

**Grand Traverse County
2011-2 Solid Waste Management Plan Amendment**

As approved by the Michigan Department of Environmental Quality

April 17, 2012

The County's current Solid Waste Management Plan Update was adopted by the County and local units of government and approved by the MDEQ in 1999. At that time and in that plan, there was a focus on providing trash and recycling services to residents under one County-wide contract with all processing done at a County owned/sponsored TS/MRF.

Some of the core mechanisms for achieving goals and objectives in the County's Solid Waste Management Plan were abandoned following a failed initiative in 2002. Abandoned mechanisms from the 1999 plan addressed funding, infrastructure and County managed contracting for services.

In August of 2004, a Solid Waste Management Planning Committee (SWMPC) was appointed by the County Board of Commissioners (BOC) to study and amend the Solid Waste Plan. The amendment was approved by the BOC on October 31, 2007. However, the amendment was never submitted to the local units of government for approval.

In January of 2011, a SWMPC was appointed by the BOC to amend the Solid Waste Plan to include and authorize automatic consistency to the proposed American Waste TS/MRF and to address the abandoned 2007 amendment and provide a general review and update of the plan.

Amendment 2011-1 to include and authorize automatic consistency to the proposed American Waste TS/MRF was approved by the MDEQ on July 06, 2011.

Amendment 2011-2 to address the abandoned 2007 amendment and to provide a general review and update of the plan was approved by the SWMPC on 09-15-11 for release to a 90 day public review and comment period. The 90 day public comment period started on September 21, 2011. A public hearing was held on November 17, 2011. The 90 day public comment period ended on December 19, 2011.

On December 21, 2011, the SWMPC voted to approve Amendment 2011-2 and recommend it to the BOC for adoption. The BOC approved amendment 2011-2 on December 28, 2011.

Highlights of amendment 2011-2 are as follows:

- Eliminated County-held contracting for services to services being provided by subscription unless contracted otherwise by individual, association, local unit or authority
- Eliminated County proposed flow and price control at County TS/MRF
- Eliminated County owned/sponsored TS/MRF to either private or public ownership
- Eliminated proposed Type II Landfill to be located in Whitewater Township
- Included language prohibiting siting of landfills and incinerators
- Shifted emphasis on recycling at the drop-offs to recycling at curbside
- Broadened language that allows funding alternate to the landfill surcharge to be implemented should the BOC so choose
- Changed reporting structure of Resource Recovery Department and Resource Recovery Council from Board of Public Works to Board of Commissioners
- Eliminated reference to expired intergovernmental Agreement giving Local Units of Government home rule authority to the funding, organization, and implementation of the plan's selected alternative
- Set waste diversion rate goal at 50% by 2017
- Established new goals and objectives
- Updated and/or added disposal areas and facility descriptions
- Rewrote sections of the plan to make it concise, easy to read and understand

The following sections of the Grand Traverse County Solid Waste Plan Update dated March 31, 1999 are amended as follows:

Section I-1 Executive Summary

The attached Section I-1 labeled "Executive Summary" replaces same section in the 1999 plan update pages I-1 thru I-6:

- Updated population data with 2010 U.S Bureau of Census data
- Updated land use data
- Revised Selected System Alternative to eliminate duplication of section III-1
- Revised Authorized Management Component to eliminate duplication of section III-10
- Revised Timetable for Selected System Implementation to eliminate duplication of section III-8

Section I-2 Goals and Objectives

The attached Section I-2 labeled "Goals and Objectives" replaces same section in the 1999 plan update pages I-7 thru I-9:

- Updated goals and objectives reducing number of goals from 8 to 4

Section II-2 Solid Waste Disposal Areas

The attached Section II-2 labeled "Solid Waste Disposal Areas" replaces same section in the 1999 plan update page II-5 and the 2011-1 amendment:

- Removed Ken's Type III Landfill (WMI aka USA/United)
- Removed Cedar Ridge Landfill (WMI)
- Removed East Bay Township Transfer Station
- Added Wexford County Landfill (Wexford County)
- Added City Environmental Services of Waters (WMI)
- Added American Waste Transfer Station/Processing/MRF (Hughes Drive, Traverse City MI)
- Added American Waste Sanitary Waste and Recycling TS (Sundowner, Traverse City MI)
- Added Northern A-1 Waste TS (Kalkaska MI)
- Added Ken's TS (WMI)
- Added Waste Management MRF (Cass Road, Traverse City MI)
- Added Waste Management Recycle America Facility (Saginaw MI)
- Added Bay Area Recycling for Charities MRF (Maple City MI)
- Added GT Profile MRF (Traverse City MI)

Section II-3 Solid Waste Disposal Areas

The attached Section II-3 labeled "Solid Waste Facility Descriptions" replaces same section in the 1999 plan update pages II-6 thru II-12 and the 2011-1 amendment:

- Updated all existing solid waste facility descriptions
- New solid waste facility descriptions for additional disposal areas identified in section II-2

Section II-4 Solid Waste Collection Services and Transportation Infrastructure

The attached Section II-4 labeled "Solid Waste Collection Services and Transportation Infrastructure" replaces same section in the 1999 plan update pages II-13 thru II-14

- Updated to reflect current haulers operating in Grand Traverse County

- Removed reference to designated curbside recycling district
- Removed reference to Waste Management providing more than 98% of the service
- Replaced County owned and operated tub grinder with contract grinding

Section II-5 Evaluation of Deficiencies and Problems

The attached Section II-5 labeled “Evaluation of Deficiencies and Problems” replaces same section in the 1999 plan update page II-15:

- Removed reference to lack of competition, recycling services and recycling capacity
- Added new deficiencies and problems; low waste stream diversion rate, an unstable funding source and enforcement of illegal dump sites

Section III-1 Selected Solid Waste Management System

The attached Section III-1 labeled “Selected Solid Waste Management System” replaces same section in the 1999 plan update pages III-1 thru III-3:

- Included strong emphasis on data collection and education
- Removed reference to permanent hazardous waste collection site
- Replaced SQG with CESQG
- Removed reference to “flagship” drop-off recycling sites. Drop-off recycling sites to be provided by private sector or Local Units of Government
- Replaced two stream commingled recycling with single stream recycling
- Replaced reference to residential yard waste composting with composting of organics
- Removed reference to business recycling service district
- Removed reference to tip fee for commercial recyclables at MRF
- Removed reference to County contracting for long term landfill disposal
- Removed reference to County owned MRF/TS along with price and flow control

Section III-4 Solid Waste Disposal Areas

The attached Section III-1 labeled “Solid Waste Disposal Areas” replaces same section in the 1999 plan update pages III-11 thru III-18 and the 2011-1 amendment:

- Added and deleted solid waste disposal areas
- Removed facilities descriptions to eliminate duplication of section II-2

Section III-5 Solid Waste Collection Services and Transportation

The attached Section III-1 labeled Solid Waste Collection Services and Transportation replaces same section in the 1999 plan update pages III-19 thru III-20:

- Removed reference to permanent hazardous waste collection site removed
- Replaced SQG to CESQG
- Removed reference to County owned MRF/TS along with price and flow control

Section III-8 Timetable for Selected System Implementation

The attached Section III-8 labeled “Timetable for Selected System Implementation” replaces same section in the 1999 plan update page III-35:

- Replaced Office of Solid Waste with Resource Recovery Department
- Replaced Solid Waste Council with Resource Recovery Council
- Deleted component 7, 9, 12, and 14
- Changed component 8 to read “Implementation of Funding Structure and Mechanisms

Section III-9 Siting Review Procedures

The attached Section III-9 labeled “Siting Review Procedures” replaces all text under Siting Review Procedures and Authorized Disposal Area Types in the 1999 plan update pages III-36 thru III-37 and the 2011-1 amendment:

- Eliminated proposed Type II Landfill to be located in Whitewater Township
- Included description of facilities that can be sited in the plan i.e. Type A Transfer Station/Processing/Material Recycling Facilities, Type B Transfer Stations, Material Recycling Facilities and Composting Facilities
- Included description of facilities that can not be sited in the plan i.e. landfills and incinerators
- Removed County required ownership/sponsorship of TS/MRF

Section III-10 Solid Waste Management Components

The attached Section III-10 labeled “Solid Waste Management Components” replaces same section in the 1999 plan update pages III-52 thru III-58:

- Replaced Office of Solid Waste with Resource Recovery Department
- Replaced Solid Waste Council with Resource Recovery Council
- Replaced Board of Public Works with Board of Commissioners
- Removed Intergovernmental Agreement
- Removed dispute resolution between County and United Waste Systems
- Removed construction of MRF/TS
- Removed County negotiated multi-year contracts for landfill and recycling tipping fees
- Removed price and flow control
- Replaced needs of the current management system with low waste stream diversion rate, an unstable funding source and enforcement of illegal dump sites
- Removed Intergovernmental Agreement between Local Units of Government and BPW and added home rule authority for LUG in managing solid waste in their jurisdiction

Section III-11 Identification of Responsible Parties

The attached Section III-11 labeled “Identification of Responsible Parties” replaces same section in the 1999 plan update pages III-59 thru III-60:

- Replaced Office of Solid Waste with Resource Recovery Department
- Replaced Solid Waste Council with Resource Recovery Council
- Replaced Board of Public Works with Board of Commissioners
- Removed reference to Intergovernmental Agreement
- Added home rule authority for LUG in managing solid waste in their jurisdiction

Section III-13 Capacity Certifications

The attached Section III-13 labeled Capacity Certifications replaces same section in the 1999 plan update page III-63:

- Removed Cedar Ridge Landfill
- Removed Ken's Landfill
- Update landfill life based on 2010 MDEQ Solid Waste Report

Language in sections of the 2011-2 Plan Amendment supersedes any conflicting text in the following sections of the current 1999 Solid Waste Management Plan Update:

- II-1 Database
- II-6 Demographics
- II-7 Land Development
- II-8 Solid Waste Management Alternatives
- III-2 Import Authorization
- III-3 Export Authorization
- III-6 Resource Conservation Efforts
- III-7 Waste Reduction, Recycling and Composting
- III-12 Local Ordinances and Regulations

I-1 EXECUTIVE SUMMARY

The following summarizes the solid waste management system selected to manage solid waste within the County. In case of conflicting information, the information provided in the main body of the Plan update will take precedence over the executive summary.

