# 2014 - 2024 SOLID WASTE MANAGEMENT PLAN



## **Garrett County**

Department of Solid Waste & Recycling Garrett County Government 3118 Oakland Sang Run Road Oakland, MD 301.387.0322



# TABLE OF CONTENTS SOLID WASTE MANAGEMENT PLAN

### **Garrett County, Maryland**

Chap	<u>ter</u>	<u>Page</u>
	INTRODUCTION	
	Statement of Purpose	
	Plan Approval Process	
	Certification	
	Board of Garrett County Commissioners Resolution	
	MDE Approval Letter	i-5
1.	LEGAL AND INSTITUTIONAL FRAMEWORK	1-1
	Introduction	1-1
	Garrett County Solid Waste and Recycling Division	
	Goals, Objectives, and Policies	
	Garrett County Goals	
	Objectives and Policies	
	Conformance with State, Regional, and Local Land Use Plans	1-2
	Appalachian Regional Commission	
	Tri-County Council of Western Maryland	
	Structure of County Government	
	Laws and Regulations	
	Federal Laws	
	Federal Regulations	1-5
	Maryland Department of the Environment	
	State Laws	1-6
	State Regulations	
	Incorporated Towns	
	Maryland Environmental Service (MES)	1-11
	Garrett County Code	
2.	BACKGROUND INFORMATION	<b>2</b> -1
	Background	2_1
	History	
	Development	
	Federal Facilities	
	Municipalities	

Chap	<u>ter</u>	Page
2.	BACKGROUND INFORMATION (continued)	
	Population and Employment	2-5
	Population and Households	
	Visitors	
	Employment	
	Zoning	
	Watershed Land Use Plans	
	Municipalities' Comprehensive Land Use Plan	2-12
3.	EXISTING SOLID WASTE MANAGEMENT AND RECYCLING S	SYSTEM 3-1
	Introduction	3-1
	Waste Generation	3-1
	Historic Waste Quantities	3-2
	Existing and Projected Waste Stream	
	Residential Waste	
	Commercial/Industrial Waste	3-4
	Institutional Waste	3-4
	Construction, Demolition and Land Clearing Debris (CDL)	
	Controlled Hazardous Substances (CHS)	
	Medical (Infectious) Waste	
	Household Hazardous Waste	
	Dead Animals	3-7
	Bulky or Special Wastes	
	Scrap Tires	
	Sludge	
	Septage	
	Other Wastes	
	Waste Imports and Exports	
	Imported	
	Exports	
	Existing Solid Waste Collection System	
	Refuse Collection	
	Refuse & Recycling Sites	
	Refuse Site Permit Program	
	Recyclables Collection	
	Recycling Program	
	Historic Recycling Quantities	
	Program Performance	
	Refuse & Recycling Sites	
	Material Exchange Program (Swap Shop)	
	Yard Waste Program	
	Electronic Recycling	

<u>Chapter</u> <u>Page</u>

3.	EXISTING SOLID WASTE MANAGEMENT AND RECYCLING SYST	EM
	(continued)	2.22
	Used Oil and Antifreeze Program	
	Municipal Program	
	Recycling Markets	
	Solid Waste Acceptance	
	Round Glade Landfill - Closed	
	Garrett County Landfill - Active  Landfill Design	
4.	ASSESSMENT OF SOLID WASTE MANAGEMENT SYSTEMS	
	AND POTENTIAL ALTERNATIVES	4-1
	Introduction	4-1
	Collection	
	Organization of Waste Collection	
	Reporting	
	Refuse & Recycling Sites	
	Litter Collection	
	Source Reduction	
	County Policy Development	
	Public Education	
	Household Hazardous Waste Program	
	Fluorescent and Compact Fluorescent Light Recycling County Plan	4-10
	Recycling	
	Curbside Recycling	
	Recycling Computers, Electronics, Covered Devices	
	Management of White Goods	
	Recycling Coordinator	
	Education and Publicity	
	Establish Public School Recycling Plan	
	Establish Apartment Building & Condominium Recycling Program	
	Waste Processing and Disposal Alternatives	
	Waste-To-Energy (WTE)	
	Anaerobic Digestion Option	
	Mixed Waste Processing and Composting Facility	
	Garrett County Landfill	
	Landfill Life	
	Facility Siting Constraints	
	Topography	
	Geologic Conditions/Aquifers	
	Surface Waters	
	Soil Types and Characteristics	
	Location	

Chapter Page 4. ASSESSMENT OF SOLID WASTE MANAGEMENT SYSTEMS AND POTENTIAL ALTERNATIVES (continued) Wetlands 4-28 Defined Critical Areas .......4-30 Emergency Material Spill Management Program ...... 4-31 Garrett County Hazardous Materials Plan ...... 4-31 System Costs 4-32 5. Plan of Action 5-1 **APPENDICES** Retail Outlets Selling Bulk Item Stickers A Garrett County Landfill Tipping Fees В Bear Proof Container Ordinances in Other Jurisdictions  $\mathbf{C}$ **EXHIBITS** 3-8 Municipal Recyclable Programs.......3-23 

3-12	Liner Details	3-28
EXHI	BITS (continued)	
3-13	Garrett County Solid Waste and Recycling Facility	3-29
	Landfill Capacity Reported by MES	
	Garrett County Waste Projections	
	Generalized Soils Map of Garrett County	
	Summary of Waste Management Costs	
	Waste Projections	
	Implementation Schedule	

#### CHAPTER 1 LEGAL AND INSTITUTIONAL FRAMEWORK

#### INTRODUCTION

Solid waste is regulated by government agencies at federal, state, and local levels. Each element of a sound solid waste management system must comply with government agency requirements. This Chapter describes the organization within County government that implements and operates solid waste and recycling programs and facilities and federal, state, and local laws and regulations affecting solid waste management.

In August of 1990, Garrett County drafted a Recycling Plan to bring the County into compliance and fulfill state requirements. This Plan laid out the groundwork for Garrett County's Recycling Program and provided alternatives for processing, collection, and implementation based upon the needs of the County. This was a separate Plan from the 1985 Solid Waste Management Plan. Both Plans were incorporated into one Solid Waste Management Plan in 2004. The Maryland Recycling Act of 1988 requires all Counties and Baltimore City to recycle wastes and meet an overall percentage of materials recycled which is based upon the population of residents that reside in that county. Since Garrett County's population is under 150,000 residents, the State of Maryland requires the County to reach and maintain a 20% recycling rate, which includes certain designated recyclables.

#### **Garrett County Department of Solid Waste and Recycling**

#### Mission--

The Department of Solid Waste and Recycling is responsible for solid waste disposal and recycling services in Garrett County, Maryland. Its overall mission statement is as follows:

It shall be the present and future mission of Garrett County Department of Solid Waste and Recycling to provide an integrated, cost effective, and environmentally sound solid waste disposal system to all county residents, homeowners, and commercial enterprises. Success in this endeavor will be dependent on developing cooperative relationships with the business community, independent haulers, municipalities, contractors, regulatory authorities, and the general public. The County will promote and encourage recycling efforts and will provide as many recycling opportunities as possible where economically feasible and not in conflict with private sector initiatives.

#### Goals--

The Garrett County Department of Solid Waste and Recycling goals are to:

- Provide efficient and economical refuse collection services to County residents, businesses, and institutions;
- Continue to meet and exceed the MRA recycling goal of 20 percent as required by the State for counties with populations less than 150,000;
- Provide accessible facilities for the sanitary and efficient acceptance, transportation, and disposal of solid waste generated within Garrett County;
- Support public education on sound waste management practices, with particular emphasis on source reduction and recycling; and
- Promote partnering and cooperation between the County and incorporated municipalities, businesses, and organizations for waste diversion programs.

#### Municipalities Goals and Objectives-

All eight incorporated municipalities have updated their Comprehensive Plans. One of the Plans have specific goals & objectives directly relating to solid waste management issues, while some have incorporated goals from *The 2008 Garrett County Comprehensive Plan* (previously known as *The Garrett County New Development Plan*). There are no specific goals or objectives directly relating to recycling in the other seven Plans, but most of the municipalities are participating in or initiating some type of Limited Recycling Program. A more in-depth discussion of these programs can be found in *Chapters 3 and 4*.

#### CONFORMANCE WITH STATE, REGIONAL, AND LOCAL LAND USE PLANS

The Maryland Department of Planning is tasked with reviewing the Garrett County Comprehensive Plan (scheduled for an update in 2016). The 1995 original plan titled *The Garrett County New Development Plan* was incorporated into the new plan adopted by the Garrett County Commissioners on October 7, 2008. The 2008 Garrett County Comprehensive Plan includes basic planning tools for Garrett County to function and grow. All eight of the municipalities are required to have a Comprehensive Plan specific to their town. The Maryland Department of Planning also reviews these Plans. All Comprehensive Plans are in compliance with the Maryland Department of Planning.

To aid in regional planning issues, Garrett County works with agencies such as the Appalachian Regional Commission (ARC) and the Tri-County Council.

#### Appalachian Regional Commission

Congress established the ARC in 1965 to support economic and social development in the Appalachian Region of the United States. The Commission is a unique partnership composed of the governors of the 13 Appalachian states and a presidential appointee representing the federal government. Grassroots participation is provided through local development districts—multicounty organizations with boards made up of elected officials, businesspeople, and other local leaders. In an era of reduced federal funds for valuable job-creating infrastructure, the ARC program continues to merge local, state and federal funds to implement such projects. To access ARC's website, go to: <a href="http://www.arc.gov">http://www.arc.gov</a>.

ARC has developed a Strategic Plan called <u>Moving Appalachia Forward</u>, 2011-2016. This strategic plan is a guide for ARC to take targeted and measurable action toward its vision of bringing Appalachia into full economic parity with the nation. It calls for alignment of resources to maximize results and for performance measurement that ensures that the ARC partnership is effective and accountable. It creates a framework for building on past accomplishments to help move Appalachia forward. ARC's mission is to be a strategic partner and advocate for sustainable community and economic development in Appalachia.

#### Tri-County Council of Western Maryland

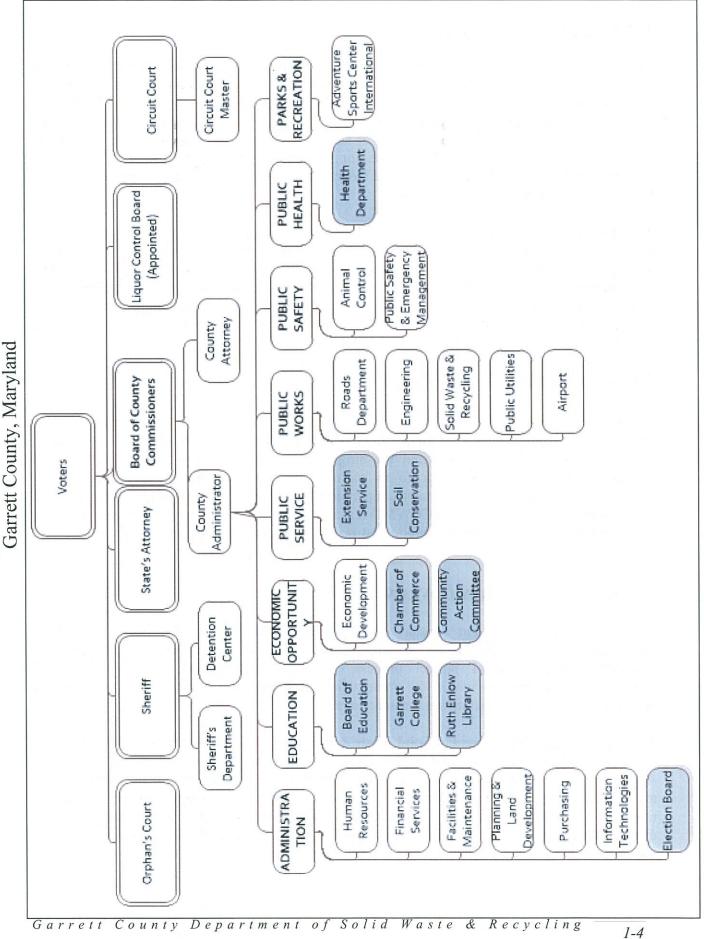
Tri-County Council for Western Maryland, Inc (TCCWMD) is a Local Development District serving a three-county region in Appalachian Maryland. TCCWMD is owned by its member governments of Allegany, Garrett and Washington Counties and has provided economic and community development assistance to its partners since its inception in 1971. TCCWMD encourages and facilitates government cooperation by addressing issues of greater than local significance on a regional basis. TCCWMD has a vision to improve the overall quality of life in the region by efficiently utilizing public and private resources to fund projects throughout the region.

#### STRUCTURE OF COUNTY GOVERNMENT

Garrett County's government consists of three elected members of the Board of County Commissioners (the "Board"). The County Administrator is responsible for overseeing the financial planning, annual budget process, personnel management, and direction and management of operations within the organization. *Exhibit 1-1* illustrates the overall County government as it relates to solid waste management.

The Garrett County Department of Solid Waste & Recycling is under the Division of Public Utilities; this department is a "service related" agency under the direction of the County Administrator, who has overall responsibility for planning and implementing solid waste management programs. This Department has a staff of eight full-time employees and 24 part-time employees. The Department is responsible for solid waste and recycling collection and disposal services for residents of the County, while private firms provide collection services for municipal, commercial, and construction wastes.

EXHIBIT 1-1: Organization of Government Structure



#### LAWS AND REGULATIONS

Although solid waste management is primarily a local responsibility, federal and state laws and regulations place requirements on the programs at the local level. This section presents a brief overview of federal, state, and local solid waste management legislative and regulatory initiatives. Further information and specific details of these initiatives can be found on the websites listed in each subsection.

#### **Federal Laws**

Although compliance monitoring and enforcement of many of the federal laws and regulations are delegated to states, state implementation must, at a minimum, comply with federal laws and regulations, and states may choose to have more stringent requirements. This subsection identifies several major federal laws governing solid waste management. To access federal laws, use the website: <a href="http://www.epa.gov">http://www.epa.gov</a>; select "Laws & Regulations" and then select "By Topic."

- Resource Conservation and Recovery Act (RCRA) Subtitle C and D;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);
- Clean Air Act (CAA);
- Clean Water Act (CWA);
- Endangered Species Act; and
- Safe Drinking Water Act (SDWA).

#### **Federal Regulations**

The Code of Federal Regulations (CFR) contains regulations published in the Federal Register by the Executive Department and agencies of the Federal Government. Volume 40 of the CFR pertains to environmental protection regulations. Guidelines also are included for complying with the regulations. To access Federal Regulations, use the following website: <a href="http://www.epa.gov">http://www.epa.gov</a>; select "Laws & Regulations" and then select "Regulations." Once this page is accessed, select "The Electronic Code of Federal Regulations (• e-CFR)." From this page, scroll down to the appropriate Regulations, Title 40 – Protection of Environment, (Parts 190-259); 260-265; (Parts of 266-291); (Parts of 425 – 699).

- 40 CFR 239 Requirements for State Permit Program Determination of Adequacy;
- 40 CFR 240 Guidelines for the Thermal Processing of Solid Waste;

- 40 CFR 243 Guidelines for the Storage and Collection of Residential, Commercial and Institutional Solid Waste;
- 40 CFR 246 Source Separation for Materials Recovery Guidelines;
- 40 CFR 247 Comprehensive Procurement Guidelines for Products Containing Recovered Materials;
- 40 CFR 254 Prior Notice of Citizen Suits;
- 40 CFR 255 Identification of Regions and Agencies for Solid Waste Management;
- 40 CFR 256 Guidelines for Development and Implementation of State Solid Waste Management Plans;
- 40 CFR 257 Criteria for the Classification of Solid Waste Disposal Facilities and Practices;
- 40 CFR 258 Criteria for Municipal Solid Waste Landfills (Subtitle D Regulations);
- 40 CFR Parts 260 through 279 Standards for Hazard Waste Regulations;
- 40 CFR Part 280 Requirements for Underground Storage Tanks; and
- 40 CFR 503 Standards for the Disposal of Sewage Sludge.

#### Maryland Department of the Environment

The Maryland Department of the Environment (MDE) is the State agency that oversees solid waste management issues. Under State law and in accordance with Subtitle D of RCRA, MDE regulates the design, construction, operation and maintenance of solid waste acceptance facilities in the State. MDE issues refuse and disposal permits for all solid waste acceptance facilities such as landfills (i.e., sanitary, rubble, construction and demolition (C&D) debris, industrial, and hazardous waste), transfer stations, incinerators, and processing facilities (i.e., materials recovery and rubble processing). To access MDE's website, go to <a href="http://www.mde.state.md.us">http://www.mde.state.md.us</a>.

