ SPLOST: \_\_\_\_\_ Ent Fund/User Fees: \_\_\_\_\_  
Dollars Dollars Dollars

Per Capita Fees: \_\_\_\_\_ Govt Grants: \_\_\_\_\_  
Dollars Fed \$ / State \$

Projected Capitol/Equipment/Structural Costs (excluding Landfills): 33,000  
Dollars

# SHORT TERM WORK PROGRAM CHECKLIST

Local Government	Baker Co./ Newton
Address	
Telephone/Fax	
Contact Person	

Date Submitted to RDC                      NA  
 Date approved by DCA                      07/21/98  
 Reviewed by:                                  Will Sheahan  
 Approved by:                                  Patty McIntosh

1. Are all participating communities represented in the program?      YES  NO
  
2. Are the 5 final years of the 10 year planning period represented in the program?      YES  NO
  
3. Work Program Required Elements:  
 The following tables lists the information needed for each element. Check the appropriate box for each item .

### ELEMENTS

ITEMS*	Amount of waste	Collection	Disposal	Waste Reduction	Land Limitation	Education and public involvement	Implementing and Financing
Time frame for decisions	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NL	<input checked="" type="checkbox"/>	NL
Administrative Arrangements	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NL	<input checked="" type="checkbox"/>	NL
Equipment Purchases	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NL	<input checked="" type="checkbox"/>	NL
Facility and Program Operation	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NL	<input checked="" type="checkbox"/>	NL
Responsibility	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NL	<input checked="" type="checkbox"/>	NL
Funding Needed	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NL	<input checked="" type="checkbox"/>	NL
Source of Funding	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NL	<input checked="" type="checkbox"/>	NL

\*select box and use F1 to check item on Mac .

After reviewing the items in each element does the work program assure appropriate solid waste collection, disposal, and waste reduction for the community over the final five years of the plan?

Collection            YES       NO   
 Disposal              YES       NO   
 Waste Reduction    YES       NO

4. Amendments

Does the short term work program show any major changes in collection, transfer and disposal of solid waste for the last five years of the plan? YES  NO

If so, a plan amendment may be required. Check the appropriate Solid Waste Management Plan for any documentation. If necessary notify the reviewing RDC

*Major amendments approved, county and city privatized collection and disposal.*

Does the work program show any major changes in waste reduction strategies for the final five years of the plan? YES  NO

If so, a plan amendment may be required. Check the appropriate Solid Waste Management Plan for any documentation. If necessary notify the reviewing RDC.

5. Public hearing notification? YES  NO

Reviewing RDC	Southwest Georgia
Address	P.O. Box 346, 30 West Broad St., Camilla, GA 31730
Telephone/Fax	912-336-5616 / 912-430-4337
Contact Person	Jeannie Brantley, Economic Development Specialist

If the short term work program meets with the requirements above, recommend approval of the program to Division Director, if not, list specific items which do not meet the specifications and recommend appropriate actions to bring the program into compliance.

Recommend approval of the Short Term Work Plan. YES  NO

If no, List items:

Education and Public Awareness element left out of the STWP

List Recommended Actions

6. Letter to RDC sent: YES  NO  Date:

Date review completed: 06/09/98 Initials WRS

# RDC SOLID WASTE MANAGEMENT PLAN REVIEW CHECKLIST COVER SHEET

Name of Government(s): Baker County Date: 2/6/93

**Type of Solid Waste Management Plan Submittal:**

- New Solid Waste Management Plan
- Solid Waste Management Plan Amendment
- Solid Waste Management Plan Update

RECEIVED  
MAR 11 1993  
GOVERNMENTAL MANAGEMENT

RDC Public Hearing Date: 2/24/93 @ 1:00 p.m.

Reconsideration Hearing Date: \_\_\_\_\_

RDC Local Plan Review Completion Date: 2/25/93

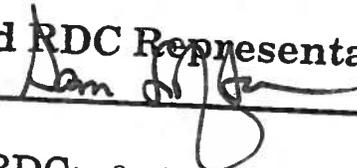
**Materials Forwarded to DCA:**

- Copy of Solid Waste Management Plan
- Copy of Solid Waste Management Plan Review Checklist
- Copy of RDC Findings and Recommendations

**RDC Recommendation:**

- Solid Waste Management Plan is in Compliance with Minimum Planning Standards and Procedures for Solid Waste Management
- Solid Waste Management Plan is not in Compliance with Minimum Planning Standards and Procedures for Solid Waste Management

Authorized RDC Representative: Sam Lofton, Executive Director

Signature:  Date: \_\_\_\_\_

Reviewing RDC: Southwest Georgia RDC

Date Review Forwarded to DCA: 3/9/93

Contact Person: Bill Richard, Senior Planner Phone: (912) 336-5616

# Solid Waste Management Plan Review Checklist

Basic Elements	Included in Plan *	Not Included in Plan
<b>Amount of Waste</b>		
• Existing Waste Amount (Weight)	p. 3	
• Waste Stream Characterization	p. 3	
• Ten-Year Projection of Waste Amount (Weight)	p. 2	
• Ten-Year Projection of Waste Composition	Attachment A	
• Indication of Methodology Used	p. 3	
<b>Collection</b>		
• Existing Collection System - Size, Number & Type - Costs (Annual Operating and Annual Capital)	p. 10 ✓ p. 15 ✓ p. 28 ✓	
• Ten-Year Forecast of Collection System - Size, Number & Type - Costs (Annual Operating and Annual Capital)	p. 10 p. 15 ✓ p. 28 ✓	
<b>Waste Reduction</b>		
• Existing Programs	p. 17	
- Facilities	p. 17	
- Goals	p. 17	
- Costs (Annual Operating and Annual Capital)	p. 17	

Not found for 10 year period - only one year given

\*Please indicate page number.

Local Government/Multi-jurisdiction: Baker Co.  
 RDC: \_\_\_\_\_ Date: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_



# Solid Waste Management Plan Review Checklist Continued (Page 3 of 3)

Basic Elements	Included in Plan *	Not Included in Plan
<b>Disposal Continued</b>		
- Costs (Annual Operating and Annual Capital)	p. 28      p. 7	
- Capacity (documentation assuring 10-year disposal capacity)	p. 4      Letter p. 28      Attached	
<b>Land Limitation</b>		
• Map Identifying Unsuitable Areas, Based on Land Use and Environmental Considerations	Attachment E	
<b>Education and Public Involvement</b>		
• Existing Programs	p. 23	
• Inclusion of Source Reduction as Program Component	p. 23	
• Costs (Annual Operating)	p. 23	
<b>Implementation and Financing Element</b>		
• Present and future financing options (10 years future)	p. 13-14	
• Assessment of Full Costs of SWM	p. 10	
• Assurance of Adequate Solid Waste Handling Capacity and Capability for Ten-Year Plan Period	p. 4 <i>not found</i> Letter p. 28      Attached ✓	

✓  
✓  
also  
marat

✓  
✓  
✓

X 1981-1991

✓  
✓

\*Please indicate page number.

Local Government/Multi-jurisdiction: Baker County  
 RDC: \_\_\_\_\_ Date: \_\_\_\_\_  
 Reviewer: \_\_\_\_\_

## **Procedural and Public Hearing Requirements**

### **Local Government Transmittal and Public Hearings:**

- Official Transmittal Letter from Submitting Local Government Received by RDC with Solid Waste Management Plan Submittal
  - Letter States That Two Required Local Public Hearings Held
- 
- Inventory and Analysis
  - Identification of Needs and Goals
  - Implementation Strategy