OVERVIEW OF THE COUNTY

Grand Traverse County is approximately 485 square miles in size and consists of 13 townships, which are Peninsula, Acme, Whitewater, East Bay Charter, Garfield Charter, Long Lake, Green Lake, Blair, Union, Fife Lake, Paradise, Mayfield, and Grant. The City of Traverse City is the only city and is the most urbanized area in the County. The Villages of Fife Lake and Kingsley are located in the southeast area of the County. The County features a wealth of natural resources, including lakes, forests, agricultural land and urban areas.

Population by municipality is characterized in the chart below. In addition to the projected growth of year-round residents, the population of the county increases seasonally. By the height of the tourist season, (late summer), it has been estimated that the county experiences a 39% increase in population.

Municipality Name	Population 2010	Seasonal Gain	Peak Population
Acme Twp	4,375	1,706	6,081
Blair Twp	8,209	3,202	11,411
East Bay Twp	10,663	4,159	14,822
Fife Lake Village	443	173	616
Balance of Fife Lake Twp	2,348	916	3,264
Garfield Twp	16,256	6,340	22,596
Grant Twp	1,066	416	1,482
Green Lake Twp	5,784	2,256	8,040
Long Lake Twp	8,662	3,378	12,040
Mayfield Twp	1,550	605	2,155
Kingsley Village	1,480	577	2,057
Balance of Paradise Twp	3,233	1,261	4,494
Peninsula Twp	5,433	2,119	7,552
Traverse City (pt)	14,482	5,648	20,130
Union Twp	405	158	563
Whitewater Twp	2,597	1,013	3,610
Total Population GTC	86,986	33,925	120,911

Source 2010 U.S. Bureau of Census data, USA Counties – Grand Traverse

The recently released data for the 2010 Census indicate a continued trend in population growth within Grand Traverse County. In the ten-year period between 2000 and 2010, the County grew from 77,654 residents to 86,986 residents representing a 12% increase.

As population grows, land not in use for agricultural services will be utilized to support the increasing population. The total land area of Grand Traverse County is about 310,453 acres.

Land usage in the County have been consolidated into nine categories and characterized in the chart below.

Land Use Type	Acreage	% County Land
Residential	22,769	7.33%
Commercial	1,602	0.52%
Industrial	2,739	0.88%
Institutional	974	0.31%
Recreation and Cemeteries	1,921	0.62%
Transportation & Utilities	1,407	0.45%
Agricultural	65,729	21.17%
Water/Wetlands	22,228	7.16%
Open/Wooded	191,084	61.55%
Total GTC	310,453	100.00%

Source: Grand Traverse County Master Plan

THE SOLID WASTE PLANNING PROCESS

The Designated Planning Agency (DPA) and the Solid Waste Planning Committee (SWPC) completed a strategic planning process that outlined strengths, weaknesses, opportunities, and threats that are part of the current and future solid waste management system in the County. The analysis was used to create goals and objectives that in turn formulated the solid waste management strategy and the selected alternative described in the Plan as the Plan's Enforceable Program and Process.

In developing the Plan's Selected Alternative, the SWPC developed a set of solid waste management program components in the following eight areas:

- Clean Community
- Drop-Off Residential Recycling
- Composting of Organics
- Material Transfer and Processing
- Recycling Incentives
- Curbside Residential Recycling
- Commercial and Institutional Recycling
- Disposal

These eight components are the key elements of the solid waste management system. The SWPC also considered some alternative approaches to handling the County's solid waste stream; however these alternatives were subsequently discarded based on their technical and economic feasibility. Grand Traverse County's Plan is designed to:

- build on the strengths of the local and regional situation,
- address current deficiencies and weakness,
- work with organizational approaches that the County is willing to consider,
- be fundable through systems that the County can implement,
- respond to and build community involvement and support,
- be enforceable, and
- set measurable goals that can be tracked to determine progress

Appendix B of this Plan details the System Alternatives that were not selected as part of the Plan's Enforceable Program. The Plan's Selected Alternative is described briefly below and more fully in the balance of the Plan and the Appendices.

THE PLAN'S SELECTED ALTERNATIVE

The Plan's Selected Alternative as described below and detailed further in the Plan and Appendices is an integrated strategy that places waste prevention, reduction, recycling, and composting at the top of the solid waste management hierarchy.

GRAND TRAVERSE COUNTY SYSTEM SELECTED ALTERNATIVE CLEAN COMMUNITY "RECYCLESMART" - EXPANDED CURBSIDE RECYCLING

The selected system will provide comprehensive solid waste collection services to all households and businesses. Collection of solid waste will continue to be through private agreements with residents or through municipal contracts. Private hauling companies will continue to provide residential, commercial, and industrial service pick-up in Grand Traverse County.

Recycling and composting will be an integral component of this system, improving and expanding upon present recycling and composting programs. Curbside collection of solid waste, yard waste and recyclable materials will be available County wide. Drop-off recycling stations may be provided and funded by municipalities and private companies.

Comprehensive clean community programs will be made available to collect household hazardous waste, cleanup illegal dump sites and find reuse markets for unwanted products.

Transfer Stations, Material Recycling Facilities, and combination Transfer Stations/Material Recycling Facilities will be made available to process solid waste. Grand Traverse County will continue exporting solid waste out of the County to satisfy disposal needs.

Education will be a key component of the overall program emphasizing reduce, reuse, recycle, and buy recycled products.

After conducting an analysis of options, this system was determined to be the most feasible. It builds upon the existing recovery programs and infrastructure throughout the County, allows for growth and improvement, and clearly aligns with the Goals and Objectives of the Plan.

AUTHORIZED MANAGEMENT COMPONENT

The Selected Alternative is established by this Plan as the Plan's Enforceable Program defining the Grand Traverse County Solid Waste Management System, and will be implemented jointly by units of government within the County in cooperation with other public agencies and private firms. The Plan's Enforceable Program includes a Management Component that defines details of who will take responsibility for implementation and how that will be accomplished. The Authorized Management Component is described in Section III-10.

TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

The Plan's Enforceable Program includes an implementation timeline for the Plan's Management Component and Selected Alternative. The table in Section III-8 summarizes key milestones for implementing the Plan's Enforceable Program.

I-2 INTRODUCTION

GOALS AND OBJECTIVES

To comply with Part 115 and its requirements, each Plan must be directed toward goals and objectives based on the purposes stated in Part 115, Sections 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plan:

- (1) To utilize to the maximum extent possible the resources available in Michigan's solid waste stream through source reduction, source separation, and other means of resource recovery; and
- (2) to prevent adverse effects on the public health and the environment resulting from improper solid waste collection, transportation, processing, or disposal, so as to protect the quality of the air, the land, and ground and surface waters.

The solid waste management plan works toward the following goals through actions designed to meet the objectives described under the respective goals which they support:

Grand Traverse County Solid Waste Goals and Objectives

Goal One:

Create, implement, manage and monitor an aggressive program to increase MSW diversion rate from current levels to a County average of 50% by weight by the year 2017.

Objectives:

1. Promote pay-as-you-throw pricing systems.
2. Promote bans on landfill disposal of selected recyclable materials.
3. Consider mandatory recycling ordinances to motivate residents to reduce waste.
4. Promote and encourage County wide curbside collection of recyclable materials.
5. Develop and/or support programs aimed at reducing waste generation, such as source reduction, pollution prevention, and ISO 14000.
6. Promote backyard grass cycling and home and agricultural composting initiatives.
7. Investigate and encourage the composting of other organics.
8. Continue to pursue recycling and disposal alternatives for problematic materials such as Styrofoam, agriculture plastic, shrink wrap, expired medicines and sharps.
9. Work with government agencies and businesses to develop additional markets for recycled materials and organics.
10. Establish realistic and measurable goals for annual evaluation and investigate and implement measurement systems as needed.

Goal Two:

Ensure the safe and efficient management of municipal solid waste to protect the public's health and the quality of the natural resources: air, land, ground and surface waters.

Objectives:

1. Provide disposal capacity to meet the County's needs by utilizing regional landfills located outside the County.
2. Coordinate and staff three household hazardous waste collection events per year (spring, summer and fall).

3. Enforce County litter ordinance that provides for fines and/or other penalties for illegal dumping.
4. Promote a convenient product return infrastructure where consumers can return unwanted products to providers/businesses.

Goal Three:

Maintain an integrated solid waste management system in which all components work together to provide for the effective and efficient collection, separation, recycling and disposal of solid waste.

Objectives:

1. Maintain an administrative and planning structure for solid waste management.
2. Provide funding to finance the administrative and operational costs associated with the solid waste management system.
3. Maintain an office where the public can direct questions and obtain educational materials on solid waste management.
4. Promote best management practices for solid waste management as derived from existing programs in the County and other municipalities.
5. Promote a network of Transfer Stations, Material Recycling Facilities and Landfills to support the solid waste management system.
6. Maintain private and municipal programs to assist with the recovery and processing of yard waste and other compostable materials.
7. Promote use of County wide Curbside collection of solid waste, yard waste and recyclable materials.

Goal Four:

Provide public education and awareness programs for county residents, businesses and industries that promote hazardous waste management, recycling, reuse and waste reduction.

Objectives:

1. Expand the public awareness program efforts of the Resource Recovery Program through the production of a waste reduction guide, newspaper, flyers and other media outlets.
2. Expand the use of the Internet to gather and distribute information to residents through links to the RecycleSmart Home Page.
3. Maintain a recycling hotline to inform the public about County Resource Recovery programs.
4. Continue existing and develop new educational programs targeting school aged children, to teach them the benefits and techniques of waste reduction, recycling and resource conservation.
5. Develop programs to provide services such as waste audits, full cost accounting analysis of existing programs and pollution prevention training to municipal officials, institutions and businesses.