#### **State Laws**

State laws addressing solid waste management are codified under Title 9 of the *Annotated Code of Maryland* in the Environment Article. This Article contains laws affecting the location, design, and operation of solid waste disposal facilities. To access state laws on the Internet, go to the website: <a href="http://www.mdarchives.state.md.us/msa/mdmanual/html/mmtoc.html">http://www.mdarchives.state.md.us/msa/mdmanual/html/mmtoc.html</a>, select Code of Maryland (laws), if you Agree to Terms & Conditions, type "Solid Waste" in Search Bar and Hit "Go." Some of the state laws affecting solid waste management include the following:

Asbestos Control - Asbestos Hazard Emergency Response Act (1990);

- Composting Act (1992);
- Land-Clearing Debris Landfills Amount of Surety (1990);
- Maryland Landfill Financial Assurance Law (1997);
- Maryland Landfill Siting Law;
- Maryland Recycling Act (1988);
- Maryland State Implementation Plan (SIP);
- Maryland State Senate Joint Resolution 6 (2000);
- Maryland Used Oil Recycling Act (1997);
- Medical Waste Legislation (1988);
- Mercury Oxide Battery Act (1992);
- Natural Wood Waste Recycling Act (1991);
- Newsprint Recycled Content Act (1991);
- Plastic Material Code (1991);
- Scrap Tire Law (1992);
- Sludge Application (1993);
- Telephone Directory Recycling Act (1991)
- Recycling of Computers, Electronics, Covered Electronic Devices and Video Display Devices (2012);
- Fluorescent & Compact Fluorescent Light Recycling (2011);
- Environment Recycling Public School Plans; and
- Apartment and Condominium Recycling (2012).

#### **State Regulations**

#### COMAR--

The principal State of Maryland regulations pertaining to solid waste management are found in the *Code of Maryland Regulations* (COMAR). COMAR Title 26 contains administrative rules and regulations for solid waste management. To access COMAR online, go to the state regulations website, go to: <a href="http://www.dsd.state.md.us">http://www.dsd.state.md.us</a>, select COMAR online. Click on number 3- "Access through Table of Contents Structure", then select Title 26 – Department of the Environment. You can perform various searches with the different section options you select. Below is an abbreviated summary of Title 26 regulations affecting solid waste management:

- Subtitle 2 Occupational, Industrial, and Residential Hazards 26.02.03 Control of Noise Pollution
- Subtitle 3 Water Supply, Sewerage, Solid Waste and Pollution Control Planning and Funding
  - 26.03.03 Development of County Comprehensive Solid Waste Management Plans
  - 26.03.10 Financial Assistance for the Constructing of Solid Waste Processing and Disposal Facilities
- Subtitle 4 Regulation of Water Supply, Sewage Disposal, and Solid Waste 26.04.06 Sewage Sludge Management
  - 26.04.07 Solid Waste Management
  - 26.04.08 Storage, Collection, Transferring, Hauling, Recycling, and Processing of Scrap Tire
  - 26.04.09 Natural Wood Waste Recycling Facilities
- Subtitle 8 Water Pollution 26.08.04 Permits
- Subtitle 10 Oil Pollution & Tank Management
   26.10.02 Underground Storage Tanks
   26.10.15 Management of Used Oil
- Subtitle 11 Air Quality
   26.11.02 Permits, Approvals, and Registration
   26.11.03 Permits, Approvals, and Registration Title V Permits
- Subtitle 13 Disposal of Controlled Hazardous Substances

- Subtitle 17 Water Management
  - 26.17.01 Erosion and Sediment Control
  - 26.17.02 Stormwater Management
  - 26.17.04 Construction of Nontidal Waters and Floodplains
  - 26.17.06 Water Appropriation Use
- Subtitle 23 Nontidal Wetlands
  - 26.23.06 Nontidal Wetlands of Special State Concern

#### Annotated Code of Maryland--

Article 9 – Environmental Article is the primary statute for environmental regulation and solid waste management in the State of Maryland. To access the state regulations website, go to: <a href="http://www.dsd.state.md.us">http://www.dsd.state.md.us</a>, select Annotated Code of Maryland (This statute contains MDE's authority for the regulation of solid waste). Select "Maryland Statutes", then select "Maryland Code Online". From this point, select "Maryland Code", then "Environment". You can perform various searches with the different title options you select. Below is an abbreviated summary of the regulations affecting solid waste:

- Title 4 Water Management
- Title 6 Toxic, Carcinogenic and Flammable Substances
- Title 7 Hazardous Materials and Substances
- Title 9 Water, Ice, and Sanitary Facilities; this statute contains MDE's authority to regulate the location, design, and operation of sanitary landfills through refuse disposal permits issued and enforced under authority of the following sections:
  - Section 204 Installing, Altering or Extending Water Supply Systems, Sewerage Systems or Refuse Disposal Systems
    - 204.1 Installing, Altering or Extending Incinerators
    - 204.2 Installing, Altering or Extending Landfill Systems
  - Section 209 Landfill System Hearings
  - Section 210 Prerequisites for Issuance of Permit
  - Section 211 Landfills, Incinerators and Transfer Stations; Requirements for Security
  - Section 212 Landfill Systems Options to Purchase
    - 212.1 Denial of Permit to Non-government Person
  - Section 213 Term of Permit (5 Years)
  - Section 214 Revoking or Refusal to Renew a Permit
  - Section 215 Closure and Cover when Operation Ends
  - Section 225 Landfills near hospitals prohibited (1/2-Mile Radius)
  - Section 226 Certification of Public Necessity Required for Hazardous Waste Landfill System

Section 227 - Infectious Waste in Landfill System Prohibited Section 228 - Scrap Tires - Storage, Recycling and Disposal

Subtitle 5 - County Water and Sewerage Plans Subtitle 6 - Sanitary Commissions

Subtitle 17 - Office of Recycling

Subtitle 18 - Household Hazardous Waste

• Title 10 – Nuisances; statute contains regulations & MDE's authority to investigate & devise means for the control of all nuisances and conditions caused thereof, that affect the public's health or safety.

Article 8 – Natural Resources, Annotated Code of Maryland also contains regulations of the Department of Natural Resources (DNR), which must be considered when siting solid waste facilities.

• Title 8 – Natural Resources

Chapter 3 - Landfill Project Requirements

Chapter 5 – Forest Conservation

Chapter 10 – Threatened and Endangered Species

#### **Incorporated Towns**

The Annotated Code of Maryland and the COMAR address the potential for incorporation of subsidiary solid waste plans developed by individual municipalities into the 2008 Garrett County Comprehensive Plan. If the Garrett County Board of Commissioners determines that incorporation of a subsidiary plan meets the environmental protection goals of the 2008 Garrett County Comprehensive Plan, it can be incorporated by reference. The specific citation from the Codes are as follows:

- Annotated Code of Maryland, Title 9-504 "(a) Required incorporation. To the extent that the incorporation will promote the public health, safety, and welfare, each county plan shall incorporate all or part of the subsidiary plans of each town, municipal corporation, sanitary district, privately owned facility, or local, state, or federal agency that has existing or planned development in that county."
- COMAR 26.03.02B "Each county plan shall include all or part of the subsidiary plans of the towns, municipal corporations, sanitary districts, privately owned facilities, and local, state and federal agencies having existing, planned or programmed development within the county to the extent that these inclusions shall promote the public health, safety, and welfare. These subsidiary plans may be incorporated by reference into the county plan."

As stated above, COMAR provides Maryland municipalities the option to develop their own, or portions of their own solid waste plan and have it incorporated into the 2008 *Garrett County Comprehensive Plan*. Garrett County has developed a cooperative working relationship with all

eight municipalities: Oakland, Grantsville, Deer Park, Loch Lynn Heights, Friendsville, Kitzmiller, Accident, and Mountain Lake Park.

#### **Maryland Environmental Service (MES)**

The Maryland Environmental Service (MES) was created in 1970 as an agency of the State of Maryland. MES is a public corporation that provides a wide range of environmental management services to both public and private entities. MES operates as a not-for-profit corporation and receives no direct state appropriation, but is required to provide its services on a fee-for-service basis. MES provides dependable, effective and efficient water supply and purification; disposal of liquid and solid wastes; reductions in the amount of waste generated and discharged into the environment; and the generation of energy from and recovery of wastes. MES has also been delegated the responsibility for overseeing Maryland's used oil and scrap tire recycling programs. To access MES, go to the website: <a href="http://www.menv.com">http://www.menv.com</a>.

#### **Garrett County Code**

Solid waste regulations pertaining to Garrett County can be found in the Garrett County Code, Part III of the General Legislation, Chapter 260 - Solid Waste. These regulations can be found on the website: <a href="http://www.garrettcounty.org">http://www.garrettcounty.org</a> select "Commissioners Home", then select "Code of Garrett County".

Title V: Public Works; Chapter 50 - Solid Waste General Provisions

```
§50.01 - Applicability
```

§50.02 - Definitions

§50.03 - Placement of solid wastes; collection; disposal

§50.04 - Enforcement

#### Chapter 50 - Recycling

§50.15 - Purpose and intent

§50.16 - Recyclable materials; definitions

§50.17 - Acceptance and collection of materials

§50.18 - Effect of plan on organizations currently recycling; registration and documentation required

§50.19 - Amendments

#### Chapter 50 - Refuse Collection; Disposal

§50.30 - Title

§50.31 - Applicability

§50.32 - Purpose

§50.33 - Effect on other laws

§50.34 - Definitions and word usage

§50.35 - Licensing of refuse collection; disposal sites

§50.36 - General standards

§50.37 - Setbacks

§50.38 - Screening

§50.39 - Access

§50.40 - Operating standards

§50.41 - Signs

§50.42 - Security

§50.43 - Closing of site

§50.44 - Amendments; violations and penalties

§50.99 - Penalty

Other regulations pertaining to solid waste management issues of the General Legislation:

Title V: Public Works; Chapter 52 – Sewage Regulations

Title IX: General Regulations; Chapter 90 - Cleanliness of Roads and Ditches (waste on roads)

Title XI: Business Regulations; Chapter 111 - Junkyards

# CHAPTER 2 BACKGROUND INFORMATION

This Chapter presents background information, including demographics and general historical information, about Garrett County. Projected population and growth estimates presented in this chapter are used to develop waste generation projections in *Chapter 3*.

#### **BACKGROUND**

Garrett County, an area of approximately 648 square miles, is situated in the western-most corner of Maryland. As shown on *Exhibit 2-1*, the County is bounded by West Virginia on its western and southeastern borders, by Pennsylvania on its northern border, and Allegany County, Maryland, on its northeastern border.

Pennsylvania

Somerset County, PA

Allegany County, MD

Preston County, WV

Maryland

Mineral County, WV

Grant County, WV

Grant County, WV

Garrett County, MD

**EXHIBIT 2-1: LOCATION MAP FOR GARRETT COUNTY** 

From the metropolitan areas of Maryland, heading east to west, the geography changes from Piedmont to Ridge and Valley to Allegany Plateau. The "Allegany Front" is the mountain ridge that forms the eastern boundary of the Allegany Plateau. This ridge is a prominent feature rising steeply above the valley to its east. On the western side of this ridge the land elevations of the Allegany Plateau remain at substantially higher elevations relative to the land to the east of the ridge. The Allegheny Front spans the entire length of the County from north to south (over 40 miles), which is the "Eastern Continental Divide."

The County lies entirely within the Allegheny Plateau, a physiographic area which is characterized by deep forests, diverse wildlife, and rich river valleys. These natural resources combined with a close proximity to major metropolitan areas such as Pittsburgh, Washington D.C., and Baltimore, attract a wide variety of recreational users. Deep Creek Lake is western Maryland's premier tourist destination.

The former Baltimore & Ohio Railroad passes through the southern end of the County for 30 miles, and the National Road (US 40) through the northern end of the county a distance of 20 miles. Interstate 68 runs through the upper portion of the County. US 50 traverses the southern part of the County connecting to Clarksburg, West Virginia, and Washington D. C. US 219 connects to US 40 and US 50 and provides access to both Pennsylvania and West Virginia. The County boasts the highest elevation in Maryland (3,360 feet) which is on Backbone Mountain on the western edge of Garrett County and Maryland. The County is also home to the largest inland body of water in the state, Deep Creek Lake.

#### **History**

Indian tribes known to have inhabited Garrett County include the Monongahela, the Shawnee, the Delaware, and the Iroquois. Records of early explorers and surveyors and archeological evidence suggests that the area was used extensively for hunting and fishing. Evidence also indicates some permanent Indian settlements. Settlement by European settlers and the subsequent displacement of the Indians began with John Friend in 1765, when his family constructed their homes at the site of a former Indian village. The small community later became known as Friendsville.

The development of the Cumberland Road (subsequently called the National Road and US 40) spurred the growth of Garrett County. The coming of the railroad in 1852 and the scenic beauty of the area combined to promote the establishment of resort towns. During this period, Garrett County prospered and grew. Its economy was established on a threefold basis of agriculture, timber and coal extraction, and recreation. This growth precipitated the governor of Maryland to sign a proclamation declaring Garrett County a separate county on December 5, 1872.

Garrett County's economy declined during the early 1900's as the timber, coal and tourism industries declined. The construction of Deep Creek Dam and subsequent creation of Deep Creek Lake in 1925 brought a revival in tourism. Acquisition of state forest lands has also contributed to the recreational potential in Garrett County.

#### **Development**

Development in the County has been moderate with the exception of the Deep Creek Lake area, which remains as the center of growth in Garrett County. The McHenry and Thayerville areas are expected to continue to grow into year-round communities. While not incorporated, these two areas have become distinguishable communities in the Lake area because of their location along major roads and the type of development that has occurred there. These communities have many commercial services and support facilities, such as restaurants, stores, banks, churches, schools, and a fire station that are typically associated with full-time communities.

The vast majority of building permits issued in the Deep Creek Lake area have been for single family detached dwelling units used as second homes or vacation homes. Second homes and vacation homes that were previously only occupied during portions of the year are being utilized more intensively throughout the year now. These structures now tend to be much larger and have a greater number of bedrooms than earlier single family homes.

Exhibit 2-2 presents the percentage increase in the Accommodations Tax from County fiscal years 1998 to 2012. The Garrett County Chamber of Commerce uses the Accommodations Tax to aid in yearly population estimates of visitors to the County. Percentage increases in the amount of tax collected from accommodations such as rental property and hotels can predict the number of visitors to the County.

**EXHIBIT 2-2: COUNTY ACCOMMODATIONS TAX** 

Fiscal Year	Accommodations Tax	Percent Increase
1998	\$372,286	w see
1999	\$418,591	+12%
2000	\$483,498	+16%
2001	\$596,730	+23%
2002	\$781,121	+31%
2003	\$867,723	+11%
2004	\$869,470	+2%
2005	\$949,552	+9%
2006	\$1,242,121	+31%
2007	\$1,464,282	+18%
2008	\$1,563,698	+7%
2009	\$1,426,900	-9%
2010	\$1,442,463	+1%
2011	\$1,603,614	+11%
2012	\$1,752,381	+9%

Source: Garrett County Financial Services

#### **Federal Facilities**

Currently, there are no federal facilities such as prisons or institutional settings in Garrett County. However, there are federal functions that utilize office space in the County such as the Farm Service Agency, the Natural Resources Conservation Office, and Post Offices. In addition, there are two lakes owned by the Federal Government and operated by the Army Corps of Engineers. The Jennings Randolph Lake is located on the north branch of the Potomac River and comprises 950 acres. A dam exists for flood control and water quality and quantity. The dam is not used to generate electricity. Two thirds of the Youghiogheny River Lake lies in Pennsylvania and one-third of the lake lies in Maryland. A dam also exists for flood control and water quality and quantity. The dam is generating electricity and is owned by a private developer.

#### **Municipalities**

Approximately one quarter of the County's population live in the eight municipalities in the County. *Exhibit 2-3* shows the locations of the eight municipalities in Garrett County. Following is a brief description of them:

#### Accident--

Accident is located on Route 219 about five miles north of Deep Creek Lake in a scenic farming valley dating back to the late 1700's. Its population is approximately 353 in 147 households. Accident provides curbside recycling of newspapers.

#### Deer Park--

Deer Park is home to the world famous Deer Park Spring Water plant and Flying Scot Sailboats. Its population is approximately 405 in 156 households.

#### Friendsville--

Friendsville, located near Exit 4 off Interstate 68, along the Youghiogheny River, is now most noted for its adventure sports, including whitewater and hiking opportunities. It is positioned at the foot of the Youghiogheny Corridor, just above the Yough Dam. When the C&O Railroad was built in 1890, the Town became an important shipping point for lumber products. Its population is approximately 491 in 219 households.

#### Grantsville--

Grantsville is located two miles south of the Pennsylvania line on US Highway 40 off Exit 19 of Interstate 68 and is the site of many historic landmarks. Its population is approximately 619 in 350 households.

#### Kitzmiller--

Kitzmiller is on the North Branch of the Potomac River, which provides exceptional fishing and hunting opportunities. Its population is approximately 321 n 126 households.

#### Loch Lynn Heights--

Located just east of Mountain Lake Park, Loch Lynn Heights sprang from the tracks of the B&O Railroad as a resort area. Its population is approximately 552 in 185 households.

#### Mountain Lake Park--

From 1882 until 1942, Mountain Lake Park was a Chautauqua-type resort, having as many as 28 hotels and boarding houses in 1912. Today, it is almost completely residential. Its population is approximately 2,092 in 873 households. The town offers curbside pick-up services for yard waste.

#### Oakland--

Oakland is the County seat, and it is a National Main Street Community, an honor designated by the National Historic Trust. Its population is approximately 1,925 in 875 households.

#### POPULATION AND EMPLOYMENT

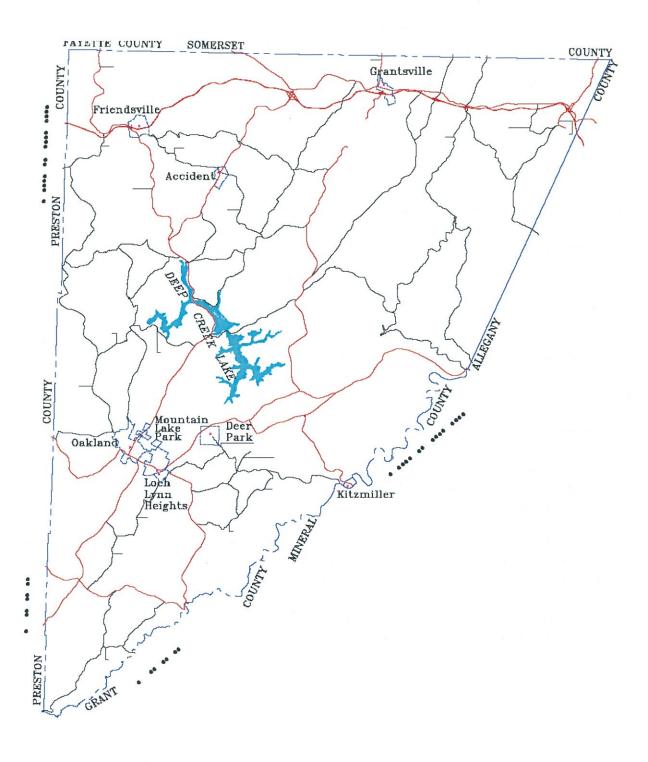
#### Population and Households

Estimates of number of households and population for the County are presented in *Exhibit 2-4*. These figures are based on the 2010 U.S. Census counts for small statistical areas. As shown, the current population of Garrett County is slightly more than 30,000.

Garrett County contains .52 percent of the State of Maryland population. U.S. Census data indicate that the population increased 1 percent between 2000 and 2010. Continued population growth is expected to increase at (at least) the same rate for the next 15 years.

The percent of the population over age 65 is higher in the County (17.4 percent) than the State (12.3 percent) and is projected to grow over the next 20 years, potentially reducing the overall percent of workers in the workforce.

#### **EXHIBIT 2-3: LOCATION OF MUNICIPALITIES IN GARRETT COUNTY**



**EXHIBIT 2-4: GARRETT COUNTY HOUSEHOLDS AND POPULATION** 

Year	Population	Households	Population /Household
1990 Census	28,138	10,110	2.74
1995	29,659	10,793	2.70
2000 Census	29,846	11,476	2.55
2005	30,083	12,271	2.50
2010 Census	30,097	12,050	2.45
2015	30,200	12,400	2.39
2022	20.500	12,925	2.33
2020	30,700	13,450	2.28
2025	31,300	13,775	2.25
2030	31,650	13,925	2.23
2035	31,800	14,000	2.22
2040	31,850		

Source: Maryland Dept. of Planning, Historical & Projected Figures.

Revised March 2012 (Based on U.s. Census Data)

#### **Visitors**

As development continues in the County, especially within the Deep Creek Watershed Area, the number of visitors is expected to increase proportionally. The Chamber of Commerce estimates that the County has approximately 1,100,000 visitors each year. During peak season times in the summer, it is estimated that the County's population doubles to over 60,000. Hence, the visitor population has had and will continue to have a significant impact on waste generation in the County.

#### **Employment**

Garrett County is continuing to transition from an economy based on agriculture and natural resource extraction (timber, minerals, etc.) to a more diversified economy based on numerous industries. Although agriculture and natural resource extraction will remain an important part of the County's economy, their impact on the economy is expected to decline in the future. Information technology-based industries plus the tourism/hospitality/recreation and retail

business bases are expected to grow significantly over the next decade. *Exhibit 2-5* indicates the distribution of employment in Garrett County.

**EXHIBIT 2-5: 2012 EMPLOYMENT DISTRIBUTION** 

	Annual	
Industry	Employment	Percent
Government		
Federal	65	0.6%
State	246	2.2%
Local	1,414	12.4%
Private Sector		
Natural Resources and Mining	470	4.1%
Construction	781	6.8%
Manufacturing	1,054	9.2%
Trade, Transportation, and Utilities	2,417	21.1%
Information Technologies	194	1.7%
Financial Activities	482	4.2%
Professional and Business Services	751	6.6%
Education and Health Services	1,658	14.5%
Leisure and Hospitality	1,614	14.1%
Other Services	289	2.5%
Includes civillian employment only		
Total	11,435	100%

Source: Maryland Department of Labor, Licensing, and Regulation, Office of

Labor Market Analysis and Information

#### Zoning Classifications and Land Use in Garrett County

The policies and standards developed in the 2008 Garrett County Comprehensive Plan have been a positive influence on development patterns, property values, and quality of growth in the County, Deep Creek Lake and Watershed Areas. It is expected that existing policies will continue to favorably guide growth in the foreseeable future.

Zoning classifications and land use in the County are divided into 12 categories and described below:

#### Rural

Rural (R) areas comprise approximately 21 percent of the County. The County's intent for Rural areas is to accommodate a wide range and variety of rural residential and non-residential uses at low densities, while maintaining open space and rural character. The R category also includes some small scattered areas of agricultural land, forest land and commercial development.

#### Lake Residential 1

Lake residential land use is split into two new classifications: Lake Residential 1 (LR1) and Lake Residential 2

(LR2). The Lake Residential areas accommodate relatively low density residential and other open space, low intensity uses. Residential development is permitted at an average density of at least one acre per dwelling unit, regardless of the type of construction used (single-family homes, townhouses, apartments, etc.). Continued farming and forest management are also encouraged as additional ways to keep land in low intensity uses and achieve a low overall density of population. Other additional land-based recreation facilities such as private, family-vacation farms are allowed (by special exception) to help reduce the pressures for recreational use of the water surface. More than 90 percent of properties along the shoreline are zoned, Lake Residential, and single family residences are the predominant type of development in this district.

#### Lake Residential 2

LR2 land includes areas currently designated LR1 that falls outside of existing or future public sewer service boundaries. Residential development is permitted at an average of two acres per dwelling unit.

#### Suburban Residential

Suburban Residential (SR) areas are intended to accommodate medium density residential development, with lot sizes of at least 20,000 square feet for properties with public water and sewer service (larger lot sizes if served by on-site wells and wastewater systems). Approximately 4,748 acres are in the SR category, equivalent to slightly more than one percent of the County. SR areas are located in several areas of the County, outside many of the incorporated towns and

some of the rural villages. No areas within the Deep Creek Watershed are in the SR category, although the area east of Garrett College, north and south of Mosser Road (in the Bear Creek watershed) is designated SR.

#### **Town Residential**

Town Residential (TR) areas provide for higher density, more compact development near incorporated towns, villages (such as Bittinger and Swanton), and other places such as McHenry, and Thayerville. Development densities in TR areas are up to eight multi-family dwelling units per acre and approximately four to five single-family dwelling units per acre in areas served by public water and sewer. Minimum lot sizes are 8,000 to 10,000 square feet, or larger if served by on-site wells and wastewater systems. TR areas can accommodate a mix of housing types, including single family detached, townhouses, and apartments. Approximately 4,815 acres are in the TR category, equivalent to slightly more than one percent of the County.

#### **Town Center**

Town Center (TC) areas also provide for higher density, more compact development. The largest TC areas are in the Deep Creek watershed along US 219, especially in McHenry and Thayerville. Other TC areas are near some of the incorporated towns and in rural villages. TC areas are intended to be served by both public water and sewer. Development densities in TC areas are typically five to six dwelling units per acre, but can go up to nine units per acre. TC areas, like TR areas, can accommodate a mix of housing types including single family detached, townhouses, and apartments. TC areas, unlike TR areas, are mixed use areas where a variety of retail, service, and commercial uses can be intermixed with residential uses.

#### **General Commercial**

General Commercial (GC) areas provide for retail, service, commercial, and some light industrial uses including large businesses such as warehouses, service stations, and lumberyards. Because such uses are frequently highway-oriented and can generate vehicle traffic, noise, and glare, residential uses are discouraged in GC areas. There are approximately 14 GC areas in the County, including four areas near Oakland and Mountain Lake Park, two near Thayerville, and several near the interchanges along I-68 and on US 40 (alt).

#### **Commercial Resort**

Commercial Resort (CR) areas provide for commercial recreation uses and supporting commercial uses and residential development, such as the Wisp Resort and the Garrett County Fairgrounds and nearby land. CR areas promote resort-type light commercial uses and family recreation, as opposed to the highway-oriented uses that GC areas accommodate. CR areas are designated only in the Deep Creek Watershed. The Deep Creek Watershed zoning ordinance distinguishes two types of CR: CR1 provides for visitor oriented commercial development only, while CR2 which emphasizes land-based family oriented commercial development, as well as low density residential development.

#### **Employment Center**

Employment Center (EC) areas provide for business, manufacturing, and industrial economic development uses with varying land use requirements. EC areas are located at strategic points in the County, with the intent of providing a business park or campus type settings near major highways, with access to public water and sewer services, and where there will be minimal adverse effects on adjoining land uses. Three other employment areas are the industrial parks located in the incorporated towns of Oakland, Accident, and Grantsville.

#### **Incorporated Towns**

Incorporated towns have their own planning authority and adopt their own comprehensive plans.

#### **Future Growth Area**

Future Growth Areas (FGA) are areas that the incorporated towns have identified for future annexation. FGAs are displayed as cross-hatched areas on top of land classifications. The underlying land classifications reflect the County's intended land uses for the FGAs (or the Town's intended land use, where the Towns' intent was expressed), and will apply until the area in question is annexed, at which time the land classification may change. As the towns complete their plans, the location and size of FGAs may change.

#### Rural Villages

The 2008 Garrett County Comprehensive Plan recognizes the following 11 rural villages as growth areas:

- Bittinger
- Bloomington
- Crellin
- Finzel
- Gorman
- Hoyes Run
- Hutton
- Jennings
- Sang Run
- Shallmar
- Swanton

#### Watershed Land Use Plans

In Chapter 3: Land Use of the 2008 Garrett County Comprehensive Plan, the chapter details the watershed locations in Garrett County. The Land Use Plan emphasizes resource land conservation and further classifies the location of each Watershed in Garrett County. There are

nine planning area watersheds; seven major watersheds, plus two subareas within the Youghiogheny River watershed—Bear Creek and Southern Youghiogheny.

**EXHIBIT 2-6: MUNICIPALITIES' COMPREHENSIVE LAND USE PLANS** 

Town Name	Plan Update	Solid Waste & Recycling Goals in Land Use Plan
Accident	September 2009	None, but may update in future plans
Deer Park	Unknown	None
Grantsville	2009	Yes
Mtn. Lake Park	July 2003	None
Loch Lynn	August 2009	None
Kitzmiller	2004	None
Friendsville	2009	None
Oakland	September 2009	None

# CHAPTER 3 EXISTING SOLID WASTE MANAGEMENT AND RECYCLING SYSTEM

#### INTRODUCTION

The existing Garrett County solid waste management system includes one sanitary landfill, six refuse & recycling sites, a combination of public and private collectors of solid waste and recyclables materials, and source reduction and recycling programs. This Chapter describes the existing Garrett County solid waste management and recycling practices and provides a platform for implementation of an integrated solid waste management program for the County.

#### WASTE GENERATION

Solid waste is generated in Garrett County through the activities of residents, businesses, industries, and institutions. Section 26.03.03.03D of COMAR requires this Plan identify and quantify existing and projected solid waste generated within the County for the following waste categories:

- Residential waste (household, domestic)
- Commercial waste
- Industrial solids, liquids, and sludges (nonhazardous)
- Institutional waste
  - Schools
  - Hospitals
  - Government facilities
- Construction, demolition, and land clearing debris (CDL)
- Controlled hazardous substances (CHS)
- Dead animals
- Bulky or special waste
  - Automobiles
  - White goods
  - Other
- Scrap tires
- Wastewater treatment plant sludges
- Septage
- Other wastes
  - Pollution control device residue
  - Agricultural wastes
  - Mining waste
  - Litter
  - Street sweeping debris
  - Recreational waste

As discussed in *Chapter 1*, the Department of Solid Waste and Recycling is responsible for waste collection from the County-operated Refuse & Recycling Sites and day-to-day operation of the Garrett County Solid Waste Disposal and Recycling Facility, also known as the County Landfill. All eight incorporated municipalities either contract with a private hauler or provide their own municipal workers to collect waste from town residents and select businesses. County residents that do not live within a municipality and commercial businesses, are responsible for disposing of their own waste, either by contracting with private haulers or self-hauling their waste to one of the Refuse & Recycling Sites or the County Landfill. Garrett County prohibits the disposal of out-of-County waste at the County Landfill. It is expected that most, if not all, of the waste generated in the County is disposed of at the County Landfill due to the low tipping fee and the distance to other landfills in the region.

#### **Historic Waste Quantities**

Prior to the opening of the County Landfill in August 1994, waste generated in Garrett County went to the Round Glade Landfill, located adjacent to the current County Landfill. Round Glade ceased operation in 1994. Because the facility did not have a scale house to weigh incoming material; there is little historical data on the quantity or type of waste delivered. The present County Landfill has scales; accordingly, weight data is available from 1994 to the present. Data from the current County Landfill combined with the County's population growth estimates, will be used to project waste quantities generated for the succeeding ten-year period.

Within the past decade, there has been substantial development in the County. Many vacation and second homes have been built. However, this is a trend that will likely slow down.

Exhibit 3-1 presents the annual waste generated in Garrett County. The table shows existing and projected waste generation totals in the categories of residential, commercial, industrial, institutional, demolition, land clearing, controlled hazardous substance (CHS), dead animal, bulk or special waste, vehicle tires, wastewater treatment plant sludges and septage wastes. The table spans for the calendar years 2012 to 2024.

It projects a moderate increase in residential, commercial and demolition waste. It also indicates a steady increase in the amount of controlled hazardous substances generated in the County. These companies generating more than 220 pounds (110 kg) of CHS in a year are required to report biannually to the Maryland Department of the Environment (MDE). Businesses generating less than 220 pounds (small quantity generators) are not required to report. Therefore, only quantities generated by large generators are on file at MDE.

### Exhibit 3-1 2012 Annual Waste Generation in Garrett County<sup>1</sup>

2016-2024 Waste Projections

	Annual Generation (Tons)				
Waste Category	2012 (Actual)	2016	2020	2024	
Residential	10,678	11,108	11,753	12,454	
Commercial	11,703	12,175	12,882	13,650	
Mixed	10	10	11	12	
Industrial (solids, liquid, etc.)	0	0	0	0	
Institutional (schools, hospitals etc.)	0	0	0	0	
Demolition Debris (rubble)	6,438	6,698	7,087	7,509	
Land Clearing	800	832	881	933	
Controlled Hazardous Substance (CHS)	61	64	68	72	
Dead Animals	0	0	0	0	
Bulky or Special Waste	0	0	0	0	
Vehicle Tires	0	0	0	0	
Wastewater Treatment Plant Sludges	0	275	330	389	
Septage	0	0	0	0	
Total MRA & NON MRA Waste Disposed	29,690	31,162	33,012	35,019	
Total MRA and NON MRA Recyclables	22,120	22,672	23,950	25,337	
Total <sup>2</sup> Waste Generation	51,810	53,834	56,962	60,356	

<sup>&</sup>lt;sup>1</sup> Source: Garrett County Solid Waste Tonnage Report for Calendar Year 2013

<sup>&</sup>lt;sup>2</sup> Source: Subtotals May Not be Exact Due to Rounding.

#### **EXISTING AND PROJECTED WASTE STREAMS**

This section presents a description of the existing solid waste stream and projections based upon historical data. Waste projections are presented in *Exhibit 3-1* for the years 2012 -2024 and are discussed in the subsequent sections.

The existing and projected waste streams are based on three generating sources: residential population, commercial businesses and the number of visitors to the County. The permanent residential population is projected to increase slightly over the next ten years. Assuming per capita waste generation remains consistent; the quantities of waste generated by permanent residents will increase accordingly. Trends and data do not support a large increase in waste generation by visitors and second homeowners and is likely to remain consistent over the next ten years.

#### Residential Waste

Residential waste is generated from single and multi-family households. In Garrett County, residential waste is collected from households through a combination of curbside service, provided by either municipal or private haulers, or self-hauling to refuse & recycling sites or the County Landfill.

Other types of "residential waste" such as dead animals, household hazardous waste (HHW), bulky wastes, and scrap tires are discussed later in this Chapter.

#### Commercial/Industrial Waste

For the purposes of this Plan, commercial waste is defined as waste generated by privately owned commercial businesses and industries (non-hazardous solid, liquid, or semi-liquid waste). Waste brought to the County Landfill from commercial businesses and light industries is reported under the Commercial Waste category in *Exhibit 3-1*. Typically, these businesses contract with private haulers for collection and disposal of waste, although a limited amount is self-hauled to the County Landfill. In either case, most, if not all, commercial waste goes to the County Landfill.