II-2 SOLID WASTE DISPOSAL AREAS

The following is an inventory and description of solid waste disposal areas which will be utilized by the County to meet its disposal needs for the planning period. Descriptions of these facilities are included in Section II-3.

Solid waste disposal areas identified outside the County for potential use are included in the export authorization tables in Section III-3. Additional facilities within the County with applicable permits and licenses may be utilized as they are sited by this plan, or amended into this plan, and become available for disposal.

Type II Landfill:

Glens Sanitary Landfill (WMI)
Manistee County Landfill (Republic)
Wexford County Landfill (American Waste)
City Environmental Services of Waters (WMI)

Type III Landfill:

None

Type A Transfer Station:

American Waste Transfer Station/Processing/MRF (Hughes Drive, Traverse City MI)
American Waste Sanitary Waste and Recycling TS (Sundowner, Traverse City MI)
Northern A-1 Waste TS (Kalkaska MI)

Type B Transfer Station:

Peninsula Township TS
Ken's Landfill TS (WMI)

Processing Facility:

American Waste Transfer Station/Processing/MRF (Hughes Drive, Traverse City MI)
American Waste Sanitary Waste and Recycling TS (Sundowner, Traverse City MI)
Northern A-1 Waste TS (Kalkaska MI)

Material Recycling Facility (source separated Materials Recovery Facilities not regulated under Part 115)

Waste Management MRF (Cass Road, Traverse City MI)
Waste Management Recycle America MRF (Saginaw MI)
Bay Area Recycling for Charities MRF (Maple City MI)
GT Profile MRF (Traverse City MI)

Incinerator:

None

Waste-to-Energy Incinerator:

None

Waste Pile:

None

Other:

None

Note: To receive waste from within Grand Traverse County any facility listed above is required to have a current designated facility agreement with the County as specified by Ordinance 17 and Rules and Regulations.

II-3 Solid Waste Facility Descriptions

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Glens Sanitary Landfill Inc.

County: Leelanau

Location: 518 M 72 W, MAPLE CITY, MI 49664

Town: T28N Range 13W Section(s) 35 N 1/2

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: n/a

Public or Private: Private

Owner: Waste Management Inc.

Operating Status (check)

<input checked="" type="checkbox"/>	open
<input type="checkbox"/>	closed
<input checked="" type="checkbox"/>	licensed
<input type="checkbox"/>	unlicensed
<input checked="" type="checkbox"/>	construction permit
<input type="checkbox"/>	open, but closure pending

Waste Types Received (check all that apply)

<input checked="" type="checkbox"/>	residential
<input checked="" type="checkbox"/>	commercial
<input checked="" type="checkbox"/>	industrial
<input checked="" type="checkbox"/>	construction & demolition
<input checked="" type="checkbox"/>	contaminated soils
<input checked="" type="checkbox"/>	special wastes *
<input type="checkbox"/>	other:

* Explanation of special wastes, including a specific list and/or conditions: All special wastes (including c-soils) must be approved through WM profile process prior to disposal.

Site Size:

Total area of facility property:	401.5	acres
Total area sited for use:	401.5	acres
Total area permitted:	133	acres
Operating:	41.5	acres
Not excavated	91.5	acres

Current capacity:	18,300,000	bank cubic yards
Estimated lifetime:	150	years
Estimated days open per year	260	days
Estimated yearly disposal volume:	230,000	gate cubic yards

(if applicable)

Annual energy production:

Landfill gas recovery projects:	n/a	megawatts
Waste-to-energy incinerators:	n/a	megawatts

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Manistee County Landfill

County: Manistee

Location: 3890 CAMP RD, MANISTEE, MI 49660
Town: T21N Range R16W Section(s) 32

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: n/a

Public or Private: Private

Owner: Harland's Sanitary Landfill, Inc. (Republic)

Operating Status (check)

<input checked="" type="checkbox"/>	open
<input type="checkbox"/>	closed
<input checked="" type="checkbox"/>	licensed
<input type="checkbox"/>	unlicensed
<input checked="" type="checkbox"/>	construction permit
<input type="checkbox"/>	open, but closure pending

Waste Types Received (check all that apply)

<input checked="" type="checkbox"/>	residential
<input type="checkbox"/>	commercial
<input type="checkbox"/>	industrial
<input type="checkbox"/>	construction & demolition
<input type="checkbox"/>	contaminated soils
<input type="checkbox"/>	special wastes *
<input type="checkbox"/>	other:

* Explanation of special wastes, including a specific list and/or conditions: asbestos, flyash

Site Size:

Total area of facility property: 376 acres

Total area sited for use: 120 acres

Total area permitted: 98 acres

Operating: 36 acres

Not excavated: 62 acres

Current capacity: 11,000,000 bank cubic yards

Estimated lifetime: 33 years

Estimated days open per year: 265 days

Estimated yearly disposal volume: 440,000 gate cubic yards

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: Wexford County Landfill

County: Wexford

Location: 990 N US HIGHWAY 131, MANTON, MI 49663
Town: T23N Range 9W Section(s) 33, 34

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: n/a

Public or Private: Private

Owner: American Waste

Operating Status (check)

<input checked="" type="checkbox"/>	open
<input type="checkbox"/>	closed
<input checked="" type="checkbox"/>	licensed
<input type="checkbox"/>	unlicensed
<input checked="" type="checkbox"/>	construction permit
<input type="checkbox"/>	open, but closure pending

Waste Types Received (check all that apply)

<input checked="" type="checkbox"/>	residential
<input type="checkbox"/>	commercial
<input type="checkbox"/>	industrial
<input type="checkbox"/>	construction & demolition
<input type="checkbox"/>	contaminated soils
<input type="checkbox"/>	special wastes *
<input type="checkbox"/>	other:

* Explanation of special wastes, including a specific list and/or conditions:

Site Size:

Total area of facility property: 178.4 acres

Total area sited for use: 178.4 acres

Total area permitted: 38.1 acres

Operating: 23.3 acres

Not excavated: 14.8 acres

Current capacity: 5,000,000 bank cubic yards

Estimated lifetime: 40 years

Estimated days open per year: 260 days

Estimated yearly disposal volume: 125,000 gate cubic yards

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

FACILITY DESCRIPTIONS

Facility Type: Type II Landfill

Facility Name: City Environmental Services, Inc. of Waters

County: Crawford

Location: 11375 SHERMAN RD, FREDERIC, MI 49733
Town: T28N Range 3W Section(s) 4 W 1/2

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: n/a

Public or Private: Private

Owner: Waste Management Inc.

Operating Status (check)

open
 closed
 licensed
 unlicensed
 construction permit
 open, but closure pending

Waste Types Received (check all that apply)

residential
 commercial
 industrial
 construction & demolition
 contaminated soils
 special wastes *
 other:

* Explanation of special wastes, including a specific list and/or conditions: All special wastes (including c-soils) must be approved through WM profile process prior to disposal.

Site Size:

Total area of facility property: 271.5 acres

Total area sited for use: 271.5 acres

Total area permitted: 100 acres

Operating: 44.5 acres

Not excavated: 55.5 acres

Current capacity: 16,000.00 bank cubic yards

Estimated lifetime: 75 years

Estimated days open per year: 260 days

Estimated yearly disposal volume: 425,000 gate cubic yards

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: American Waste Transfer Station/Processing/MRF

County: Grand Traverse

Location: 280 Hughes Drive, Traverse City, Michigan 49686
Town T27N Range 11W Section(s) 25 part

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Wexford Landfill or other approved facility identified in Section III

Public or Private: Private

Owner: American Waste

Operating Status (check)

open
 closed
 licensed
 unlicensed
 construction permit
 open, but closure pending

Waste Types Received (check all that apply)

residential
 commercial
 industrial
 construction & demolition
 contaminated soils
 special wastes *
 other:

* Explanation of special wastes, including a specific list and/or conditions:

Site Size:

Total area of facility property: 15.8 acres

Total area sited for use: 15.8 acres

Total area permitted: acres

Operating: acres

Not excavated acres

Current capacity: tons

Estimated lifetime: years

Estimated days open per year 310 days

Estimated yearly disposal volume: 170,000+ tons

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: American Waste Sanitary Waste and Recycling Transfer Station

County: Grand Traverse

Location: 3850 Sundowner Dr., Traverse City, MI 49684
Town: T27N Range 11W Section(s) 33

Map identifying location included in Attachment Section: x Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Wexford Landfill or other approved facility identified in Section III

Public or Private: Private

Owner: American Waste

Operating Status (check)

 x open
 closed
 x licensed
 unlicensed
 x construction permit
 open, but closure pending

Waste Types Received (check all that apply)

 x residential
 x commercial
 x industrial
 construction & demolition
 contaminated soils
 special wastes *
 other:

* Explanation of special wastes, including a specific list and/or conditions:

Site Size:

Total area of facility property:	<u> </u> 10,000	sqft
Total area sited for use:	<u> </u> 10,000	sqft
Total area permitted:	<u> </u>	acres
Operating:	<u> </u>	acres
Not excavated	<u> </u>	acres

Current capacity:	<u> </u>	tons
Estimated lifetime:	<u> </u>	years
Estimated days open per year	<u> </u> 312	days
Estimated yearly disposal volume:	<u> </u> 50,000	tons

(if applicable)

Annual energy production:		
Landfill gas recovery projects:	<u> </u> n/a	megawatts
Waste-to-energy incinerators:	<u> </u> n/a	megawatts

FACILITY DESCRIPTIONS

Facility Type: Type A Transfer Station

Facility Name: Northern A-1 Waste Transfer Station

County: Kalkaska

Location: 3947 US Highway 131 N, Kalkaska, MI 49646

Town: Range Section(s)

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Wexford Landfill or other approved facility identified in Section III

Public or Private: Private

Owner: American Waste

Operating Status (check)

open
 closed
 licensed
 unlicensed
 construction permit
 open, but closure pending

Waste Types Received (check all that apply)

residential
 commercial
 industrial
 construction & demolition
 contaminated soils
 special wastes *
 other:

* Explanation of special wastes, including a specific list and/or conditions:

Site Size:

Total area of facility property: 10 acres

Total area sited for use: 10 acres

Total area permitted: acres

Operating: acres

Not excavated acres

Current capacity: tons

Estimated lifetime: years

Estimated days open per year 312 days

Estimated yearly disposal volume: 100,000 tons

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station

Facility Name: Peninsula Township Transfer Station

County: Grand Traverse

Location: Devil's Dive Road, Traverse City, MI 49686

Town: T29N Range 10W Section(s) NE1/4 28

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Wexford Landfill or other approved facility identified in Section III

Public or Private: Public

Owner: Peninsula Township

Operating Status (check)

open
 closed
 licensed
 unlicensed
 construction permit
 open, but closure pending

Waste Types Received (check all that apply)

residential
 commercial
 industrial
 construction & demolition
 contaminated soils
 special wastes *
 other:

* Explanation of special wastes, including a specific list and/or conditions:

Site Size:

Total area of facility property: 2.1 acres

Total area sited for use: _____ acres

Total area permitted: _____ acres

Operating: _____ acres

Not excavated: _____ acres

Current capacity: _____ tons

Estimated lifetime: _____ years

Estimated days open per year: 104 days

Estimated yearly disposal volume: _____ compacted cubic yards

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

FACILITY DESCRIPTIONS

Facility Type: Type B Transfer Station

Facility Name: Ken's Landfill Transfer Station

County: Grand Traverse

Location: 5111 Cedar Run Road Traverse City, MI 49684

Town: T27N Range 11W Section(s) NE 1/4 of 7

Map identifying location included in Attachment Section: Yes No

If facility is an Incinerator or a Transfer Station, list the final disposal site and location for Incinerator ash or Transfer Station wastes: Glens Landfill or other approved facility identified in Section III

Public or Private: Private

Owner: Waste Management Inc.

Operating Status (check)

open
 closed
 licensed
 unlicensed
 construction permit
 open, but closure pending

Waste Types Received (check all that apply)

residential
 commercial
 industrial
 construction & demolition
 contaminated soils
 special wastes *
 other:

* Explanation of special wastes, including a specific list and/or conditions:

Site Size:

Total area of facility property: 16.8 acres

Total area sited for use: 5 acres

Total area permitted: n/a acres

Operating: n/a acres

Not excavated: n/a acres

Current capacity: Facility tons

Estimated lifetime: n/a years

Estimated days open per year: Currently days

Estimated yearly disposal volume: Operating compacted cubic yards

(if applicable)

Annual energy production:

Landfill gas recovery projects: n/a megawatts

Waste-to-energy incinerators: n/a megawatts

FACILITY DESCRIPTIONS

Facility Type: Materials Processing Facility

Facility Name: American Waste Transfer Station/Processing/MRF

County: Grand Traverse

Location: 280 Hughes Drive, Traverse City, Michigan 49686
Town T27N Range 11W Section(s) 25 part

Map identifying location included in Attachment Section: Yes No

Classification: Regulated under act 451

Public or Private: Private

Owner: American Waste

Materials Processed

<input checked="" type="checkbox"/>	glass	<input checked="" type="checkbox"/>	aluminum cans
<input checked="" type="checkbox"/>	paper	<input checked="" type="checkbox"/>	steel cans
<input checked="" type="checkbox"/>	corrugated cardboard	<input checked="" type="checkbox"/>	aseptic packaging
<input checked="" type="checkbox"/>	plastic 1,2,3,4,5,6,7	<input checked="" type="checkbox"/>	batteries
<input checked="" type="checkbox"/>	plastic film	<input checked="" type="checkbox"/>	textiles
<input checked="" type="checkbox"/>	polystyrene	<input checked="" type="checkbox"/>	construction & demolition
<input checked="" type="checkbox"/>	plastic bags	<input checked="" type="checkbox"/>	white goods
<input checked="" type="checkbox"/>	scrap metal	<input checked="" type="checkbox"/>	other:

Site Size:

Total size of facility:	<u>150,000</u>	square feet
Current processing capacity:	<u> </u>	tons per day
Total processing capacity:	<u> </u>	tons per day
Estimated day open per year:	<u>312</u>	days
Estimated yearly processing volume:	<u>20,000</u>	tons

FACILITY DESCRIPTIONS

Facility Type: Material Processing Facility

Facility Name: American Waste Sanitary Waste and Recycling Transfer Station

County: Grand Traverse

Location: 3850 Sundowner Dr., Traverse City, MI 49684
Town: T27N Range 11W Section(s) 33

Map identifying location included in Attachment Section: Yes No

Classification: Regulated under act 451

Public or Private: Private

Owner: American Waste

Materials Processed

<input type="checkbox"/>	glass	<input type="checkbox"/>	aluminum cans
<input type="checkbox"/>	paper	<input type="checkbox"/>	steel cans
<input checked="" type="checkbox"/>	corrugated cardboard	<input type="checkbox"/>	aseptic packaging
<input type="checkbox"/>	plastic 1,2,3,4,5,6,7	<input type="checkbox"/>	batteries
<input type="checkbox"/>	plastic film	<input type="checkbox"/>	textiles
<input type="checkbox"/>	polystyrene	<input checked="" type="checkbox"/>	construction & demolition
<input type="checkbox"/>	plastic bags	<input type="checkbox"/>	white goods
<input checked="" type="checkbox"/>	scrap metal	<input type="checkbox"/>	other:

Site Size:

Total size of facility:	<u>10,000</u>	square feet
Current processing capacity:	<u> </u>	tons per day
Total processing capacity:	<u> </u>	tons per day
Estimated day open per year:	<u>312</u>	days
Estimated yearly processing volume:	<u>1,000</u>	tons

FACILITY DESCRIPTIONS

Facility Type: Materials Processing Facility

Facility Name: Northern A-1 Waste Transfer Station

County: Kalkaska

Location: 3941 US 131 N, Kalkaska, MI 49646

Town: Range Section(s)

Map identifying location included in Attachment Section:

Yes No

Classification: Regulated under act 451

Public or Private: Private

Owner: American Waste

Materials Processed

<input type="checkbox"/>	glass	<input type="checkbox"/>	aluminum cans
<input type="checkbox"/>	paper	<input type="checkbox"/>	steel cans
<input checked="" type="checkbox"/>	corrugated cardboard	<input type="checkbox"/>	aseptic packaging
<input type="checkbox"/>	plastic 1,2,3,4,5,6,7	<input type="checkbox"/>	batteries
<input type="checkbox"/>	plastic film	<input type="checkbox"/>	textiles
<input type="checkbox"/>	polystyrene	<input checked="" type="checkbox"/>	construction & demolition
<input type="checkbox"/>	plastic bags	<input type="checkbox"/>	white goods
<input checked="" type="checkbox"/>	scrap metal	<input type="checkbox"/>	other:

Site Size:

Total size of facility:	<input type="text"/> TBD	square feet
Current processing capacity:	<input type="text"/>	tons per day
Total processing capacity:	<input type="text"/>	tons per day
Estimated day open per year:	<input type="text"/> 312	days
Estimated yearly processing volume:	<input type="text"/> TBD	tons

FACILITY DESCRIPTIONS

Facility Type: Material Recycling Facility

Facility Name: WMI Material Recycling Facility

County: Grand Traverse

Location: 2294 Cass Road, Traverse City, Michigan 49684
Town: 27N Range 10W Section(s)

Map identifying location included in Attachment Section: Yes No

Classification: Not regulated under act 451

Public or Private: Private

Owner: Waste Management Inc.

Materials Processed:

<input checked="" type="checkbox"/>	glass	<input checked="" type="checkbox"/>	aluminum cans
<input checked="" type="checkbox"/>	paper	<input checked="" type="checkbox"/>	steel cans
<input checked="" type="checkbox"/>	corrugated cardboard	<input checked="" type="checkbox"/>	aseptic packaging
<input checked="" type="checkbox"/>	plastic 1,2,3,4,5,6,7	<input checked="" type="checkbox"/>	batteries
<input checked="" type="checkbox"/>	plastic film	<input checked="" type="checkbox"/>	textiles
<input checked="" type="checkbox"/>	polystyrene	<input checked="" type="checkbox"/>	construction & demolition
<input checked="" type="checkbox"/>	plastic bags	<input checked="" type="checkbox"/>	white goods
<input checked="" type="checkbox"/>	scrap metal	<input checked="" type="checkbox"/>	other:

Site Size:

Total size of facility:	<u>22,000</u>	square feet
Current processing capacity:	<u>30</u>	tons per day
Total processing capacity:	<u>60-75</u>	tons per day
Estimated day open per year:	<u>260</u>	days
Estimated yearly processing volume:	<u>400</u>	tons

FACILITY DESCRIPTIONS

Facility Type: Materials Recycling Facility

Facility Name: Waste Management Recycle America Facility

County: Saginaw

Location: 1953 Findley, Saginaw, MI 48601

Town: Range Section(s)

Map identifying location included in Attachment Section:

Yes No

Classification: Not regulated under act 451

Public or Private: Private

Owner: Waste Management Inc.