#### Institutional Waste

Institutional waste includes waste generated by facilities such as hospitals, schools, federal, state, and county government facilities and offices. The majority of institutional waste generated in Garrett County is collected and disposed of at the County Landfill by private haulers. Municipal employees from the incorporated towns collect from certain institutional sources such as municipal buildings, churches, and street cans. Some smaller County agencies use their own vehicles to haul waste to the County Landfill.

# Construction, Demolition, and Land Clearing Debris (CDL)

Construction, demolition, and land clearing debris (CDL) waste quantities have been increasing as the County grows in popularity as a vacation area. The three waste types as defined in COMAR are:

- Construction waste is solid waste produced or generated during construction of structures. Construction wastes includes: cement, concrete, bricks (excluding refractory type), lumber, plaster and plasterboard, insulation, shingles, floor, wall and ceiling tile, pipes, glass, wires, carpet, wallpaper, roofing, felt, or other structural fabrics. Paper or cardboard packaging, spacing, or building materials, and paint, caulk, or glaze containers (empty).
- Demolition waste refers to waste associated with the razing of buildings, roads, bridges, and other structures including structural steel, concrete, bricks (excluding refractory type), lumber, plaster and plasterboard, insulation material, cement, shingles and roofing material, floor and wall tile, asphalt, pipes and wires, and other items physically attached to the structure, including appliances if they have been or will be compacted to their smallest practical volume.
- Land clearing debris consists of topsoil, tree stumps, root mats, brush and limbs, logs, vegetation, rock.

Until June 2001, the County Landfill operated an unlined area designated for CDL disposal. At that time, MDE regulations were promulgated that required CDL to be disposed of in a lined landfill cell. The CDL area was closed and now CDL is mixed with other refuse in the municipal cell.

CDL debris generation has fluctuated widely over the past several years. Factors affecting CDL disposal rates include:

- CDL debris processed and/or used at the source of generation (e.g., grinding stumps, chipping and using on-site, grading using rubble as fill, or burning of material on-site); and
- CDL debris mixed in with the commercial waste stream during the collection process.

# Controlled Hazardous Substances (CHS)

Controlled hazardous substances (CHS) are generated by businesses, industry, and institutions through industrial and manufacturing processes. Businesses that generate CHS can range from automotive shops to industrial manufacturing operations. CHS are defined by COMAR 26.13.02.03 as causing or significantly contributing to an increase in mortality; an increase in

serious irreversible, incapacitating illness; or pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed.

CHS generators must obtain an EPA identification number. Since there are no hazardous waste disposal facilities in Garrett County, generators must contract with out-of-County facilities for the treatment, storage, and disposal of CHS and must ensure that all shipments of CHS sent off-site are accompanied by an EPA Uniform Hazardous Waste Manifest.

MDE requires businesses generating more than 220 pounds (110kg) of CHS in a year to report biannually. Businesses generating less than 220 pounds (small quantity generators) are not required to report. Therefore, only quantities generated by large generators are on file at MDE. The types of CHS generated in the County are highly variable. According to MDE records, approximately 61 tons of CHS were disposed of by large quantity generators in Garrett County during 2011 (the last reporting year).

#### Medical (Infectious) Waste--

Medical waste is generated in the County by the hospital, clinics, nursing facilities, and other medical facilities. It is composed of anatomical material, blood, blood-soiled articles, microbiological laboratory waste or sharps, and contaminated material. Medical wastes are classified as CHS and are subject to the provisions of COMAR 26.13.11.

The County Landfill is not permitted for disposal of medical waste. All medical waste must be handled, stored, collected, transported, processed, and/or disposed of by a licensed operator. There are no permitted medical waste disposal facilities in Garrett County; thus, all regulated medical waste is disposed of out-of-County. Medical waste quantities are not included in reported CHS quantities.

#### Household Hazardous Waste--

Certain types of hazardous waste generated by residential households are not considered to be CHS and are exempt from federal and state laws and regulations. These wastes are classified as household hazardous waste (HHW) and can include waste paints, organic solvents, household cleaners, lead-acid batteries, and pesticides. Although the County has no formal HHW program, the County partners with MES for the collection of used motor oil, oil & transmission filters and antifreeze at all of the Refuse & Recycling sites and the County Landfill (excluding the Friendsville Refuse & Recycling Site).

In 2012, 18.81 tons of used motor oil and just over one-half ton of antifreeze were collected from the County's Refuse & Recycling Sites. The oil and transmission filter recycling program started as a pilot program at the Garrett Highway Refuse & Recycling Site. Due to its' popularity with the residents and businesses in Garrett County, the program was extended to include all of the sites that accept motor oil and antifreeze. Because this material is collected and managed by MES, it is not included in waste quantities listed in *Exhibit 3-1*. Since there are no processing facilities located in the County, it is assumed that all used motor oil, filters and antifreeze

generated from commercial businesses (service stations, salvage yards, etc.) is sent out-of-county for disposal/recycling by private licensed haulers.

Other types of HHW, such as oil-based paints, solvents, swimming pool chemicals, pesticides, and lawn care products are mixed with MSW by the household residents or businesses and disposed of at the County Landfill as residential or commercial waste.

#### **Dead Animals**

Dead animals can be generated by a variety of means, such as natural causes, being struck by vehicles along roadways, or euthanized from animal shelters and clinics. Dead animals include livestock from farms, domestic animals, and wild animals. The County Landfill is permitted to accept dead animals.

The Garrett County Roads Department is responsible for removing dead animals from County roadways, while the Maryland State Highway Administration is responsible for removing them from State roadways. Both departments bury the dead animals within the road rights-of-way. If animals are found close to the County Landfill, they are taken there for disposal. Deer found on State roadways are taken to a "deer pit" located on State Highway property. Dead livestock are buried on farms.

Dead animals from veterinary clinics and hospitals are collected by private haulers and transported out-of-County or State for proper disposal. Some animals from the County Animal Shelter are sent to the County Landfill, while others are collected by private haulers. Since reporting by businesses and farms is not mandatory, quantities of dead animals are not available. Dead animal quantities delivered to the County Landfill are included in the residential and commercial waste categories in *Exhibit 3-1*.

# **Bulky or Special Wastes**

Bulky wastes consist of items such as furniture, mattresses/boxsprings, appliances, and other large items not contained in waste bags. Bulky items may be collected by a private waste hauler or self-hauled by the generator to a disposal facility. Refuse & Recycling Sites can handle small quantities of bulky waste; however, large items such as furniture and mattresses are typically taken to the County Landfill for disposal. Metal items may be taken directly to a private scrap yard by the generator.

White goods delivered to the County Landfill that contain refrigerants are first aggregated in a special area. These items must have refrigerants removed before transporting to various markets such as scrap metal dealers. Quantities of these appliances are included in *Exhibit 3-1*.

Vehicles can be disposed of at scrap yards, donated to a charitable organization, or traded in when purchasing a new vehicle. The Sheriff's Department uses licensed towing companies to tow abandoned vehicles to holding facilities. Some vehicles are reclaimed by their owners, but unclaimed vehicles are disposed of at a scrap yard. It is not possible to obtain quantities of automobiles, buses, and trucks that are discarded in Garrett County because vehicles can be

stored for a period of time at scrap processing yards to provide parts or delivered to out-of-county sites for recycling (e.g., for shredding, shearing, or baling for metal feedstock into steel mills, or to dismantlers).

Once a year, the Garrett County Commissioners grant an Amnesty Day a "Spring Clean Up" in which all tipping fees are waived. This allows municipalities the ability to drop off larger items for disposal or recycling; items normally not collected at the curb by municipal workers or private haulers. During this Amnesty Day (or Spring Clean Up), residents are encouraged to take advantage of the free disposal and pick up services offered by their municipality. Throughout the "Spring Clean Up" the County receives significant quantities of bulk materials, construction debris and materials that are either disposed of or recycled.

# **Scrap Tires**

Scrap tires are generated by passenger cars, trucks, or farm equipment. Often scrap tires are accumulated by commercial businesses that sell or change tires. Scrap tires generated in Garrett County may be taken to the County Landfill. Tires are prohibited from being disposed of at any of the Refuse & Recycling Sites, but may be taken to the Landfill for drop-off. There are no scrap tire processing facilities located in the County. The County contracts with a private hauler for the transport of vehicle tires to an appropriate disposal facility. Currently, the tires are transported to a monofill in West Virginia.

Commercial tires may be collected by licensed haulers. In 2012 there were approximately 25 licensed scrap tire locations throughout Garrett County where tires are collected and stored. In the same year, approximately 17 tons of tires were collected at the County Landfill and transported out-of-County for disposal. Approximately 1,485 tons of scrap tires were reported to the County as disposed of by commercial businesses in 2012.

#### Sludge

# Wastewater Treatment Plant Sludge--

Sewage sludge, also known as biosolids, is one of the final products of the treatment of sewage at a wastewater treatment plant. Sewage sludge from the Friendsville, Bloomington, Kitzmiller, and McHenry wastewater treatment plants is permitted for land application on approximately 286 acres within Garrett County.

Gorman, Deer Park and Crellin have class 2 sand filter treatment plants that do not generate any sewage sludge on site. Each home in Gorman, Deer Park and Crellin have septic tanks that catch the solids, the effluent from these septic tanks flows to the treatment plants. The septic tanks are pumped and maintained by Public Utilities personnel and hauled to the Septage Receiving Facility at Deep Creek Lake Wastewater Treatment Plant.

County currently receives sewage sludge for land application from the Grantsville and Deep Creek treatment plants. The Garrett County Health Department and MDE review sludge permit applications for compliance with county policies and other rules and regulations. The amount of sludge from these treatment plants could increase from 25 - 50 percent over the next few years due to the increasing visitor population.

#### **Septage**

Septage is material generated and removed from septic tanks, sewer lines, privies, chemical toilets, and cesspools. Twenty-five percent of County residents are on public septage while seventy-five percent are on septic systems. Septage is also generated from state park public facilities. Septic systems are typically cleaned out approximately every three years by a licensed private hauler who pumps the tank out and delivers the septage for processing and treatment to the Deep Creek Lake Wastewater Treatment Facility. The County Environmental Health Services office (within the Garret County Health Department) and MDE regulate the collection and disposal of septage. All septage must be treated at a permitted wastewater treatment plant. Since septage is mixed with wastewater treatment sludge, separate quantities of septage is unknown.

# **Other Wastes**

#### Asbestos--

Asbestos is a naturally occurring mineral found in certain rock formations and was frequently used in piping, heating systems, and housing materials such as flooring, ceiling tiles, and siding. Since asbestos was found to be a hazardous air pollutant, it is no longer used for these applications. Waste asbestos is generated through renovation of old buildings and homes, either by a homeowner or commercial contractor. The County Landfill is permitted to take both friable and non-friable asbestos (non-friable asbestos is mixed with MSW). Written notice is not required by the resident/hauler/contractor, but it is strongly recommended that the resident/hauler/contractor notify the County Landfill ahead of time to discuss the type, quantity, and delivery time to the County Landfill. Friable asbestos must be packaged according to state rules, while non-friable should be handled to minimize crushing of the material. All materials are buried and covered immediately upon disposal. Asbestos quantities received at the County Landfill are included in the commercial waste category of *Exhibit 3-1*.

#### Air Pollution Control Device Residuals--

Currently there are no businesses in Garrett County that generate residuals from air pollution control devices. There have been no quantities received or recorded at the County Landfill.

# Agricultural Waste--

Many activities on farms produce agricultural waste, such as crop residuals, and livestock and poultry manure. Agricultural wastes are typically recycled on the farm where they are generated. For example, manure is used as fertilizer and organic debris is applied to farmland, or plowed under and injected directly into the farm fields. A farmer with excess quantities of manure can

give it to another farmer or apply it on neighboring fields. As a result, virtually no agricultural waste enters the collection waste stream or is disposed of at the County Landfill.

#### Mining Wastes--

Garrett County has had a long history of mining operations. These types of operations generate waste from quarries and surface mines where raw materials are extracted from the earth. Most of the mining waste is usually disposed of in an abandoned area where the mining was done. Incidental waste from mining operations not disposed of on-site is taken to the County Landfill. While it is assumed that the quantity of mining waste generated is insignificant, quantities of mining waste are included in the commercial waste category of *Exhibit 3-1*.

#### Litter--

Litter is loose, discarded waste that lands on public or private property. The wastes are usually small and are generally paper products, glass, or metals. For municipalities, State parks, and County Roads Departments, select employees are responsible for the collection of litter. This waste is typically taken to a dumpster and, once full, collected by a private hauler and taken to the County Landfill, where it is recorded as commercial waste. Litter brought to the County Landfill by municipal employees is recorded as residential waste. Because litter brought to the County Landfill is not tabulated separately, the quantity of litter cannot be determined. Litter has become an increasing problem in Garrett County due to the increase in the visitor population and construction activity.

Illegal dumping in the County does occur and has become an increasing problem that is being monitored carefully. Most illegal dumping is comprised of bulky waste and construction debris left on remote back roads. The property owner is responsible for cleanup. A significant quantity of illegal dumping occurs on state forest land where the roads are often inaccessible during winter months. The County waives the landfill tipping fee for State cleanups and community cleanups. Further discussion of litter is addressed in *Chapter 4*.

# Street Sweepings--

Street sweeping waste typically consists of small rocks, dirt, sand, dust, leaves, etc. The County Roads Department uses street sweepers to collect debris from County roadways and the unincorporated town of Bloomington. All debris collected is used as filler for ditches or abrasive on snow-covered roads. The County Roads Department does not record quantities of debris generated. Municipalities may either contract with a private company or use their own equipment to sweep their streets. The State Highway Administration contracts with a private contractor to clean state roadways in the County. It is the responsibility of the contractor to dispose of the debris collected. The State Highway Administration does not require the contractor to report tonnages. At times, the State's contractor has brought street sweepings to the County Landfill.

Street sweepings taken to the County Landfill, depending on the composition of the debris, may be recorded as clean fill material, contaminated soil, or commercial waste. Because the street sweeping debris is not usually delivered to the County Landfill separately from other types of waste, the quantity of street sweeping debris cannot be determined.

#### Recreational Waste--

Recreational waste is generated from visitors to State forests, parks and recreational facilities. As the number of tourists and vacationers increase, the amount of recreational waste will also increase. The majority of the waste generated at recreational facilities is collected by private haulers and disposed of at the County Landfill, where it is included in the commercial waste category. Since the waste is mixed with other commercial loads, the quantity of recreational waste is not measured.

#### WASTE IMPORTS AND EXPORTS

As mentioned earlier in this Plan, Garrett County prohibits the disposal of out-of-County waste at the County Landfill. Therefore, the majority of waste managed in Garrett County is generated by sources within the County and is typically either landfilled or exported out-of-County for further processing, recycling, or disposal. In accordance with COMAR 26.03.03D(3), types and quantities of waste imported into and exported from Garrett County are addressed in this section.

# **Imports**

There are several locally owned and operated automobile salvage and junkyards in the County. Materials typically accepted are scrap metals and automobiles that are generated by both County and non-County residents and businesses. Once the scrapped metals and automobiles have been separated and processed, the material is shipped out-of-county or out-of-state to various markets.

# **Exports**

The majority of the waste exported out-of-County is transported by private waste collectors and haulers. This limits the County's knowledge of the amount of waste exported since haulers are not required to report waste quantities to the County; therefore, the quantity and extent of waste export is unknown at this time.

#### Controlled Hazardous Substances (CHS)--

Since there are no CHS processing or disposal facilities located in the County, CHS are exported out-of-county for disposal. In 2011 (the last reporting year), approximately 61 tons of CHS was generated by large quantity generators in the County. Quantities of CHS generated by small quantity generators is unknown.

#### Medical Waste--

There are no medical waste processing or disposal facilities located in the County; all medical wastes collected from the hospital and other medical facilities are exported out-of-County for disposal. Quantities are unknown.

#### **Dead Animals--**

There are no rendering plants located in the County. Small quantities of dead animals are either disposed of at the County Landfill or buried along roadsides. The majority of dead animals from animal hospitals and veterinarian clinics are sent out-of-County for disposal. Quantities are unknown.

#### Recyclable Materials--

In 2012, the County documented nearly 19,724 tons of recyclable materials collected from both residential and commercial sources. These materials are reported on the MRA Report submitted to MDE and counted toward the County's overall recycling rate of 46.83%.

#### Tires--

Since January 1, 1994, Maryland law has prohibited the disposal of scrap tires in landfills. Since there are no tire processing facilities in Garrett County, scrap tires are apparently exported out-of-County for processing or disposal. Tires received at the County Landfill are sent to a monofill in West Virginia. In 2012, it is estimated that 17 tons of scrap tires were exported from the County Landfill.

#### Used Motor Oil, Transmission & Oil Filters and Antifreeze--

There are no processing facilities located in Garrett County for used motor oil, transmission and oil filters and antifreeze; therefore, all quantities received at the County Landfill, Bumble Bee Road, Grantsville, Kings Run, 135 and Garrett Highway Refuse & Recycling Sites are sent out-of-County for processing and recycling. Shelters or coverings were constructed over every collection area to keep water out and residents/businesses dry while recycling materials. All six Refuse & Recycling Sites have benefited from a Rain Shelter Grant awarded through the Maryland Environmental Service.

#### **EXISTING SOLID WASTE COLLECTION SYSTEMS**

# **Refuse Collection**

County residents either self-haul their waste to a disposal site or contract with a private hauler. Residents living in incorporated towns (and some businesses) are provided waste collection services by municipal programs or through a municipal contract with a private hauler. The rest of

the businesses must either self-haul their waste or contract with a private hauler for waste collection services.

#### Private Haulers--

Three refuse collection companies provide waste collection services to residents and businesses in the County:

- Sunrise Sanitation;
- Deep Creek Refuse, Inc.; and
- Perry's Solid Waste Disposal.

Cost for waste collection services varies depending on the quantity of waste collected, the collection frequency, and the location of the business or residence.

The majority of commercial businesses located throughout Garrett County contract with private haulers for refuse collection. Residents are increasingly using private haulers, especially in and around the Deep Creek Lake area. Haulers are not required to dispose of solid waste at the County Landfill, but generally do because of its proximity and low tipping fees.

# Municipal Programs--

The incorporated towns of Kitzmiller and Deer Park use municipal employees to provide residents with weekly curbside collection of solid waste. The incorporated towns of Accident, Grantsville, Mtn. Lake Park, Loch Lynn, and Oakland each have contracts with private haulers for weekly curbside collection of solid waste. The Town of Friendsville stopped weekly curbside collection of solid waste & recycling due to the cost associated with both services. The residents must self-haul their waste or contract with a private hauler for waste collection services. All waste is delivered to the County Landfill. *Exhibit 3-2* summarizes waste collection services for the incorporated towns. Residents typically are billed quarterly on their water and sewer bills for solid waste collection services.

**EXHIBIT 3-2: MUNICIPAL COLLECTION SERVICES** 

Incomparated	Collection	n Service	Monthly	
Incorporated Town	Municipal	Private	Collection	Name of Hauler
10WH	Employees		Cost 1	
Accident		X	\$1,647	Perry's Solid Waste Disposal
	X		Information	
Deer Park	Λ		Unavailable	Town of Deer Park
Friendsville	•			N/A
Granstville		X	\$2,050	Perry's Solid Waste Disposal
Kitzmiller	X		\$1,100	Town of Kitzmiller
Loch Lynn		X	\$1,573	Perry's Solid Waste Disposal
Mtn. Lake Park		X	\$6,281	Perry's Solid Waste Disposal
Oakland		X	\$5,525	Sunrise Sanitation

Source: Town Personnel

# Self-Hauling--

County residents have the option to haul their own waste to one of the six Refuse & Recycling Sites or the County Landfill. Self-hauling is the primary method to dispose of large bulky items such as furniture or appliances; municipal and private collection services do not provide this service on a regular basis.

# Refuse & Recycling Sites

Garrett County operates six Refuse & Recycling Sites, which are utilized by County residents, property owners and visitors. These sites are available for disposal of normal household waste or other small loads of discarded items and for recyclables. Waste brought to the Refuse & Recycling Sites is aggregated in roll-off containers and transported to the County Landfill by Perry's Solid Waste Disposal (the County's contract hauler).

Exhibit 3-3 shows the location of the Refuse & Recycling Sites. Sites are open Monday through Friday from 7:00 am to 6:00 pm, Saturday from 9:00 am to 6:00 pm, and Sunday from 12:00 pm to 6:00 pm. Sites are closed on five holidays (New Year's Day, Easter, Independence Day, Thanksgiving Day, and Christmas Day).

Certain materials are not accepted at the Refuse & Recycling Sites, but may be taken to the County Landfill for disposal. Materials not accepted are:

• Construction debris (even if it is from remodeling a portion of a home);

Monthly refuse collection costs are for once per week collection

- Commercial waste (including home businesses);
- Brush, leaves, grass clippings, or other yard debris;
- Scrap Tires; and
- Refrigerators, freezers, or air conditioners

Water heaters, dishwashers, or other large appliances are accepted at the Bumble Bee, Garrett Highway, Grantsville, Kings Run and 135 Refuse & Recycling Site for the price of a bulk item sticker; or taken to the County Landfill where a tipping fee is charged. Bulk item stickers are discussed further in this section. Refrigerators, freezers, air conditioners and dehumidifiers are accepted at the County Landfill for a fee of \$10.

Liquid waste, lead-acid batteries, propane tanks, and hazardous waste are not accepted at any of the Refuse & Recycling Sites or the County Landfill.

In 2012, approximately 6,320.27 tons of waste was disposed through the Refuse & Recycling Sites. This constitutes approximately 21 percent of all waste delivered to the County Landfill and approximately 59 percent of municipal solid waste. This waste was delivered to the County Landfill in both compacting and open-top containers. In 2012, there were 1,059 pulls made by the County's contractor to transport this waste to the County Landfill. Since 2004, there has not been any remarkable increasing or decreasing trends in the waste quantities delivered to the individual Refuse & Recycling Sites.

In order to dispose of household waste at the Refuse & Recycling Sites or the County Landfill, residents must display a refuse site permit on their windshield or purchase individual bag stickers; both are described in *Refuse Site Permit Programs*.

PENNSYLVANIA **WEST VIRGINIA** Landfill: Summer (April 15 - November 15) Hours of Operation are 8:00 a.m. - 3:30 p.m. Mon. - Fri.; riendsville Saturday 8:00 a.m. - 3:30 p.m., Main Cell closes at 2:30 p.m. Winter (November 16 - April 14) Hours of Operation are 8:00 a.m. - 3:30 p.m. Mon. - Fri., 8:00 a.m. - 12:00 p.m. Saturdays - Scales are Accident closed, Landfill closed Sundays and the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day Refuse Site Locations: Hours of Operation are 7:00 a.m. - 6:00 p.m., Monday - Friday; 9:00 a.m. - 6:00 p.m., Saturday; and 12:00 p.m. - 6:00 p.m. Sundays. The refuse sites are closed on the following holidays: New Year's Day, Easter Sunday, Independence Day, Thanksgiving Day and Christmas Day. Refuse Disposal Sites Lynn & Garrett County Office of Heights Solid Waste & Recycling 1 in = 4 miles Kings Run / Mt. Nebo Site - 1631 Kings Run Road 1/4 mile North of Oakland on Kings Run Road Garrett Highway - 10180 Garrett Highway 1 mile South of Oakland on Rt. 219 Backbone Mt. / Rt. 135 Site - 12091 Maryland Hwy 1/2 mile West of Swanton Rd (Rt. 495) on Rt. 135 Bumble Bee Road - 1367 Bumble Bee Rd 1 1/2 miles East of Garrett College on Bumble Bee Rd Friendsville - 8397 Friendsville Road 3/4 mile Northwest of Friendsville on Rt. 42 Grantsville - 13168 National Pike 1/4 mile East of Rt. 219N on Rt. 40 Garrett County Landfill - 3118 Oakland Sang Run Road 3 1/2 miles North of Oakland on Oakland Sang Run Rd

**EXHIBIT 3-3: LOCATION OF REFUSE COLLECTION SITES** 

# Refuse Site Permit Program--

County residents may purchase refuse site permits that allow disposal of household waste at any of the six Refuse & Recycling Sites or the County Landfill during normal operating hours. The permits must be permanently affixed to the inside windshield on the lower corner of the passenger side to allow access to the sites. Cost of the permit is \$50.00 for each vehicle. Applicants may be required to show proof of maintaining a household within Garrett County. An application must be completed and approved by the Department of Solid Waste and Recycling before receiving the sticker. Permits are available October 1 of each year and are valid through the following calendar year.

# Individual Bag Stickers--

Without a permitted refuse site sticker, County residents or visitors creating trash in Garrett County, may dispose of household waste at any of the Refuse & Recycling Sites or County Landfill by purchasing individual bag stickers. The cost is \$0.50 per sticker and may be purchased in any quantity. Each sticker allows you to dispose of one 13-gallon trash bag; two stickers are required for bags larger than 13 gallons. Residents or visitors to Garrett County may purchase the stickers at any of the Refuse & Recycling Sites, the County Landfill, or at selected retail locations. *Appendix A* contains a list of the selected retail locations.

#### **Bulk Item Stickers--**

Since Garrett County does not provide bulk collection services, all residents must either contract with a private hauler for collection and disposal of bulk items or self-haul to any of the Refuse & Recycling Sites or the County Landfill. Each bulk item must have a bulk sticker affixed to it. The cost is \$5.00 per sticker, and can be purchased at the Bumble Bee, Garrett Highway, Grantsville, Kings Run and 135 (Backbone Mtn.) Refuse & Recycling Site or at selected retail locations (see Appendix A). The Refuse & Recycling Sites, with the exception of the Friendsville site, accept bulk items such as water heaters, stoves, washers, dryers, etc. Bulk items taken to the County Landfill do not need a bulk sticker, but the resident is charged for the weight of the bulk item. Large appliances DO NOT need to be dismantled. Freezers, refrigerators, dehumidifiers, and air conditioners (items that may contain Freon) are accepted at the County Landfill location only, for a fee of \$10. Please DO NOT cut the lines on these appliances. Operators on site check the appliances for Freon.

#### Recyclables Collection

Recyclables generated by County residents, businesses and visitors are either self-hauled to one of the Refuse & Recycling Sites or the County Landfill or collected by private haulers contracted for collection services. The residents & businesses in incorporated towns are provided collection services either through contracted private haulers or municipal workers. Most businesses must either self-haul their recyclables or contract with a private hauler for collection and disposal services.

Garrett County provides a voluntary Recycling Program to all residents, businesses and visitors. In Garrett County all residents, businesses and visitors are encouraged to bring recyclables to any of the Refuse and Recycling Sites or the County Landfill. Refuse Site Permits and individual bag stickers are not required for those who bring only recyclable materials to any of the Refuse & Recycling Sites or the County Landfill.

# **Municipal Programs--**

Collection of designated recyclables is provided to select municipalities by town personnel. Recyclables are taken to the closest Refuse & Recycling Site or the County Landfill. Accident, Grantsville and Kitzmiller, have been participating in limited curbside recycling programs.

The Garrett County Department of Solid Waste and Recycling has implemented a County Facilities Recycling Program which reaches several County government offices. Office paper, newspaper, magazines, cardboard and aluminum cans are collected by personnel from the Department of Facilities & Maintenance. All recyclables collected go to either the recycling drop-off area at the County Landfill or to one of the Refuse & Recycling Sites.

#### Self-Hauling--

Residents, businesses and visitors may self-haul recyclables to the recycling drop-off center at the County Landfill or one of the Refuse & Recycling Sites at no charge.

#### RECYCLING PROGRAM

#### **Historic Recycling Quantities**

In 1985, Garrett County initiated a Recycling Program. The County's goal to recycle at least 20 percent of the generated waste stream, stated in *Chapter 1* of this Plan, has been met for several years. Garrett County has implemented a Recycling and Waste Reduction Program which satisfies the requirements of the Maryland Recycling Act.

Exhibit 3-4 presents historical quantities of residential MRA recycled materials collected in Garrett County from calendar years 2010 to 2012. Residential recycling quantities have remained relatively consistent over the last three years. A slight increase in compost & mulch materials recycled may be attributed to devastation the County experienced after Storm Sandy. Many homeowners took advantage of a waived tipping fee for yard waste, brush and wood waste. Also identified is a rise in plastic recycling.

EXHIBIT 3-4: HISTORICAL RESIDENTIAL RECYCLING QUANTITIES1

Pooveling Cotegowies	Year					
Recycling Categories	2010	2011	<b>2012</b> -			
Metals <sup>2</sup>	40	30	22			
Paper <sup>3</sup>	397	353	327			
Compost/Mulch <sup>4</sup>	166	181	233			
Plastic 5	46	35	44			
Glass <sup>6</sup>	144	156	143			
Other <sup>7</sup>			42			
Total	85 <b>878</b>	57812	811			

- Source data from 2000-2002 MRA reports.
- <sup>2</sup> Includes aluminum cans, mixed cans, tin/steel cans, batteries & white goods.
- Includes newspaper, old corrugated cardboard, office/computer paper, magazines, mixed paper, and other paper.
- Includes grass, leaves, brush and branches, mixed yard waste, sawdust wood waste, solid waste compost, pallets, and Christmas trees.
- Includes mixed plastic, PET containers (#1), HDPE containers (#2), and other.
- <sup>6</sup> Includes mixed glass, brown glass, green glass, and clear glass.
- Includes rendering waste, textiles/cloth, toner cartridges, tires, tires to cement kilns, electronics, litho-plates, fluorescent bulbs, oil filters, cameras/canisters.

Exhibit 3-5 presents historical quantities of commercial MRA recycled materials generated in Garrett County from calendar years 2010 to 2012. The quantities of compost and mulch materials recycled in the commercial sector remained constant over the three-year period. The amount of glass recycled, decreased possibly due to economic factors. The ski resort area reported less glass recycled, as did the local company that manufactures specialty glass.

EXHIBIT 3-5: HISTORICAL COMMERCIAL RECYCLING QUANTITIES1

Passeling Catagories	Year					
Recycling Categories	2010	2011	2012			
Metals <sup>2</sup>	930	680	553			
Paper <sup>3</sup>	1,788	1,824	1,574			
Compost/Mulch <sup>4</sup>	12,659	16,953	15,035			
Plastic <sup>5</sup>	61	85	64			
Glass <sup>6</sup>	77	80	51			
Other <sup>7</sup>	1,849	1,975	1,778			
Total	17,364	21,597	19,055			

- Source data from 2000-2002 MRA reports.
- <sup>2</sup> Includes aluminum cans, mixed cans, tin/steel cans, white goods and batteries.
- Includes newspaper, old corrugated cardboard, office/computer paper, magazines, mixed paper, and other paper.
- Includes grass, leaves, brush and branches, mixed yard waste, wood waste, sawdust, solid waste compost, pallets, and Christmas trees.
- Includes mixed plastic, PET containers (#1), HDPE containers (#2), and other.
- 6 Includes mixed glass, brown glass, green glass, and clear glass.
- Includes rendering waste, textiles/cloth, toner cartridges, tires, tires to cement kilns, litho-plates, oil filters, fluorescent bulbs, electronics & cameras/canisters.

#### **Program Performance**

In 2012, Garrett County's recycling rate was 46.83% with a source reduction rate of 47.83%. The Garrett County Recycling Program has an average recycling rate of 48% over the last five years. According to the Maryland Recycling Act of 1988, Garrett County is required to reach and maintain a recycling rate of 20% based upon a population fewer than 150,000 residents. Garrett County consistency maintains and/or exceeds the recycling rate requirements.

# Refuse & Recycling Sites

Exhibit 3-6 shows the types of recyclable materials accepted at each of the Refuse & Recycling Sites and the County Landfill. Residents, businesses and visitors are encouraged to drop off recyclables at any of the locations free of charge. A refuse site permit is not required to participate in the Recycling Program.

EXHIBIT 3-6: RECYCLABLE MATERIALS ACCEPTED AT THE REFUSE & RECYCLING SITES

	TYPE OF MATERIALS ACCEPTED*											
NAME OF SITE	.vews-	Office Paper	Cardboard	Metal	Aluminu Cans	Whit Goods	Plastic		Glas	Oil, Filters Antifreeze	Yard Waste	Mags.
							#1	#2	1		æ	
Kings Run Road	X	X	[ X	X	X	X	X	X	X	x		X
Garrett Hwy.	X	X	X	X	X	X	X	х	X	х		X
135, Backbone Mountain	X		X	X	X	X			X	X		
Bumble Bee Road	X	Х	Х	X	X	х	X	X	X	х		Х
Friendsville	X		x	X	X				x			
Grantsville	X	х	Х	X	X	Х	X	х	X	X		Х
County Landfill	x	X	X	X	Х	Х	X	X	X	х	Х	х

In 2012, approximately 735 tons of recyclable material was delivered to the Refuse & Recycling Sites. *Exhibit 3-7* displays total annual recycling quantities delivered to each Refuse & Recycling Site. The only remarkable trend is seen in 2011 and 2012. There is an overall decrease in the amount of materials delivered to the Refuse & Recycling sites. After the recession in 2008 and 2009, businesses and individuals took their recyclables directly to market to receive funds for their materials and their efforts. This occurred in response to a difficult recovery time in the economy.

# Materials Exchange Program (Swap Shop)

Employees at the County Landfill and Refuse & Recycling Sites are trained to monitor materials brought in for disposal and sort the reusable and recyclable materials immediately upon arrival. Reusable items are set aside and made available to patrons free of charge. The weight of the material is estimated or measured using portable scales and recorded once a patron takes the item. Items remaining after several days are disposed of. Types of items recovered through this program have included bathroom/kitchen tiles, plumbing fixtures, furniture, and shelving. In 2012, the Swap Shop recycled approximately 13.74 tons of material. This continues to be a popular Source Reduction Program in the County.