Materials Processed

<input checked="" type="checkbox"/>	glass	<input checked="" type="checkbox"/>	aluminum cans
<input checked="" type="checkbox"/>	paper	<input checked="" type="checkbox"/>	steel cans
<input checked="" type="checkbox"/>	corrugated cardboard	<input checked="" type="checkbox"/>	aseptic packaging
<input checked="" type="checkbox"/>	plastic 1,2,3,4,5,6,7	<input type="checkbox"/>	batteries
<input checked="" type="checkbox"/>	plastic film	<input type="checkbox"/>	textiles
<input checked="" type="checkbox"/>	polystyrene	<input type="checkbox"/>	construction & demolition
<input checked="" type="checkbox"/>	plastic bags	<input type="checkbox"/>	white goods
<input checked="" type="checkbox"/>	scrap metal	<input type="checkbox"/>	other:

Site Size:

Total size of facility:	<u>95,000</u>	square feet
Current processing capacity:	<u>100</u>	tons per day
Total processing capacity:	<u>200</u>	tons per day
Estimated day open per year:	<u>254</u>	days
Estimated yearly processing volume:	<u>20,100</u>	tons

FACILITY DESCRIPTIONS

Facility Type: Materials Recycling Facility

Facility Name: Bay Area Recycling for Charities Material Recycling Facility

County: Leelanau

Location: 177 E. Kasson Rd., Maple City, MI 49664

Town: Range Section(s)

Map identifying location included in Attachment Section: Yes No

Classification: Not regulated under act 451

Public or Private: Private

Owner: Bay Area Recycling for Charities

Materials Processed

<input checked="" type="checkbox"/>	glass	<input checked="" type="checkbox"/>	aluminum cans
<input checked="" type="checkbox"/>	paper	<input checked="" type="checkbox"/>	steel cans
<input checked="" type="checkbox"/>	corrugated cardboard	<input checked="" type="checkbox"/>	aseptic packaging
<input checked="" type="checkbox"/>	plastic 1,2,3,4,5,6,7	<input checked="" type="checkbox"/>	batteries
<input checked="" type="checkbox"/>	plastic film	<input checked="" type="checkbox"/>	textiles
<input checked="" type="checkbox"/>	polystyrene	<input checked="" type="checkbox"/>	construction & demolition
<input checked="" type="checkbox"/>	plastic bags	<input checked="" type="checkbox"/>	white goods
<input checked="" type="checkbox"/>	scrap metal	<input checked="" type="checkbox"/>	other:

Site Size:

Total size of facility:	<u>4,800</u>	square feet
Current processing capacity:	<u>5</u>	tons per day
Total processing capacity:	<u>10</u>	tons per day
Estimated day open per year:	<u>200</u>	days
Estimated yearly processing volume:	<u>1,000</u>	tons

FACILITY DESCRIPTIONS

Facility Type: Materials Recycling Facility

Facility Name: GT Profile MRF Material Recycling Facility

County: Grand Traverse

Location: 3820 Cass Road, Traverse City MI 49684

Town: Range Section(s)

Map identifying location included in Attachment Section: Yes No

Classification: Not regulated under act 451

Public or Private: Private

Owner: GT Profile LLC

Materials Processed

<input type="checkbox"/>	glass	<input type="checkbox"/>	aluminum cans
<input checked="" type="checkbox"/>	paper	<input type="checkbox"/>	steel cans
<input type="checkbox"/>	corrugated cardboard	<input type="checkbox"/>	aseptic packaging
<input type="checkbox"/>	plastic 1,2,3,4,5,6,7	<input type="checkbox"/>	batteries
<input type="checkbox"/>	plastic film	<input type="checkbox"/>	textiles
<input type="checkbox"/>	polystyrene	<input type="checkbox"/>	construction & demolition
<input type="checkbox"/>	plastic bags	<input type="checkbox"/>	white goods
<input type="checkbox"/>	scrap metal	<input type="checkbox"/>	other:

Site Size:

Total size of facility:	<u>10,000</u>	square feet
Current processing capacity:	<u>4</u>	tons per day
Total processing capacity:	<u>12</u>	tons per day
Estimated day open per year:	<u>260</u>	days
Estimated yearly processing volume:	<u>1,000</u>	tons

II-4 SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION INFRASTRUCTURE

Per County ordinance, haulers must obtain a County license to collect and transport solid waste, yard waste and recyclables within Grand Traverse County. The following describes the solid waste collection services and transportation infrastructure which will be utilized within the County to collect and transport solid waste, yard waste and recyclables.

Solid Waste Collection Services

The collection of residential, commercial and industrial waste in Grand Traverse County is by licensed private haulers or individuals transporting their own waste to County designated transfer stations or landfills. Collection services are provided through individual subscription, preferred hauler or single hauler contracts. Customer pays hauler directly for solid waste collection services.

Residents who generate small amounts of trash have the option of purchasing budget bags from their hauler or from local businesses. Disposal is included in the cost of the bag, so residents only pay for the actual amount of trash produced. A maintenance charge may apply.

Haulers serving the County are:

Service Provider	Service Type ¹	Service Area	Disposal Facility
Acme Hauling	C,I	Partial County	American Waste TS/MRF
American Waste	R,C,I	County	American Waste TS/MRF
Republic Services	R,C,I	County	Manistee & Glens Landfill
Waste Management	R,C,I	County	Glens Landfill
Northern Disposal	C,I	Partial County	American Waste TS/MRF
Builders Waste	C,I	Partial County	American Waste TS/MRF
Area Waste Services	R	Partial County	Waters Landfill
Bay Area Disposal	R,C	County	American Waste TS/MRF

1 = Service Type: R=Residential; C=Commercial; and I=industrial

Recycling Collection Services

Collection of residential, commercial and industrial recyclables in Grand Traverse County is by licensed private haulers or individuals transporting their own recyclables to County designated material recycling facilities or drop-off recycling stations. Recycling collection services are provided through individual subscription, preferred hauler or single hauler contracts. Customer pays hauler directly for recycling collection services.

Haulers serving the County are:

Service Provider	Service Type ¹	Service Area	Disposal Facility
American Waste	R,C,I	County	American Waste TS/MRF
Republic Services	R,C,I	County	Waste Management MRF
Waste Management	R,C,I	County	Waste Management MRF
Area Waste Services	R	Partial County	American Waste TS/MRF
Bay Area Recycling for Charities	R,C	County	BARC
G.T Profile, LLC	C,I	County	Profile
Royal Oak Recycling	C	County	Royal Oak

1 = Service Type: R=Residential; C=Commercial; and I=industrial

Yard Waste Collection Services

Collection of residential, commercial and industrial yard waste in Grand Traverse County is by licensed private haulers or individuals transporting their own yard waste to a County designated composting facility. Yard waste collection services are provided through individual subscription, preferred hauler or single hauler contracts. Customer pays hauler directly for yard waste collection services.

Haulers serving the County are:

Service Provider	Service Type ¹	Service Area	Disposal Facility
American Waste	R,C,I	County	Keystone
Andy's Outdoor Service	R,C	Partial County	Keystone
Authentic Lawn & Tree Service	R,C	Partial County	Keystone
Bay Area Recycling for Charities	R,C	Partial County	BARC
Brian Zimmerman & Associates	R,C	County	Private Compost Site
Clearbrook O.R., LLC	R,C	County	Private Compost Site
Goodwill of Northern Michigan	R	Partial County	Keystone
GT Organic Landscape, Inc.	R,C	Partial County	Keystone
Heritage Landscape Design	R,C	Partial County	Keystone
JEM Outdoor Services	R	Partial County	Keystone
Landgreen Lawncare	R,C	Partial County	Private Compost Site
Landscape Management	R,C	County	Private Compost Site
Lesley's Landscape Maintenance	R,C	Partial County	Keystone
Lewis Lawn Care	R,C	Partial County	Keystone
Republic Services	R,C,I	County	Keystone
Waste Management	R,C,I	County	Keystone
T.O.P Services	R,C	County	Private Compost Site

1 = Service Type: R=Residential; C=Commercial; and I=Industrial

Traverse City in cooperation with the County operates a yard waste compost facility, where it processes approximately 50,000 cubic yards of yard waste each year. The site consists of yard waste placed in windrows which are turned by the City. Finished compost (about 5-10,000 cubic yards per year) is screened on-site and sold wholesale to local retail outlets. The County contracts for the grinding of brush and wood debris (about 3,500-5,000 cubic yards per year) which is used locally as landscape material.

The following municipalities have contracted with a preferred hauler or a single hauler for solid waste collection services. The remaining municipalities in Grand Traverse County use subscription based collection services.

- Single Hauler Contract – City of Traverse City
- Single Hauler Contract – Peninsula Township
- Single Hauler Contract – Acme Township
- Preferred Hauler Agreement – Garfield Township

The County's road network is sufficiently developed to ensure that all residents have access to solid waste collection services.

II-5 EVALUATION OF DEFICIENCIES AND PROBLEMS

The following is a description of problems or deficiencies in the existing solid waste system.

At the time of the Grand Traverse County's 1999 Solid Waste Plan Update, the County was experiencing a dramatic decline in the availability of competitive solid waste collection services, with one hauler providing more than 98% of all service in the County. Since that time, competition has increased significantly with a strong network of haulers offering competitive services as described in Section II-4.

With sufficient competition in Grand Traverse County, the major problems facing residents today are centered on increasing the waste stream diversion, implementing a stable funding source and eliminating illegal dump sites. The following areas have been identified as being deficient in the existing solid waste system:

1. Curbside Recycling: Curbside recycling is not being fully utilized by residents. Access to curbside is available County wide. However, many residents choose to use drop-off recycling containers instead or do not recycle despite the availability of the service. Effective recycling programs at curbside could have a measurable impact on the County's overall waste stream requiring disposal.

Curbside recycling is addressed under Goals #1 and 4.

2. Multi-Unit Housing Recycling: Multi-unit housing recycling for the most part is not being provided by property owners. Residents can use drop-off recycling containers if available. Effective recycling programs at multi-unit housing could have a measurable impact on the County's overall waste stream requiring disposal.

Multi-unit housing recycling is addressed under Goals #1 and 4.

3. Organic Composting: There is no infrastructure on a large scale to divert food waste from landfill disposal. The US EPA estimates that food waste constitutes 14% of the total solid waste generated. Effective residential, commercial and industrial organic composting programs could have a measurable impact on the County's overall waste stream requiring disposal.

Organic composting is addressed under Goals #1 and 4.

4. Funding: Funding generated from the landfill surcharge is dependent on the amount of waste sent to the landfill. Landfill volumes can be unpredictable. During recessionary periods and recycling market development, landfill volumes can decline resulting in reduced funding. Funding is also dependent on honest and accurate reporting of the surcharge. A stable funding source is critical in maintaining programs and services identified in the Selected Solid Waste Management System.

Funding is addressed under Goal #3. Alternate funding mechanisms are also addressed within several other areas of the Plan.