#### Yard Waste Program

Yard waste is accepted for composting only at the County Landfill and consists of various types of material including leaves, small branches, bushes, and grass clippings. When needed, a chipper is utilized to process the wood waste into mulch. Although not advertised, this material is available to all County residents for free. A Christmas tree recycling program is available to residents, businesses and visitors every year. The trees are accepted at the County Landfill

location only; some of the trees are incorporated into the compost pile. The majority of the trees are taken by The Department of Natural Resources who take them to build habitats for fish and other wildlife.

Residents of Grantsville, Kitzmiller, Loch Lynn, Mtn. Lake Park and Oakland receive curbside yard waste collection from municipal employees. Material collected is either taken to the County Landfill for incorporation into the compost piles, or taken to local farms and composting areas. The town of Oakland chips woody debris for residents and uses the material for landscaping purposes.

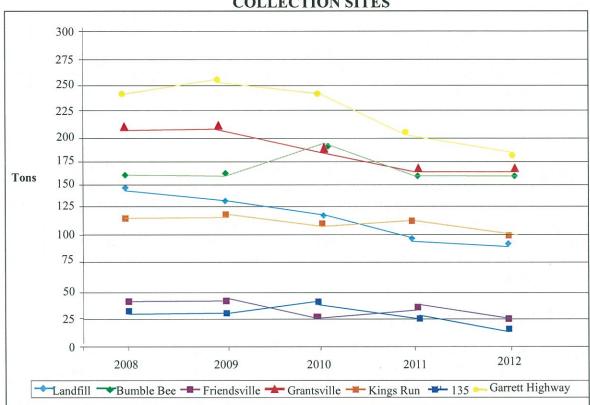


EXHIBIT 3-7: RECYCLABLE QUANTITIES DELIVERED TO THE REFUSE COLLECTION SITES

#### **Electronics Recycling**

In 2003, the Garrett County Department of Solid Waste & Recycling, seeing a growing concern over the proper disposal and recycling of computers and electronics, took measures and applied for funding available through the Maryland Environmental Service (MES) to host a one-day electronics recycling collection event. During the first event, 12,328 pounds of electronics were collected.

For five consecutive years, one-day electronics collection events were held in Garrett County; a total of 54.86 tons of materials were diverted from the County Landfill. In 2008, with funding from the Maryland Department of the Environment, Garrett County started a permanent electronics recycling program. After its' first year, the program had collected a total of 74.93 tons of

electronics. In 2012, a total of 24.49 tons of electronics were recycled. Totals are reported annually to the Maryland Department of the Environment. Further discussion of electronics recycling is addressed in *Chapter 4*.

# Used Oil, Transmission and Oil Filters, & Antifreeze Program

Garrett County has a partnership with MES for the Used Oil, transmission and oil filters, & Antifreeze Program. MES contracts with a private contractor for the collection of the materials from the Bumble Bee, Garrett Highway, Grantsville, Kings Run, and 135 (Backbone Mtn.) Refuse & Recycling Sites and the County Landfill.

In 2012, 81.09 tons of used motor oil and almost 5 tons of antifreeze were recycled by residents and businesses in the County. Because MES manages the collection and processing of used motor oil and antifreeze from the County's Refuse & Recycling Sites, these quantities are not included in *Exhibit 3-1*. Additionally, since the Maryland Recycling Act does not allow the inclusion of these materials in the recycling rate calculation, they are not included in *Exhibit 3-4* and *Exhibit 3-5*.

# **Municipal Programs**

Most incorporated towns offer some type of Municipal Recycling Program to their residents. Quantities collected through Municipal Recycling Programs are managed through the existing County Recycling Program. Materials collected are presented in *Exhibit 3-8*.

**EXHIBIT 3-8: MUNICIPAL RECYCLING PROGRAMS** 

Incorporated Town	Population	Recycling Program	Materials Collected
Accident	353 residents	Limited Curbside	Newspaper
Deer Park	405 residents	None	None
Grantsville	619 residents	Limited	Yard waste
Mtn. Lake Park	2,092 residents	Limited	Yard waste
Loch Lynn	552 residents	Limited	Yard waste
Kitzmiller	321 residents	Limited	Newspaper Cardboard
Friendsville	491 residents	Limited	Newspaper
THEHUSVIIIC	431 1621061112	Curbside	Aluminum cans
Oakland	1,925 residents	Town Employees	Yard waste

# **Recycling Markets**

Market prices for recyclable material fluctuate just like any other commodity. The County actively solicits the best price for its recyclable material, often on a monthly basis. *Exhibit 3-9* lists the markets currently used by the County for recyclable material collected.

**EXHIBIT 3-9: MARKETS FOR RECYCLABLE MATERIAL** 

Market	Location	Materials Accepted	Revenue 1	
Bates Tire & Auto	Markleysburg, PA	Mixed Metal White Goods	\$150/ton \$100/ton \$0/ton	
Cap Glass, Inc.	Connellsville, PA	Aluminum Cans Green Glass Brown Glass Clear Glass	\$40/ton \$30/ton \$12.50/ton	
Double M Recycling	Swanton, MD	Mixed Metals White Goods Aluminum Cans	\$230/ton \$210/ton \$.50/.lb	
Edward Fields & Co.	Uniontown, PA	Mixed Metals White Goods Aluminum Cans	\$315/ton \$250/ton \$.60/.lb	
Ours Auto Salvage	Oakland, MD.	Mixed Metal White Goods Aluminum Cans	\$180/ton \$160/ton \$.50/.lb	
Penn-Mar Recycling	Cumberland, MD.	Newspaper Cardboard #1Plastic/#2Plastic Mixed Metal Office Paper Magazines	\$25/ton \$25/ton \$.05/.lb - \$.05/ .lb \$0/ton \$15/ton \$25/ton	
Rrhamco, Inc.	Grafton, WV	Aluminum Cans	\$.60/.lb	
Sunrise Sanitation Services, Inc.	Oakland, MD.	Newspaper Cardboard #1Plastic/#2Plastic Aluminum Cans Office Paper Magazines	\$5/ton \$18/ton \$.01/.lb - \$.01/.lb \$.50/.lb \$15/ton \$5/ton	
Westernport Scrap	Westernport, MD	Mixed Metal	\$210/ton	

Revenue varies depending on market conditions. Unit costs are approximate.

#### SOLID WASTE ACCEPTANCE FACILITIES

Information concerning existing public and private solid waste acceptance facilities is addressed in this section in accordance with COMAR 26.03.03D(5). MDE defines solid waste acceptance facilities as municipal, rubble, land clearing debris, and industrial landfills, incinerators, medical waste incinerators, special medical waste processing facilities, processing facilities, waste-to-energy facilities and incinerators, and transfer stations. The principal existing solid waste acceptance facility in Garrett County is the County Landfill.

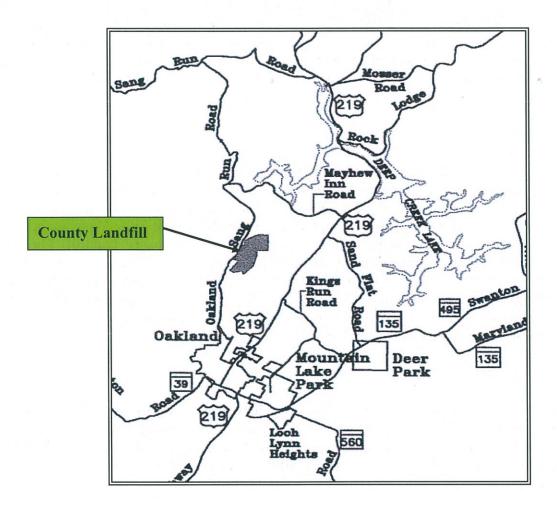
# Round Glade Landfill - Closed

Until its closure in 1994, the Round Glade Landfill was the only permitted Landfill in Garrett County accepting non-hazardous solid waste generated in the County. The disposal area lies on the east side of Oakland Sang Run Road, four miles north of the town of Oakland. The site lies on part of an abandoned strip mine with Round Glade, a tributary of the Little Youghiogheny as the southern boundary, and is adjacent to the current operating County Landfill. The Site contains 229 acres of which approximately 98 acres have been used for solid waste disposal. Round Glade Landfill was not equipped with truck scales; therefore, there are no historical records of the quantity of waste landfilled. Capping of the site was completed in 1998. MES provides twice per year monitoring of groundwater wells, monthly monitoring of discharge areas from surface water, and landfill gas monitoring.

# Garrett County Landfill - Active

The Garrett County Solid Waste Disposal and Recycling Facility, also known as the County Landfill, is located off Oakland Sang-Run Road, 3.5 miles north of Oakland and 2.5 miles south of Bray School Road. This is the only operating landfill in the County. Garrett County owns the facility and the land and operates the County Landfill. *Exhibit 3-10* shows the location of the County Landfill to the surrounding area.

# EXHIBIT 3-10: GARRETT COUNTY SOLID WASTE AND RECYCLING FACILITY AREA MAP



The County Landfill is available for use by all County residents, businesses, municipalities, visitors and private haulers collecting waste generated within the County. County residents may bring their household trash and discarded materials for disposal, either at the working face of the Landfill or at the Residents' Acceptance Facility. Additionally, recyclables such as paper, bottles and cans and major appliances can be brought for recycling. Residents may also bring brush, grass, and leaves for composting. Appendix B has a listing of items currently accepted at the County Landfill for disposal or drop-off and fees associated with those items.

The tipping fee of \$45.00 per ton is competitive with fees in neighboring jurisdictions, thus removing any incentive for haulers to export waste out-of-County. It is also believed that significant quantities of out-of-county MSW are not being disposed of at the County Landfill. *Exhibit 3-11* presents permit information for the County Landfill

**EXHIBIT 3-11: GARRETT COUNTY LANDFILL INFORMATION** 

Landfill Information			
Maryland grid coordinates:	116/604		
Owner:	Garrett County Government owns the land and operates the facility		
Permit Number:	2011-WMF-0094A		
Permit to Expire:	04/10/2018		
Address:	3118 Oakland Sang Run Road, Oakland, MD 21550		
Fill/Site Acreage:	32/188		
Hours of Operation:	Summer Hours: Mon. – Sat. 8:00 a.m. – 3:30 p.m.; Saturday - Main Cell Closes at 2:30 p.m. Winter Hours: Mon. – Fri. 8:00 a.m. – 3:30 p.m.; Saturday 8:00 a.m. – 12:00 p.m., Scales Closed, Household Trash Only. Landfill Closed on Sundays. Hours subject to Change.		

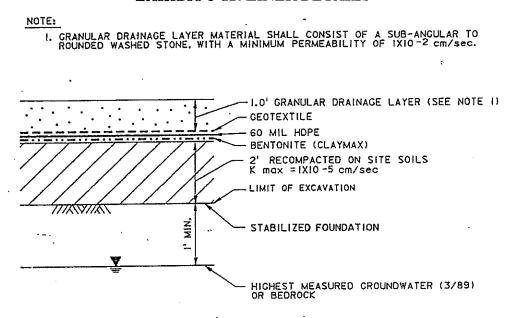
The Landfill is permitted to accept MSW, special waste such as asbestos, land clearing, construction and demolition debris, and dead animals. Tires and items with refrigerants are not landfilled. Facilities at the site include a public recycling drop-off area, yard waste mulch/chip pile, scale house and platform scale, office building with administration facilities and a fluorescent bulb and lamp recycling drop-off area.

# Landfill Design--

The County Landfill was originally designed with a life expectancy of 20 years. It originally consisted of four lined MSW cells and two rubble cells. Cell 1 was constructed with a composite liner; consisting of a two foot thick layer of compacted clay with a maximum hydraulic conductivity of 1 x 10 (-5) cm/sec, a geocomposite clay layer, and a 60-mil synthetic high density polyethylene (HDPE) liner which acts as the primary leachate collection layer. Above the HDPE liner is a one-foot layer of washed stone with a minimum hydraulic conductivity of 0.01 cm. per second. A geotextile fabric placed between the washed stone and HDPE liner provides a protective layer between the liner and the stone layer. Cell 2 is constructed in much the same way, but has four feet of tire chips as drainage layer. All cells are constructed with an exterior side slopes ratio of three to one (3:1). *Exhibit 3-12* shows the liner construction details. Additional waste disposal cells are constructed with similar liner systems in accordance with Maryland solid waste regulations.

Two rubble cells are included in the design and approved Refuse Disposal Permit for the Garrett County Solid Waste & Recycling Facility. Filling in the first, 2.5 acre Rubble Cell A, began in 1994 and continued through June of 2001. Filling ceased in Rubble Cell A prior to its reaching capacity due to regulatory changes requiring rubble fills to be constructed with synthetic liners. As a result, after June 2001 waste material previously disposed in the Rubble Cell is now disposed in the municipal disposal cell. Capping of the partially filled Rubble Cell was completed in 2010 in accordance with COMAR 26.04.07.21-22. As with all filled areas at this facility, the closed and capped Rubble Cell is included in the facility environmental monitoring plan.

#### **EXHIBIT 3-12: LINER DETAILS**



Leachate is stored in a 60-mil HDPE lined and covered lagoon. The lagoon is covered to maintain the leachate in an aerobic state and is designed to provide enough storage for Cells 1 and 2. The leachate flows by gravity through a six-inch diameter schedule-80 PVC pipe and manholes directly into the lined lagoon. A pump station is used to pump the leachate through a pipe to the Deep Creek Lake Wastewater Treatment Facility for treatment. The County Landfill is currently using a passive vent system for the release of methane gas.

Due to a change in the State of Maryland regulations in 1997, the County Landfill ceased disposal of CDL debris in the two designated rubble cells. New regulations called for all rubble cells constructed after September 22, 1997, to be equipped with liners and leachate collection systems. Due to the cost of installation of a liner in the two designated rubble cells, the County decided to allow disposal of all CDL in the MSW cells. *Exhibit 3-13* displays the boundaries and layout of the County Landfill.

# CHAPTER 4 ASSESSMENT OF SOLID WASTE MANAGEMENT SYSTEMS AND POTENTIAL ALTERNATIVES

#### INTRODUCTION

This Chapter assesses the existing solid waste management system in Garrett County and addresses the County's needs to alter, extend, modify, or add to the existing solid waste management recycling systems and facilities. This assessment evaluates how well the goals and objectives stated in *Chapter 1* of this Plan are being met. Program and facility alternatives are discussed to aid in establishing an integrated solid waste management system.

#### **COLLECTION**

Currently, refuse is collected in the County through a combination of public and private operations and self-hauling to County-operated Refuse & Recycling Sites.

#### **Organization of Waste Collection**

Two incorporated municipalities (Deer Park and Kitzmiller) use municipal crews to collect waste curbside from residents and select businesses. The remaining six incorporated municipalities contract with a private waste hauler for curbside collection of waste. County residents that do not live within a municipality and most commercial businesses are responsible for disposal of their own waste, either by contracting with a private hauler or self-hauling their waste to one of the Refuse & Recycling Sites or the County Landfill.

Alternatives to this system include licensing, contracting, franchising, and public operation. Advantages of these alternatives are the County's increased control of waste collection standards and the ability to implement curbside recycling services. Disadvantages include increased cost and administrative support by the County. Each of these alternatives is described below.

# Licensing--

Garrett County's solid waste regulations (County Code, Title V. Public Works: Chapter 50) address refuse collection, disposal, and recycling. The County does not require special licensure or permitting of waste collection vehicles operated within the County. The only license required to operate waste collection vehicles in the County is issued by the Maryland Department of Transportation.

Under a licensing system, private waste haulers would continue to operate under the free enterprise system; however, the County would require haulers to obtain a special license. Issuance of a license would be contingent on the hauler meeting standards imposed by the County. These standards could include conditions such as mandatory recyclable collection,

standardization of waste collection containers, waste collection frequency, and performance standards.

# Contracting--

Under a contract system, refuse collection would be administered by the County. The County would contract with private refuse haulers to collect refuse using their own trucks and personnel in designated areas for a pre-determined fee paid by the County. The County would be responsible for billing customers and providing customer service. The County would be able to include specific collection goals, such as mandatory curbside collection of recyclables. A fee for service would be negotiated based on tonnage of refuse and recyclables collected, a fee per household served, or a combination of the two. Such contracts usually result from a public bidding process.

# Franchising--

Under the franchise system, the County would be classified as a district or would be subdivided into several collection districts. The County would then grant private haulers a franchise based on competitive bidding. The haulers would be responsible for billing customers and providing customer service. However, the County would regulate the hauler's rates and performance standards, in essence acting as a representative of the customers (i.e., the residents and businesses).

# Public Operation--

Under public operation, waste and recyclable collection would be provided by County employees using equipment owned or leased by the County.

# Reporting

Because the County Landfill's tipping fee is competitive and the distance to alternative waste disposal sites is considerable, it is believed that most of the waste generated within the County is managed through existing County programs. However, to verify this belief and to gain knowledge of surrounding waste disposal facilities so as to maintain a competitive tipping fee, the County could require private waste haulers to report quantities of waste collected from the County and final disposal location. This would allow the County to more easily track where the waste is being disposed.

In contrast to waste reporting, the County does require that private waste haulers report quantities of materials collected for recycling. This aids in compiling a recycling rate estimate to report to MDE annually.