5. Illegal Dumping: There is little or no enforcement of illegal dumping in the County even though it is prohibited by Ordinance 17 and Rules and Regulations. Forest preserves and wooded areas in the County have provided illegal dumpers secluded locations to dump waste.

Illegal dumping is addressed under Goal #2.

III-1 THE SELECTED SOLID WASTE MANAGEMENT SYSTEM

The Selected Solid Waste Management System (Selected System) is a comprehensive approach to managing Grand Traverse County's solid waste and the recoverable commodities contained within. The Selected System addresses the generation, transfer, disposal and processing of the County's solid waste. It aims to reduce the amount of solid waste sent for final disposal by volume reduction techniques and by various resource conservation and resource recovery programs and enterprises. It also addresses collection processes and transportation needs that provide the most cost effective, efficient service to area residents and businesses. Disposal area locations and capacity to accept solid waste are identified as well as program management, funding and enforcement roles for local agencies.

Grand Traverse County identified six potential alternatives for managing its solid waste stream, described in Section II-8. Two of the strategic alternatives ("D" and "E") were further developed as GTC System Alternative 1 and GTC System Alternative 2.

The County has developed and selected a system alternative that builds off of the current solid waste and recycling management system (GTC System Alternative 2) already in place in the County.

During the Planning Period, the County will implement the following System:

GRAND TRAVERSE COUNTY SYSTEM SELECTED ALTERNATIVE CLEAN COMMUNITY "RECYCLESMART" - EXPANDED CURBSIDE RECYCLING

In developing the Plan's Selected Alternative, the SWPC developed a set of solid waste management program components in the following eight areas:

- Clean Community
- Drop-Off Residential Recycling
- Composting of Organics
- Material Transfer and Processing
- Recycling Incentives
- Curbside Residential Recycling
- Commercial and Institutional Recycling
- Disposal

Grand Traverse County has no landfills and will continue exporting solid waste to satisfy disposal needs. Regional landfill capacity is more than adequate for the planning period. Since the County relies on its neighbors for landfill space, Grand Traverse County has established an aggressive recycling and waste reduction program to increase municipal solid waste diversion rates from current levels to a County average of 50% recovery by the year 2017.

Education is important to the long-term success of any waste prevention and recycling program. Education is built into each component of the Selected System. Therefore, special efforts at improving curricula, communication channels, and monitoring of educational programs will be made within each component of the Selected System.

Another component of a successful program is the ability to adapt in response to new technologies, fluctuating market conditions, changing consumer waste generation patterns, and changing regulations. The ability to predict these changes lies in the amount of reliable information that is available. Accurate statistics are needed to design appropriate programs, budget for program needs, and assess overall impact. Therefore, as with education, this Plan places data collection as a high priority within each component of the Selected System.

Until an alternative funding mechanism is developed and implemented, the landfill surcharge paid by licensed solid waste transfer stations and disposal facilities will continue to be the primary funding source to cover the County's costs to staff the Resource Recovery Department and administer the "RecycleSmart programs". Funding will be supplemented by grants, fund balance, donations and service fees.

Additional details regarding each component of the Selected System follow:

Clean Community:

- Household hazardous waste collection, recycling, and disposal services will be provided to households and conditionally exempt small quantity generators (CESQG's).
- Clean Sweep (pesticides) collection services will be provided to County and out of County households and businesses.
- Clean community programs that promote cleaning of roadsides, stream banks, lakeshores, downtown areas, parks and forests will be promoted in conjunction with other community activities such as "Adopt a Forest".
- A convenient product return infrastructure will be promoted, where consumers can return unwanted products to providers/businesses "Take It Back program".
- Enforcement and educational efforts will be provided to prevent illegal dumping and litter.
- Special clean-up days will be encouraged that emphasize trade, reuse, and recycling.
- On-site disposal and burning of waste (except back yard composting) will be discouraged.

Drop-Off Residential Recycling:

- Municipalities and private companies have the option of funding drop-off recycling sites.
- Drop-off recycling sites will be available to handle hard to recycle materials such as Styrofoam, agriculture plastic, shrink wrap, etc.

Composting of Organics:

- Seasonal yard waste and leaf collection will be available to households and businesses.
- Drop-off options for yard waste will be available to households and businesses.
- Grass cycling and home and agricultural composting initiatives will be encouraged.
- Pilot programs targeted at food waste and other organic components of the municipal waste stream may be developed and implemented.

Material Transfer and Processing:

- Collection, transportation, delivery, or disposal of solid waste, yard waste and recyclable materials will be by private haulers licensed by the County.
- Collection, transportation, delivery, or disposal of solid waste, yard waste and recyclable materials will be through private agreements with residents or through municipal contracts.
- Type B Transfer Stations will be available to compact waste for cost effective transportation to area landfills.
- Type A Transfer/Material Recycling Facilities will be available to recover recyclable materials from the waste stream and to compact residual waste for cost effective transportation to area landfills
- Solid Waste will be delivered to County designated disposal and recycling facilities.

Recycling Incentives:

- Pay as you throw programs (Budget Bag) will be available to all households and businesses.
- Proactive education and promotion strategies will encourage responsible solid waste management and strong reduce/reuse/recycle behavior.
- Selected materials will be banned from collection and disposal as solid waste.

- Reward based recycling programs may be developed and implemented.
- Regulatory approaches such as mandatory recycling ordinances or bans on disposal may be considered.

Curbside Residential Recycling:

- Curbside recycling will be available to all single family housing units (up to fourplex in size).
- Single stream commingled recycling will be available to all single family housing units (up to fourplex in size).

Commercial and Institutional Recycling:

- On-site recycling will be available to all large businesses and institutions.
- Small businesses and home businesses will be encouraged to use existing residential curbside recycling.
- Single stream commingled recycling will be available to small businesses and home businesses.
- Businesses and institutions will be encouraged to haul directly to a drop-off recycling site when logically and economically feasible.
- Construction and demolition recycling will be encouraged and facilitated.

Disposal:

- Landfill waste collected from area households and businesses will be exported to County designated Type II and Type III landfills located outside the County.
- Type A and B transfer stations will be used to compact waste for cost effective transportation to area landfills.
- Enforcement and educational efforts will be promoted to prevent illegal dumping and litter.
- Educational materials will be available to households and businesses on proper disposal of solid waste.

As required by the Plan Format, The sections that follow address the details regarding specific components of the Plan's Enforceable Program and Process, that answer the "who, what, when, where, and how" aspects of the Selected Alternative.

III-4 SOLID WASTE DISPOSAL AREAS

An inventory of solid waste disposal areas to be utilized by the County for this planning period is provided below along with a page number where a detailed facility description can be found. Facility descriptions will not be replicated in this section to prevent additional waste.

Solid waste disposal areas identified outside the County for potential use are included in the export authorization tables in Section III-3. Additional facilities within the County with applicable permits and licenses may be utilized as they are sited by this plan, or amended into this plan, and become available for disposal.

Type II Landfill:

Glens Sanitary Landfill (WMI)	Page 13
Manistee County Landfill (Republic)	Page 14
Wexford County Landfill (American Waste)	Page 15
City Environmental Services of Waters (WMI)	Page 16

Type III Landfill:

None

Type A Transfer Station:

American Waste Transfer Station/Processing/MRF (Hughes Drive, Traverse City MI)	Page 17
American Waste Sanitary Waste and Recycling TS (Sundowner, Traverse City MI)	Page 18
Northern A-1 Waste TS (Kalkaska MI)	Page 19

Type B Transfer Station:

Peninsula Township TS	Page 20
Ken's Landfill TS (WMI)	Page 21

Processing Facility:

American Waste Transfer Station/Processing/MRF (Hughes Drive, Traverse City MI)	Page 22
American Waste Sanitary Waste and Recycling TS (Sundowner, Traverse City MI)	Page 23
Northern A-1 Waste TS (Kalkaska MI)	Page 24

Material Recycling Facility (source separated Materials Recovery Facilities not regulated under Part 115)

Waste Management MRF (Cass Road, Traverse City MI)	Page 25
Waste Management Recycle America MRF (Saginaw MI)	Page 26
Bay Area Recycling for Charities MRF (Maple City MI)	Page 27
GT Profile MRF (Traverse City MI)	Page 28

Incinerator:

None

Waste-to-Energy Incinerator:

None

Waste Pile:

None

Other:

None

Note: To receive waste from within Grand Traverse County any facility listed above is required to have a current designated facility agreement with the County as specified by Ordinance 17 and Rules and Regulations.

III-5 SOLID WASTE COLLECTION SERVICES AND TRANSPORTATION

Details on the collection and transportation infrastructure to be utilized in this Plan are provided in Section II-4. That information will not be replicated in this section to prevent additional waste. In the Plan's Enforceable Program, comprehensive solid waste collection services to conserve resources will be made available to all households and businesses in the County. During the planning period:

- Direct haul by compacting collection vehicles and transfer haul by transfer trailers being the primary methods of transportation to regional landfills.
- Illegal dumping and litter will be policed with enforcement of violations. Spring/fall cleanup days and regular curbside bulky waste collection will be encouraged through cooperation with local units of government.
- Hazardous waste collection events will be available that services households, agricultural hazardous waste generators and unregulated conditional exempt small quantity hazardous waste generators.
- Clean community programs that promote cleaning of roadsides, stream banks, lakeshores, downtown areas, parks and forests will be promoted in conjunction with other community activities such as "Adopt a Forest".
- Recycling collection programs will add more materials to encourage participation by more citizens and businesses. Through the County's Ordinance No. 17 and Rules/Regulations, selected materials will be banned from landfill and transfer station disposal.
- Proactive education and promotion strategies will encourage responsible solid waste handling along with strong reduce/reuse/recycle practices. Pay as you throw services (Budget Bag) will be available throughout the County.

III-8 TIMETABLE FOR SELECTED SYSTEM IMPLEMENTATION

The Plan's Enforceable Program includes an implementation timeline for the Plan's Management Component and Selected Alternative. The following table summarizes key milestones for implementing the Plan's Enforceable Program.

Management Components	Timeline
1) Designate Resource Recovery Department as Implementation Agency	Plan Adoption
2) Designate Resource Recovery Council as Implementation Oversight Committee	Plan Adoption
3) Develop /Adopt Implementation Action Plan	1999
4) Amend Intergovernmental Agreements/Ordinance/Rules/Regs	1999
5) Preliminary Program Specifications for Planned Programs	1999
6) Establish Budgets for Planned Programs	1999
7) Implementation of Funding Structure and Mechanisms	1999
8) Initiate all Outreach/Education Programs	1999/2000
9) Procure all Other System Improvements	1999/2000
10) Trigger Ban on Selected Items from Landfill Disposal	2000/2008
11) Evaluation of Options for Long Term Disposal Capacity	2000/2003
12) Implement Options for Long Term Disposal Capacity	2000/2003
13) Data Tracking to Assess Program Performance	Annual/Ongoing
14) Update Implementation Action Plan	Annual/Ongoing

III-9 SITING REVIEW PROCEDURES

The Siting Review Procedures contained in this Plan begin with a description of Authorized Disposal Area Types followed by a description of Unauthorized Disposal Area Types and the Siting Criteria and Process.

Per the requirements of Part 115 Section 11533 of NREPA, this Plan includes a Selected Solid Waste Management System that assures that the non-hazardous solid waste to be generated in the planning area over the next 10 years will be collected and recovered, processed, and disposed of at disposal areas that comply with state law and rules promulgated by the Michigan DEQ governing the location, design and operation of the disposal areas.

As provided for in Part 115 Section 11537 (a) of NREPA, this Plan demonstrates that the planning area has in excess of 66 months of available disposal capacity and will have in excess of 66 months of available disposal capacity for the duration of the 5 year planning period for which this Plan is provided. As a result, the County may refuse to utilize the siting mechanism contained herein until the County is no longer able to demonstrate 66 months of disposal capacity or until the County amends this Plan to provide for the annual certification process described in Part 115 Section 11538 (4) of NREPA.

This Plan does not include an annual certification process, as provided for in Part 115 Section 11538 (2) of NREPA, since specific disposal areas are identified in this Plan for the ten year period after approval of the Plan and, as such, is not required to provide the annual certification process described in Part 115 Section 11538 (4) of NREPA, or the interim siting mechanism described in Part 115 Section 11538 (3) of NREPA.

AUTHORIZED DISPOSAL AREA TYPES

The following facilities are consistent with the Goals and Objectives of the County Solid Waste Plan and the implementation of the Selected Solid Waste Management System. Disposal areas at specific sites identified in this Plan are automatically included in the Plan. Disposal areas without specific sites identified will be sited following the Plan's siting mechanism as provided for in this Chapter as will any changes in type or expansions of any existing disposal area unless provided for elsewhere in this Plan.

Facilities Included in this plan:

- Type A Transfer Station/Processing/Material Recycling Facilities
- Type B Transfer Stations
- Material Recycling Facilities
- Composting Facilities

Type B Transfer Stations do not require a construction permit and operating license from DEQ. They are still subject to the Plan's siting mechanism as provided for in this chapter and are exempt from local zoning.

Material Recycling Facilities and Composting Facilities that process only source separated materials of any type do not require a construction permit and operating license from DEQ. These types of facilities do not have to be sited by the Plan in order to be constructed and are subject to local zoning. These types of facilities can be sited with the approval of the local unit of government that has jurisdiction over a proposed site with the enforcement of local ordinances, including zoning, applicable to that siting being authorized elsewhere in this Plan.

UNAUTHORIZED DISPOSAL AREA TYPES

The following types of facilities will not be considered during this planning period for siting purposes and would automatically be deemed inconsistent with the Plan, if the County received a proposal to site such a disposal area.

Facilities Not Included in this plan:

- Type II or Type III Landfills
- Incinerators

Plan Amendment to Include a Facility Not Included in this Plan:

If a proposed facility is not consistent with or in compliance with this Plan, the facility proposer can request that the County amend the Plan. The procedure to amend this Plan is the same as the process for adopting this Plan, as provided for in Section 115 of NREPA. A request to amend the Plan should be made to the appropriate County Agency.

Upon receipt of such a request to amend the Plan, the County shall prepare a budget showing the costs anticipated to amend the Plan. Upon adoption of that Budget by the County Board of Commissioners the total amount of that budget shall become the fee charged to consider a proposed amendment to the Plan, which shall be paid in full prior to the initiation of the Plan Amendment process. Fee is only for the siting of a disposal facility not included in the plan and is not applicable to other proposed plan amendments.

III-10 SOLID WASTE MANAGEMENT COMPONENTS

The following identifies the management responsibilities and institutional arrangements necessary for the implementation of the Plan's Enforceable Program. Also included is a description of the technical, administrative, financial and legal capabilities of each identified existing structure of persons, municipalities, counties and state and federal agencies responsible for solid waste management including planning, implementation, and enforcement.

Grand Traverse County Ordinance 17 and Rules/Regulations were enacted to provide enforcement, funding and incentives for resource recovery in regards to solid waste generated, collected, transported and disposed of in Grand Traverse County. By requiring haulers to be licensed and report to the County, the Plan has a mechanism in place for monitoring compliance. Funding for programs and administration is provided through a landfill surcharge, which is also part of Ordinance 17 and Rules/Regulations.

The Grand Traverse Board of Commissioners (BOC) with appropriate legal, management and financial capabilities and acting through the Resource Recovery Council (RRC) and Resource Recovery Department (RRD) has accepted ultimate responsibility for the implementation and enforcement of the solid waste management system.

NEEDS OF THE CURRENT MANAGEMENT SYSTEM

Problems and deficiencies in the existing Solid Waste Management System are detailed in Section II-5 and are summarized below:

1. Recovery rates in the existing Solid Waste Management System are too low. A 2010 waste diversion report determined that 35.51% of the total waste generated within the County is diverted from landfill disposal through recycling and composting initiatives. Data indicates that diversion rates in some areas of the County could be higher:
 - Estimated recovery rates in the residential sector are too low at 18% - 20%. Expansion and use of curbside recycling in this sector can increase the recycling rate and reduce the need for landfill disposal.
 - Few multi-unit housing complexes provide on-site recycling. Residents can use drop-off recycling containers if available. Expansion and use of on-site recycling can increase the recycling rate and reduce the need for landfill disposal.
 - There is no infrastructure on a large scale to divert food waste from landfill disposal. The US EPA estimates that food waste constitutes 14% of the total solid waste generated. Outside of home composting and garbage disposals, residents have no alternative to handle food waste other than sending it to the landfill.
2. Funding to staff the RRD and administer the "RecycleSmart programs" is provided by the landfill surcharge. The landfill surcharge is a variable funding source for the following reasons:
 - Landfill volumes can be unpredictable. The amount of landfill surcharge collected is dependent on the amount of waste sent to the landfill. During recessionary periods and recycling market development, landfill volumes can decline resulting in reduced funding.
 - Landfill volumes are dependent on honest and accurate reporting. Haulers do not have to provide documentation on the origin of waste delivered to Designated County landfills and/or transfer stations.
3. Illegal dumping continues to plague rural communities in the County. Even though fines are in place for illegal dumping, catching illegal dumpers is difficult due to the availability of secluded forest preserves and wooded areas in the County.

STRENGTHS OF THE CURRENT MANAGEMENT SYSTEM

Some key components of the organizational and management structure required to develop a suitable mechanism to implement the Plan's Enforceable Program are already in place within the County. These include:

- The authority and powers of the Grand Traverse County BOC to implement the Plan's Enforceable Program with appropriate legal, management and financial capabilities, executed through the RRC and RRD.
- The RRC as the "implementation oversight committee" to the BOC and RRD to oversee the implementation of the Plan's Enforceable Program, including the development and adoption of an annual strategic plan and budget and submittal of that plan to the BOC for final implementation authorization.
- The RRD as the "designated implementation agency" and the RRD Manager as the "designated planning agent" to manage the implementation of the Plan's Enforceable Program under general guidance of the BOC, RRC and key stakeholders.
- The County Solid Waste Ordinance 17 and Rules/Regulations to authorize and provide the basic framework for the development and operation of the solid waste and recycling system.
- The County's contracting capability to implement and operate solid waste programs.
- The contracting capability of individual units of government to develop supporting structures for funding, organization, and implementation of their own solid waste and recycling systems.
- A network of public, private and non-profit organizations that provide critical recycling services to residents and businesses throughout the County.
- A strong product return infrastructure present in the County to support the reuse of many household items.
- Access to regional landfill(s) with disposal capacity in excess of 100 years.
- A variety of County programs in place to serve residents, including curbside recycling, HHW disposal, organic composting, special collection events and outreach/education programs.

The current organizational and management structure as just described is automatically incorporated into the Plan's Enforceable Program and is authorized as the basis for further development of the Plan's Management Component.

FURTHER DEVELOPMENT OF THE MANAGEMENT COMPONENT

The Management Component builds on the strengths of the current organizational and management structure including the County's Solid Waste Ordinance No. 17, contractual arrangements for plan implementation and all related features. Further development of the Plan's Management Component is provided for as part of the Plan's Enforceable Program.

These developments may take a number of forms and will only be initiated after evaluating the best steps that can be taken given the system already in place. These steps will be detailed in an implementation action plan that the RRD and the RRC will develop, for the BOC approval, in order to provide for the necessary details required to carry out the Enforceable Program.

Every effort will be made during further development of the Management Component to build an implemented system that is supportive of and enables development of similar services and management capabilities throughout the region and out-of-county.