# Refuse & Recycling Sites

Six Refuse & Recycling Sites and the drop-off location at the County Landfill are situated throughout Garrett County for the acceptance of solid waste and recyclables. Materials accepted include municipal solid waste, aluminum cans, cardboard, brown, clear, & green glass, electronics (at select locations) fluorescent bulbs & lamps (at select locations), used oil, transmission and oil filters & antifreeze (at select locations), office paper (at select location), magazines (at select locations), newspaper, #1 and #2 plastic (at select locations), scrap metal, telephone books and white goods, as well as certain types of bulk and other solid waste. Emptying and servicing of the containers at the sites is conducted as needed.

Alternatives to the current system include expanding the number and/or placement of sites, expanding the hours of operation, implementing consistency for types of materials collected at each site, payment methods, and creating a clear & concise guide for disposal and recycling practices in Garrett County. Each of these alternatives is described below.

# Number and Placement of Refuse & Recycling Sites--

The current system of Refuse & Recycling Sites appears to target higher population centers in the County. While some Sites experience higher volumes of traffic than others, each Site is able to adequately manage the flow of traffic and the disposal of refuse and recyclables. Field observations conducted during the spring and summer of 2012 found the sites to be exceptionally clean and the recyclable material to be in a condition to fetch good market value.

The majority of customers using the Refuse & Recycling Sites are full-time primary residents; however, increasing numbers of visitors and secondary homeowners are using the sites each year. A large majority of visitors stay at properties that contract waste collection services. These services rarely include the collection of recyclables, leaving visitors the task of transporting recyclables themselves, to an existing Refuse & Recycling Site.

In April, 2012, the Maryland General Assembly passed House Bill 1, Environmental-Recycling – Apartment Buildings and Condominiums requiring recycling in all apartment buildings and condominiums that contain 10 or more dwelling units. Pursuant to House Bill 1 (HB1), Owners or Managers of Apartment Buildings and Owners/Managers or Councils for the Unit Owners of Condominiums will be responsible for providing recycling to the residents of each apartment building or condominium by October 1, 2014. Additionally, these Owners or Managers will secure and manage recycling contracts with the contractor for providing material collection and recycling services from the building locations. Material collection bins and containers for transporting the materials from the buildings to the markets will be provided. Owners or Managers will perform record keeping and report to the County on an annual basis.

It is believed the current network of Refuse & Recycling sites will be adequate to handle the volume of recyclable materials generated by HB1, for the succeeding ten-year planning period. However, it will be prudent to observe and evaluate the materials, tonnages and traffic entering the current system on a continual basis to determine whether a change will be necessary or warranted. House Bill 1 will be further discussed in this Chapter.

# Hours of Operation--

The Refuse & Recycling Sites operate seven days per week: Monday through Friday from 7:00 am to 6:00 pm, Saturday from 9:00 am to 6:00 pm, and Sunday from 12:00 pm to 6:00 pm. Current operational hours appear to adequately serve the needs of residents and visitors.

During the next ten years, as the visitor population is expected to increase, there could be a need to extend operational hours to accommodate the growth. Most residents and visitors self-haul their waste during weekends and there is increased home improvement activity and visitor activity during summer months. Therefore, alternatives that accommodate residents and visitors include:

- Extended Sunday Operation at Select Sites Since many visitors and secondary
  homeowners leave the County on a Sunday, it may be convenient for select
  Refuse & Recycling Sites to be open later on Sunday to accept waste and
  recyclables. Advantages may be increased recycling collection and decreased
  litter. Disadvantages are cost and accessibility of the County Landfill should the
  Refuse & Recycling sites fill their capacity.
- **Elongated Summer Hours** Expanding the hours of operation until 8:00 pm during the summer months at select sites may be adequate to accommodate residents and visitors.

If either of these options is implemented, it should be first done on a temporary basis and monitored in terms of additional customers and additional waste quantities received.

#### Material Consistency-

While all Refuse & Recycling Sites accept aluminum cans, cardboard, newspaper, brown, clear and green glass bottles/jars, mixed metal and telephone books, only select sites accept electronics, fluorescent bulbs & lamps, magazines, #1 and #2 plastic bottles, oil, transmission and oil filters & antifreeze, and office paper. Advantages for consistency among sites include increased recycling material and facilitating public information and education. Disadvantages include costs associated with additional containers to hold recyclable material and additional pick-ups.

# Payment Methods--

Patrons of the Refuse & Recycling Sites pay for disposal of bagged refuse either through purchase of a sticker for each bag of refuse, purchase of a refuse site permit that covers unlimited bagged refuse for a calendar year or by utilizing the County Landfill and paying for the weight of the bagged trash at the tipping scales. The disposal of bulk items requires purchase of a special sticker for each item or by paying for the weight of the item at the tipping scales at the County Landfill.

The Refuse Site Permit Program runs smoothly. The refuse site permit allows an unlimited disposal quantity of household bagged refuse for \$50 per year/per vehicle. Households that generate two (13-gallon) bags of refuse per week, pay almost the same cost for disposal using bag stickers, as a household purchasing the yearly sticker, without the benefit of unlimited disposal.

In 2012, approximately 6,320 tons of refuse were disposed of at the Refuse & Recycling Sites, for which the County received approximately \$285,406 through the purchase of bag & bulk item stickers and refuse site permits. This equates to a cost of \$45.16 per ton (just slightly more than the tipping fee at the County Landfill).

Alternatives to create equity in payment methods include:

- *Limit Number of Bags* The Refuse Site Permit fee could cover up to five bags per visit and require purchase of bag stickers for each additional bag. This would require additional surveillance by the attendant.
- Implement a Coupon System The coupon system could take the form of a book of coupons, each coupon allowing disposal of a certain number of bags. This would limit the number of trips to a Refuse & Recycling Site. This would require additional surveillance by the attendant.
- Increase Refuse Site Permit Fee By increasing the Refuse Site Permit Fee to cover the tipping fee at the County Landfill, expansion and improvements, service would be more equitable.
- Increase Bulk Sticker Fee Since bulk items are much more difficult to manage at Refuse & Recycling Sites, the Bulk Item Sticker fee could be increased to cover cost of additional handling and transporting to the County Landfill.
- Add a Recycling Program Fee to Tipping Fee By adding \$.50 \$1.00 per ton, the Refuse & Recycling Sites could benefit by receiving needed equipment and containers, material consistency could reach its' maximum and the recycling program could utilize funds for educating residents, businesses, visitors and institutions on the ongoing and upcoming recycling programs available in the County.

Currently, patrons that deposit recycling materials at the Refuse & Recycling Sites do not pay to leave the materials. This practice should continue to provide incentive for recycling and therefore boost the recycling rate.

# Refuse & Recycling Guide--

Full-time residents are more likely to know about the location and operation of the Refuse & Recycling Sites than visitors. Therefore, the number of patrons (visitors) to the Refuse & Recycling Sites could be increased with improved literature and education. Additionally, guides indicating prices, accepted recyclables, site locations and notice that the materials can be dropped off free of charge, will attract more patrons and recyclables.

The County is in the process of developing the new 2014 Guide to Responsible Disposal & Free Recycling in Garrett County brochure. The literature is a good reference of the services offered at the County Landfill and at the Refuse & Recycling Sites. The Guide includes information on disposal rates, a map of site locations and a list of the recycling programs offered in the County. Guides are available at the Refuse & Recycling Sites, County Landfill, Chamber of Commerce and select locations throughout the county.

#### **Litter Collection**

#### The Problem--

While the growth of Garrett County is making a positive economic impact in the area, litter has become an increasing problem. Many of the homes built today, especially in the Deep Creek Lake area, are either second homes (occupied mainly on weekends and holidays) or vacation rentals. Upon vacating the property, the homeowner or renter will leave the waste containers curbside for collection by a private waste hauler. However, many times the waste is collected several days after the homeowner or renter has left, making the waste vulnerable to vectors and scavenging animals. Of particular concern is the bear population, which can open almost all types of waste collection containers and leave trash strewn about.

At times, the waste hauler will collect the debris left from a bear, or the homeowner will clean up the litter; however, more often the litter is left on the ground or not completely cleaned up. Rental companies receive complaints weekly regarding trash scattered on the rental property.

Various community associations in Garrett County have bylaws regarding litter and have taken measures to prevent litter by using a central location for a trash dumpster instead of individual containers set out by residents.

Garrett County's solid waste regulations (County Code, Title V. Public Works: Chapter 50. Solid Waste) deals with the collection, placement and disposal of solid waste. Section 50.03 Placement of Solid Wastes; Collection; Disposal subsection (11) states that it is unlawful to place or deposit solid waste, hazardous waste or unacceptable waste in a strip mine, along a public road or stream bank or at any other location that is not permitted to receive solid waste by the Garrett County Office of Solid Waste and Recycling or the Maryland Department of the Environment. Additionally, Section 50.03(12) states that it is unlawful to allow solid waste to become a nuisance to an adjacent property owner by allowing solid waste to be blown onto an adjacent property or allowing solid waste to accumulate to such an extent as to create a rodent attraction and harborage. These solid waste regulations are enforced by the Garrett County

Department of Solid Waste and Recycling, the Garrett County Sheriff and all other law enforcement officers along with the State's Attorney for Garrett County, as stated in Section 50.04 Enforcement.

#### Potential Solutions--

- Bear-Proof Containers Bear-proof containers are typically constructed of wood or steel and allow the user to lock waste containers securely inside, thus making it difficult, if not impossible, for bears to recover waste materials. Some residences are already using bear-proof containers. Disadvantages of bear-proof containers are the aesthetics of waste collection containers remaining curbside year-round, high cost of the container (up to \$1000 per container), additional labor requirements by the waste hauler to manually unlock the containers to retrieve waste, and bear-proof containers still do not work 100 percent of the time. Other vacation areas in the country that experienced bear problems were researched. Their bear-proof waste container ordinances are presented in Appendix C. Ordinances requiring bear-proof containers can vary by applicability, material and construction of the container, and exceptions for hardship.
- Placement of Waste Collection Containers Secondary and rental homes are
  more likely to have continual placement of waste collection containers curbside.
  By requiring that waste collection containers be brought back from the curb to the
  house soon after waste collection has occurred, they are less prone to attack from
  bears.

Many community associations and some municipalities prohibit the continual placement of waste collection containers curbside. Reasons for this include improved aesthetics of the community, reduction of blocked roads and/or sidewalks from tipped or misplaced waste collection containers, and reduced attraction of vectors and scavenging animals (such as bears). Hence, a reduction in bear-induced litter may result by requiring that waste collection containers be returned to the home soon after waste has been collected.

By increasing involvement with the local associations and rental companies, it could be suggested that permanent waste collection containers or containers that have separate compartments for recyclable materials be made available to renters at the rental office itself. Owners & visitors checking-in and checking-out would be able to utilize the containers prior to leaving the County or going to the rental. This is an amenity and a service to the community.

Change Waste Collection Day - Most second homeowners and vacationers begin
and end their stay in the County on a Saturday or Sunday. In contrast, most
private haulers collect waste during the week, Monday through Friday. By
collecting waste on a Saturday or Sunday, the time that waste is accessible to
bears will be limited.

- Increase Public Education Efforts Improved public education to inform residents and visitors of the fines and penalties for violating the litter ordinances, as well as the more positive issues such as the beneficial effects to the environment, should reduce the quantity of litter. This information can be disseminated through brochures, pamphlets, signs, County newspapers, etc. Signs can be posted along roads, recreational areas, and other public areas to remind people that there are penalties for littering and that they will be enforced.
- Enforcement of Litter Ordinances

# SOURCE REDUCTION

Source reduction involves the design, manufacture, purchase, or use (including re-use) of materials or products to reduce the amount of refuse or potential toxicity of materials disposed of in the waste stream. The measurement of source reduction is difficult in that one must quantify waste which has not been generated. A typical approach to measure the effectiveness of source reduction is to estimate impacts on generation rates. Greater source reduction efforts may yield reduced waste generation rates with time.

In 2002, MDE established a source reduction credit system which allows jurisdictions to count waste reduction efforts towards their overall recycling and waste reduction diversion rate goals. In 2012, Garrett County was able to add an additional one percent to its reported MRA recycling rate through documented waste reduction activities. Alternatives that could increase source reduction are discussed below.

#### **County Policy Development**

Garrett County should continue to seek further means of source reduction and promote it. The County is currently in the process of creating a *Waste & Source Reduction, Recycling, and Green Purchasing Policy*. Garrett County encourages businesses, offices, and residents to practice source reduction and recycling in their activities. Common ways to reduce wastes are described below.

- Using supplies and materials more efficiently. Double-sided photocopying can cut
  paper costs by 10 to 40 percent, compared to single-sided copying. Printing only
  the number of copies necessary or routing one copy to several readers reduces
  paper waste. Use of removable stick-on labels instead of cover sheets when
  sending faxes and reducing distribution list size reduces waste quantities.
- Reuse products and supplies. Using durable, reusable products rather than singleuse materials is one of the more effective waste prevention strategies. Examples include using ceramic mugs rather than disposable cups, reusing envelopes for interoffice mail, and reusing file folders and report binders. Posting notices in common areas and using email and electronic bulletin boards are means of communication with virtually no waste generated.

- Prepare final versions of large documents in Portable Document File (PDF) format on CD as an alternative to the hard paper copy version. Implementation of this strategy for reports can reduce storage requirements and paper reports that are ultimately discarded.
- Minimize the number of documents that are printed use electronic versions when practical. When writing letters or other documents, review the first proof on the computer screen.
- Use minimal or reusable packaging. Work with suppliers to minimize the amount of packaging used and to return shipping materials such as crates, cartons, and pallets for reuse; alternatively, save the packaging and reuse it for outgoing shipments. Promote the purchase of items in bulk to reduce packaging.
- Use and maintain durable equipment and supplies. High quality, long-lasting supplies and equipment that can be easily repaired result in fewer discards. In addition, higher initial costs are often justified by lower maintenance and longer life. If items are disposed less frequently, cost savings can be realized.
- Encourage acceptance of reused materials on construction contracts where the material will serve the intended purpose; e.g., using crushed concrete or asphalt as road base or chipped wood as mulch.

County agencies that adopt source reduction measures can further serve as examples to businesses and citizens.

#### Public Education

The County makes the public aware of waste management activities through the County website, the online magazine Deep Creek Times, the new *Guide to Responsible Disposal & Free Recycling in Garrett County* brochure, newspapers, flyers, special events, public speaking engagements, and school curricula. These are used to disseminate source reduction information.

# Household Hazardous Waste Program

To reduce hazardous chemicals being disposed of in the County Landfill, the County may wish to implement a Household Hazardous Waste (HHW) Program. Materials typically included in a HHW Program are paints, solvents, corrosives, insecticides/pesticides/herbicides, fuels, photographic chemicals, and oxidizers.

A HHW Program can be managed either through County personnel or contracted services. Drawbacks of a HHW Program are the increased administrative support by County personnel and the cost of transport and disposal. Costs could be decreased through partnering with others using volunteer firefighters to assist with collection and packaging activity.

# Fluorescent and Compact Fluorescent Light Recycling County Plan

The Garrett County fluorescent and compact fluorescent light recycling plan must be completed no later than October 1, 2011. To date, Garrett County is participating in a fluorescent, compact fluorescent and Non-PCB ballast recycling program and has a recycling plan in place approved by the Maryland Department of the Environment (5/18/10).

Garrett County shall collect, but not be limited to, compact fluorescent bulbs (CFL's), 4' lamps, 8' lamps, U-tubes and Non-PCB ballasts, however this may or may not change based on market conditions or requirements.

Garrett County Solid Waste and Recycling Division plans to utilize funds through the Solid Waste & Recycling Enterprise Fund Budget to operate a collection program for Garrett County residents. The recycling program is free to Garrett County residents, however this may or may not change based on market conditions.

The fluorescent materials will only be accepted at the landfill location at 3118 Oakland Sang Run Road, Oakland, Maryland 21550, during the business hours of 8:00 a.m. – 3:30 p.m., Monday – Friday. A 10' x 10' storage shed will be purchased for the fluorescent materials; the building will be provided with the proper signage and ventilation. Trained personnel should be prepared daily to accept the bulbs, lamps and Non-PCB ballasts for recycling at the storage shed practicing standard safety procedures.

Immediately upon collection, all fluorescent bulbs, tubes and Non-PCB ballasts will be placed directly into pre-paid mailing containers provided by an independent recycling contractor; this method of storage will eliminate breakage. When the containers are full, they will be sent to the recycling contractor for processing and recycling.

In the event that breakage should occur, employees will follow the guidelines set forth in the Mercury Spill Emergency Response Manual (approved by the Maryland Department of the Environment 5/18/10) kept in the Main Office at the Garrett County Landfill and call The Emergency Response Division (ERD) at the Maryland Department of the Environment at 866-633-4686 for immediate guidance and instructions.

As the fluorescent and compact fluorescent light recycling program is planned for Garrett County residents only, a list of fluorescent and compact fluorescent light recycling processors is available in the landfill office for commercial businesses interested in contacting an independent processor for recycling fluorescent materials.

It is the responsibility of the independent recycling processor to report, by February 15<sup>th</sup> of each year, to the Garrett County Recycling Coordinator, Garrett County Department of Solid Waste & Recycling, the amount and type of fluorescent light, compact fluorescent light and Non-PCB ballast materials collected by Garrett County, for the previous calendar year.