A. A system of Hauler License and Designated Facility Agreements as provided for in County's Ordinance No. 17 and Rules/Regulations will be used to collect user fees from solid waste generators to fund all or a portion of the Management Component. Specifically:

- **At point of generation** the current practice of a resident or business paying a monthly or quarterly fee(s) for their solid waste handling services will continue with the following enhancements: 1) continued effort to ensure fee structures include "pay as you throw" (PAYT) features that result in the generator incurring additional costs as volumes of solid waste increase, 2) the regularly billed fee(s) will be for collection services as detailed by Ordinance No.17 and Rules/Regulations;
- **At point of transfer/disposal** the user fee paid for tipping at the designated disposal facility (i.e.: the Transfer Station and/or Landfill) will provide funds for system development, implementation and operation;
- **At point of recycling processing** there may be a user fee paid for tipping at the recycling processing facility or a payment for the value of the materials;
- **At point of yard waste processing** there may be a user fee paid for tipping at a yard waste composting site(s) that will have two key features - providing a needed revenue stream and providing an incentive for diverting materials.

Until an alternative funding mechanism is in place, a landfill surcharge will be collected and deposited into a "System Enterprise Fund" to be used to fund the County's costs to staff the RRD and administer the "RecycleSmart" programs. This amount, which will need to be determined, based on the specifics of the planned program and the mix of funding sources, and will be managed by the BOC through the RRC and RRD.

Four potential alternate funding mechanisms will be considered: 1) licensed haulers paying a per customer user fee each month as a condition of their hauler licensing agreement (solid waste volume handled being an alternate approach); 2) County general fund appropriation; 3) voter approved millage; 4) P.A. 69 funding mechanisms. Should other funding sources be enabled through state legislation, these will also be considered as appropriate.

- B. Local Units of Government (LUG) will be provided information, tools and techniques to increase recovery rates and to use the contracting provisions in Michigan municipal solid waste law to provide the highest quality service at the most affordable prices. These contracting arrangements will be structured to be compatible with and supportive of County Ordinance No. 17 and Rules/Regulations as required.
- C. Leveraging of contributed resources will be used to increase recovery rates and to reduce program budget requirements. Programs operated by public, private and non-profit organizations will be used to reduce cost and promote waste diversion. Area businesses and foundations will be approached for long-term commitments (project sponsors, etc.) with appropriate recognition provided. Collaboration with workplace experience programs will be pursued and expanded. Public and private service agencies as well as school groups will be asked to get involved even more than they are already.
- D. Private bank financing will be available for capital improvements made by private companies and non-profits that are involved in the implemented system -- especially if the contracting framework described above is well structured with long term service arrangements.
- E. Agency funds from public entities will be an important part of the mix of operating and capital funding that is needed to sustain the implemented system. These funds may be part of ongoing operational cost areas that are already part of municipal budgets (e.g. current operations to collect and process yard waste that are part of some municipal budgets). In addition, these agency funds may be able to assist in part with capital requirements for some of the projects.

- F. Bond financing will be an option that will be investigated depending on the final details of how the overall implemented system is structured to raise any necessary capital for solid waste, recycling, and composting system improvements.
- G. Further steps will be taken to access the fundraising capabilities of private giving and foundations. Efforts will also be targeted at providing support for education and promotion of clean community initiatives, reduce/reuse/recycle programming and, in some cases, capital funds for informational exhibits, displays, educational facilities and school programs.

IMPLEMENTATION OF THE MANAGEMENT COMPONENT

The following key steps will be taken to further develop the Management Component as needed to implement the Plan's Enforceable Program:

- A. The RRD as the "designated implementation agency" and the RRD Manager as the "designated planning agent" is assigned responsibility to manage program development through public and private sector channels working with the RRC, BOC and key stakeholders on the implementation process.
- B. The RRC as the "implementation oversight committee" is assigned responsibility to facilitate program development through public and private sector channels advising the RRD, BOC and key stakeholders on the implementation process.
- C. The annual "strategic plan" will be expanded into a comprehensive "Implementation Action Plan" covering all aspects of implementation of the Plan's Enforceable Program with a strong emphasis on defining required decisions, important decision factors, reports and expected timing/outcomes, at a level of detail required for actual task assignments with coordination and accountability for measurable/reportable outcomes. The action plan format will also provide for a means to be updated on a regular basis based on monitoring of progress towards plan goals and targeted diversion rates and a mechanism for feeding these updates into an ordinance/contract structure should they need to be changed.
- B. Local units of government within the County may apply their home rule authority to the funding, organization, and implementation of the Plan's selected alternative. Local communities are encouraged to build on their strengths in managing solid waste and recycling programs and further enhance those strengths through intergovernmental cooperation.
- C. System improvements, new services, required contract/licensing structures and recycling processing capacity will be further detailed, incorporated into the Implementation Action Plan and then implemented. The implementation is expected to be handled by private and/or non-profit or other governmental agencies with service contracts being the principal means to define expected performance and the necessary flow of funds. In addition to updating the County Ordinance No. 17 and Rules/Regulations as required and the hauler licensing and facility designation, other contracts will be needed for purchased services such as the household hazardous waste program as well as other program components.
- F: Upon implementation, progress will be tracked through methodical data compilation and analysis in order to measure, on an annual basis, overall waste generation, reduction and recycling, benchmark performance against goals, and target future implementation planning. Regular scheduled reports of implemented system performance and new goals will be incorporated into the continuously updated Implementation Action Plan as they develop.

III-11 IDENTIFICATION OF RESPONSIBLE PARTIES

The following identifies the management responsibilities and institutional arrangements necessary for the planning, implementation and enforcement of the solid waste management system. Also included are entities within the County which will have management responsibilities over various areas of the plan.

Grand Traverse County Board of Commissioners: The County Board of Commissioners (BOC) is responsible for the overall supervision of the solid waste management system for the County acting through the Resource Recovery Council (RRC) and Resource Recovery Department (RRD). The BOC has the authority to adopt countywide ordinances that are not in conflict with state and federal law, and for the licensing and regulation of the solid waste management system.

Resource Recovery Council: This advisory council appointed by the BOC is responsible for studying and making recommendations to the BOC and RRD regarding matters relating to the operation of the County solid waste management system. The RRC has been assigned oversight responsibility for county recycling, solid waste, and household hazardous waste and composting programs, and County Ordinance No.17 and Rules/Regulations.

Resource Recovery Department: The RRD reports to the BOC and is authorized by the Board to serve as the Designated Planning Agency for the County. Under general guidance from the RRC, the RRD provides day-to-day management of county recycling, solid waste, and household hazardous waste and composting programs. This includes providing recycling and composting outreach and education; coordinating operation of the household hazardous waste collection and composting programs; implementation, all reporting, administration and enforcement coordination of the County Ordinance No. 17 and Rules/Regulations as required; and providing general information to the public.

Solid Waste Management Planning Committee (SWMPC): The Grand Traverse County SWMPC is responsible for updating and amending the County Solid Waste Management Plan and assisting the BOC in the approval process for such plan updates and amendments.

Municipal and Township Governments: The cities, villages, and townships, either individually or working together, may assume a financing, procurement, regulatory, and administrative role in arranging solid waste management services for their jurisdictions to comply with the plan.

Private Solid Waste Haulers: Private sector waste haulers provide for collection of solid waste with delivery to designated facilities as defined in the County's Ordinance No. 17 and Rules/Regulations as required.

Resource Conservation:

Source or Waste Reduction -
Product Reuse -
Reduced Material Volume -
Increased Product Lifetime -
Decreased Consumption -

Responsible Parties

RRD, LUG, waste generators
RRD, LUG, private/non-profits, waste generators
RRD, LUG, waste generators
RRD, LUG, waste generators
RRD, LUG, waste generators

Resource Recovery Programs

Composting -
Recycling -
Energy Production -

Responsible Parties

Traverse City DPW, RRD, public agencies, private waste companies
RRD, public agencies, private waste companies
not applicable

<u>Volume Reduction Techniques:</u>	RRD, LUG, waste generators
<u>Collection Processes:</u>	RRD, public agencies, private waste companies
<u>Transportation:</u>	RRD, private waste companies
<u>Disposal Areas:</u>	
Processing Plants -	RRD, private waste companies
Incineration -	Not applicable
Transfer Stations -	RRD, public agencies, private waste companies
Sanitary Landfills -	RRD, public agencies, private waste companies
<u>Ultimate Disposal Area End Uses:</u>	BOC through the RRD
<u>Local Responsibility for Plan</u>	
<u>Update Monitoring & Enforcement:</u>	RRD
<u>Local Responsibility for Emergency/</u>	
<u>Storm Waste Management</u>	RRD
<u>Educational and Informational Programs:</u>	RRD, LUG, private waste companies

Documentation of acceptance of responsibilities is contained in Appendix D.

III-13 CAPACITY CERTIFICATIONS

Every County with less than ten years of capacity identified in their Plan is required to annually prepare and submit to the DEQ an analysis and certification of solid waste disposal capacity validly available to the County. This certification is required to be prepared and approved by the County Board of Commissioners.

This County has more than ten years capacity identified in this Plan and an annual certification process is not included in this Plan.

Ten years of disposal capacity has not been identified in this Plan. The County will annually submit capacity certifications to the DEQ by June 30 of each year on the form provided by DEQ. The County's process for determination of annual capacity and submission of the County's capacity certification is as follows:

The table below identifies landfill disposal areas, their expected life, historical usage rates, and supporting analysis that demonstrates that the County will have more than ten years of disposal capacity for the duration of the ten year planning period. These facilities are included in the Plan, meet export requirements and have signed County Designated Facility agreements. Attachment B includes a letter from one of these facilities, Glen's Landfill (WMI) in Leelanau County that indicates that they can supply Grand Traverse County with 10 years of landfill capacity.

Identified Disposal Area Capacity	Available Air Space Gate CY ¹	Gate CY ¹ Delivered 09/10	Landfill Life (in yrs) ² Based on 09/10 Delivery Rates
Manistee (Republic)	10,000,000	500,000	32
Glen's (WMI)	18,000,000	230,000	125
Wexford	5,000,000	125,000	64
CES Waters (WMI)	16,000,000	425,000	60
TOTAL	49,000,000	1,280,000	61

1 = Source 2010 MDEQ Solid Waste Report

2 = Calculations of landfill life assume that 20% of available air space is lost to cover and liner components and that gate cubic yards to in-place compaction is 50%