It is the responsibility of the Garrett County Recycling Coordinator to report the tonnage of fluorescent light, compact fluorescent light and Non-PCB ballast materials recycled in Garrett

County each year on the MRA Recycling Report to the Maryland Department of the Environment.

#### RECYCLING

Recycling is considered an integral component of solid waste management and is required by Maryland law. The State has established mandated recycling goals: 20 percent for Garrett County since the population is fewer than 150,000. Population projections for the next ten years indicate that the County's population will not exceed 150,000; therefore, the recycling goal will remain at 20 percent.

# **Curbside Recycling**

As discussed in *Chapter 3*, curbside recycling is offered in only a few incorporated towns and includes few material types. Due to the rural nature of Garrett County, curbside recycling is relatively expensive to implement. However, curbside recycling has significantly increased recycling quantities in communities across the country. Methods to increase quantities include:

- Cooperative Agreement Between Incorporated Towns Instead of each municipality having a separate contract for recycling services, they could join together to get a "bulk discount." Expanding the number of homes served could decrease the cost per household thus making it more affordable for each municipality.
- Coordination with County Recycling Program The cost for curbside collection
  could be decreased if the waste collection contractor is allowed to drop off all or
  part of the collected recyclable material at the County Landfill or at the County's
  established market. Therefore, the contractor could collect recyclable materials
  for which he hasn't established a market.
- Encourage Cooperation among Community Associations Similar to incorporated towns, community associations can join together in the solicitation for curbside collection services.
- *Increase Public Education* By promoting the curbside collection program and informing residents of proper methods to prepare recyclable materials, the quantity and quality of materials collected will be improved.

# Recycling of Computers, Electronics, Covered Electronic Devices and Video Display Devices

There is a growing concern regarding the disposal of computers, electronics, covered electronic devices and video display devices in landfills. These devices (electronics) can contain hazardous materials such as lead, mercury and hexavalent chromium in circuit boards, batteries and cathode ray tubes (CRTs).

A program for the separate collection from citizens, municipalities and businesses of electronics is needed to reduce the quantity of these materials being landfilled. A program may include, but may not be limited to, computers, computer monitors, laptops computers, TVs, PDAs, peripherals, telephones, printers, fax machines, copiers, VCRs, camcorders, DVD players, CD players, calculators, typewriters, cell phones, etc.

Garrett County plans to utilize funding for this program obtained through grants or the Solid Waste & Recycling Enterprise Fund budget to operate a permanent collection program. A permanent program should be initiated at one refuse & recycling collection site in Garrett County. If funding is not available for a permanent program it is planned to conduct annual one-day events to collect electronics for recycling if economically feasible.

As awareness and interest regarding recycling of electronics grows, the need for a permanent program and/or expanded program will also grow. Additional locations should be added to a permanent electronics recycling program to provide a convenient method of disposal for citizens, municipalities and businesses. Several one-day events could also take place each year to minimize landfilling and maximize recycling of electronics. As the computer and electronics industry evolves, programs should be developed to address changes and continue to reduce landfilling of these materials.

# **Management of White Goods**

White goods containing refrigerants are accepted only at the County Landfill, where personnel remove refrigerants and aggregate the white goods until sufficient quantity is accumulated for transport to a recycling market. Other white goods that do not contain refrigerants, such as dishwashers and stoves, are accepted at Kings Run, Grantsville, 135 (Backbone Mountain), Bumble Bee and Garrett Highway Refuse & Recycling Site and then transported directly to market.

# **Recycling Coordinator**

The Recycling Coordinator performs the duties and manages the responsibilities of a successful recycling program, including marketing of material, coordination of processing activities, recycling training for staff and County personnel, residents, municipalities, civic groups, and commercial businesses, identification and establishment of partnerships that will increase recycling quantities, public education, monitoring the budget, prepare State mandatory reporting, and application for grants toward the recycling program.

# **Education and Publicity**

Garrett County is committed to recycling. To insure program success, the County has invested in public education and outreach initiatives. Efforts focus on a diversified series of media, community outreach, and volunteer programs. The Department has taken a lead role with respect to public education and promotion of recyclables and source reduction.

Public awareness and support are keys to the success of waste reduction and recycling programs. The public can be reached through a variety of educational and publicity programs. The County is very much aware of the value of education and publicity tools. In 2011 the budget for education was \$9,200. In 2012 the budget allowed for \$12,000 to be spent on education and publicity programs, including: newsletters, posters, brochures, and flyers, displays at fairs, advertising, and new program development. In keeping with anticipated waste reduction and recycling program growth, the FY 2014 budget was increased to \$12,500 for allocation of education and publicity.

### Establish a Garrett County Public School Recycling Plan

Garrett County Public Schools' recycling plans must be completed no later than October 1, 2010. To date, all Garrett County Public Schools have recycling plans in place and are participating in a recycling program.

It is the responsibility of the Garrett County Board of Education to schedule the pick-up of all recycling materials from each school in the Garrett County public school system. To date, the Board of Education has determined that a bi-weekly pick up of recyclable materials at each school must be scheduled; however this schedule may change due to the volume of materials collected at each location or by the sole discretion of the Garrett County Board of Education.

The Garrett County Schools shall collect, but not be limited to, #1 plastic, #2 plastic, cardboard, mixed paper, tin cans, aluminum cans, magazines, glass and newspaper.

Garrett County Board of Education, 40 South 2<sup>nd</sup> Street, Oakland, Maryland 21550, has the responsibility of picking up recyclable materials at the following schools:

Elementary Schools Accident Elementary School	534 Accident Bittinger Road Accident, Maryland 21520	301 746 8863
Broad Ford Elementary School	607 Harvey Winters Road	301 334 9445
Crellin Elementary School	Oakland, Maryland 21550 115 Kendall Drive Oakland, Maryland 21550	301 334 4704
Friendsville Elementary School	1 <sup>st</sup> Avenue Friendsville, Maryland 21531	301 746 5100
Grantsville Elementary School	P.O. Box 9 Grantsville, Maryland 21536	301 746 8662

Route 40 Elementary School	17764 National Pike Frostburg, Maryland 21532	301 689 6132
Swan Meadow School	6709 Garrett Highway Oakland, Maryland 21550	301 334 2059
Yough Glades Elementary Scho	ool 70 Wolf Acre Drive Oakland, Maryland 21550	301 334 3334
Middle Schools		
Northern Middle School	86 Pride Parkway Accident, Maryland 21520	301 746 8165
Southern Middle School	903 Broadford Road Oakland, Maryland 21550	301 334 8881
High Schools		
Northern High School	371 Pride Parkway Accident, Maryland 21520	301 746 8668
Southern High School	345 Oakland Drive Oakland, Maryland 21550	301 334 9447
Educational Cntr.		
Hickory Environmental Educat	tional Center 604 Pride Highway Accident, Maryland 21520	301 746 7038

Garrett County Board of Education, 40 South 2<sup>nd</sup> Street, Oakland, Maryland 21550, has the responsibility of picking up recyclable materials at any/all newly constructed public schools or educational centers in Garrett County. Newly opened schools will begin participating in a recycling program within two (2) months of the new school year session.

An employee from the Garrett County Board of Education has the responsibility of delivering #1 plastic, #2 plastic, mixed paper, aluminum cans, magazines, glass and newspaper to the Garrett

County Refuse & Recycling Sites located throughout Garrett County (open Monday – Friday, 7:00 a.m. – 6:00 p.m.; Saturday, 9:00 a.m. – 6:00 p.m.; Sunday 12:00 p.m. – 6:00 p.m.) at the following locations: Bumble Bee Site, 1367 Bumble Bee Road, Accident, Maryland 21520; Friendsville Site, 8397 Friendsville Road, Friendsville, Maryland 21531; Grantsville Site, 13168 National Pike, Grantsville, Maryland 21536; 135 Site, 12091 Maryland Highway, Swanton, Maryland 21561; Kings Run Site, 1631 Kings Run Road, Oakland, Maryland 21550; Garrett Highway, Oakland, Maryland 21550.

The Garrett County Board Of Education has the responsibility of delivering tin cans to Sunrise Sanitation Services, Inc., to 4007 Underwood Road, Oakland, Maryland 21550. Upon delivery of recyclable materials to the Garrett County refuse & recycling sites, Sunrise Sanitation Services, Inc., and/or any recycling processor chosen by the Board of Education to handle and process the recyclables collected in the schools, each entity will be held individually responsible for the final marketing and disposition of the materials. In the event that one or more of the listed recycling processors are no longer available to accept materials from the schools located in Garrett County, the Garrett County Board of Education has the responsibility of delivering the materials to one of the Garrett County refuse & recycling sites and/or the responsibility of securing a new recycling processor for the final destination of the recyclable materials collected in the public schools and educational centers.

It is the responsibility of the recycling processor to report, by February 15<sup>th</sup> of each year, to the Garrett County Recycling Coordinator, Garrett County Department of Solid Waste & Recycling, the amount and type of recyclables collected by the Board of Education, for the previous calendar year.

It is the responsibility of the Garrett County Board of Education to select a staff member to coordinate recycling efforts and schedule pick-ups with each school in the Garrett County school district. It is also the responsibility of the selected staff member to report the recycling efforts of each school to the Garrett County Recycling Coordinator. The Garrett County Recycling Coordinator will monitor the Garrett County School Recycling Program to identify areas of improvement, provide guidance and support, and ensure the continuous participation by public, trade schools and educational centers.

It is the responsibility of the selected Board of Education staff member to advise the Garrett County Recycling Coordinator of any recycling issues or non-compliance of any school within 30 days of the issue arising. The Garrett County Recycling Coordinator has 30 days to respond to the issue(s) identified with corrective actions.

### Garrett College Recycling Plan

Garrett Colleges' recycling plan must be completed no later than October 1, 2010. To date, Garrett College has a recycling plan in place and is participating in a recycling program.

It is the responsibility of Garrett College, to direct College personnel to maintain a regular schedule for the pick-up of recyclable materials at each building on campus and in the facilities offices, located at 687 Mosser Road, McHenry, Maryland 21541.

The program shall include, but not be limited to, office paper, #1 plastic, aluminum cans, toner cartridges, light bulbs, motor oil, tires and batteries.

It is the responsibility of Garrett College to select College personnel to handle the emptying of recycling receptacles in each building on campus and in each of the facilities offices and to deliver the recyclable materials to the nearest refuse & recycling site or designated recycling processor or mail to the designated vendor/processor.

Garrett College has the responsibility of delivering #1 plastic, office paper, motor oil and aluminum cans to the Garrett County Refuse & Recycling Sites (open seven days per weeks) located in Garrett County at the following locations: Bumble Bee Site, 1367 Bumble Bee Road, Accident, Maryland 21520; Grantsville Site, 13168 National Pike, Grantsville, Maryland 21536; and Garrett Highway Site, 10180 Garrett Highway, Oakland, Maryland 21550.

Garrett College has the responsibility of delivering automotive batteries to Garrett Automotive, Oakland, Maryland 21550 and tires to Glotfelty Tires, Oakland, Maryland 21550. In the event that one or more of the listed recycling processors are no longer available to accept materials, Garrett College has the responsibility of securing a new recycling processor within sixty (60) days, for the final destination of the recyclable materials collected in the facilities offices and at each building on campus.

Furthermore, Garrett College has the responsibility of mailing light bulbs and toner cartridges to Individual vendors/processors that handle, process and recycle materials in a responsible, ecologically sound and dependable manner.

It is the responsibility of the recycling processor to report, by February 15<sup>th</sup> of each year, to the Garrett County Recycling Coordinator, Garrett County Department of Solid Waste & Recycling, the amount and type of recyclables collected by Garrett College, for the previous calendar year.

It is the responsibility of Garrett College to select a "Campus Green Committee. One task of this committee should be to create a "Green Plan." This plan will outline steps to be taken that will aide in developing and implementing actions that will foster environmental awareness.

It will also be the responsibility of the Campus Green Committee to report the recycling efforts of Garrett College to the Garrett County Recycling Coordinator, Garrett County Department of Solid Waste & Recycling. The Garrett County Recycling Coordinator will monitor the Garrett College recycling program to identify areas of improvement, provide guidance and support, and ensure the continuous participation by students, educators and personnel.

It is the responsibility of the Garrett College Campus Green Committee to advise the Garrett County Recycling Coordinator of any recycling issues or non-compliance within 30 days of the issue arising. The Garrett County Recycling Coordinator has 30 days to respond to the issue(s) identified with corrective actions.

The Garrett County Landfill can be utilized as a collection site during the following business hours:

Summer Season: April 15<sup>th</sup> through November 15<sup>th</sup>; Mon-Sat 8:00 a.m. – 3:30 p.m.

Winter Season: November 16<sup>th</sup> through April 14<sup>th</sup>; Mon – Fri 8:00 a.m. – 3:30 p.m.

Saturdays 8:00 a.m. – 12:00 p.m.; No Scales Available.

### Establish an Apartment Building and Condominium Recycling Program

Pursuant to House Bill 1 adopted in April, 2012 all owners or councils of owners of Garrett County Apartment Buildings and Condominiums that contain 10 or more dwelling units are required to provide recycling to their tenants. The law requires the program to be in place by October 1st, 2014.

### A. Apartment Building and Condominium Recycling Program

In cooperation with the Garrett County Department of Solid Waste & Recycling the owners or managers of apartment buildings or councils of unit owners of condominiums ("apartment and condominium officials"), have identified the apartment buildings and condominiums that fall under the scope of the law.

Apartment and condominium officials must report to the Garrett County Department of Solid Waste & Recycling annually, with details of the required recycling activities.

Other program requirements include:

### 1. Materials Included in Program

Recyclables must include: plastic, aluminum cans, glass jars and beverage containers, as well as paper.

### 2. Collection of Materials

Apartment and condominium officials are responsible for providing all containers, labor, and equipment necessary to fulfill recycling requirements throughout their buildings. Distinctive colors and/or markings of recycling containers should be provided to avoid cross contamination. The apartment and condominium officials must ensure collection and transportation of recyclable materials from apartment and condominium locations to markets or the established County collection centers. Containers are to be of sufficient size and emptied frequently enough to provide residents with at least weekly access for recycling. Residents will be responsible for placing recyclables in recycling bins prior to their removal on the scheduled pick up day.

### 3. Marketing of Materials

Apartment and condominium officials are responsible for the marketing of their recyclables. The apartment and condominium officials shall submit annual reports detailing the recycling tonnage removed from the apartment and condominium and the markets for the materials.

### B. Stakeholders

Stakeholders that will be involved in implementing the law are:

1. County Council or Commissioners

Responsible for adopting the MDE approved language of ABCR Program into the 10 year Solid Waste Management Plan

2. County Department of Solid Waste & Recycling

Responsible for overseeing the County Office of Recycling activities and assuring that all apartment buildings and condominiums that fall under the requirements are included in the ABCR Program.

Communicate the requirements of the law to the apartment and condominium officials. Assist apartment and condominium officials in developing a recycling program. Monitor the progress and performance of the ABCR Program. Develop the requirements of an ABCR Program in conjunction with input from apartment and condominium officials.

Update the County Solid Waste Management Plan to include the ABCR program

Develop a recycling reporting survey to be used by apartment and condominium officials in reporting recycling activities.

3. Owner or Manager of the Apartment Building or Councils of the Unit Owners of Condominiums

Responsible for providing recycling to the residents of each apartment building or condominium by October 1, 2014. Secure and manage recycling contracts with the contractor for providing material collection and recycling services from the building locations. Provide material collection bins and containers for transporting the materials from the buildings to the markets. Perform record keeping and may report to the County on annual basis.

C. Participating Apartment Buildings or Condominiums () in ABCR Program

Accident Community Housing PO Box 485

Accident MD 21520

Corp – (20)					
Backbone Housing Inc – (18) Bergstrom Properties, Llc. –	320 Cathedral St	PO Box	Baltimore	MD	21201
(24) Cassel Ridge East Limited	202 N North St 104 East Center	228	Accident	MD	21520
Part- (31) Casselman, Inc. The – (40)	St 113 Main St		Oakland Grantsville	MD MD	21550 21536
E H P Associates – (29)	1000 Thayer Center	_	Oakland	MD	21550
Friendsville Associates, Ltd. Part – (29)	15825 Shady Grove Rd., Suite 25		Rockville	MD	20850
Grantsville Associates Limited Pt. – (36) Guardian Associates Limited	C/o Meadowview Apts.	PO Box 298	Grantsville	MD	21536
Part – (26) Liberty Square Limited Part –	S 112 Tull Dr.		Seaford	DE	19973
(30)	104 E Center St		Oakland	MD	21550
Maryjane Zorzit, Llc. – (12)	8100 Harford Rd		Baltimore	MD	21234
Mattingly Frank $R - (10)$	225 Sunset Lane 612 Stockslager		Oakland	MD	21550
McHenry Cove, Llc. – (21)	Rd 944 Fish		Oakland	MD	21550
Merkel Karen L- (10) Mountain Village West, Ltd.	Hatchery Rd		Accident	MD	21520
Part – (30) Nine Donald L & Rachel A –	104 E Center St		Oakland	MD	21550
(14)	53 High View Dr	603 Calais	Oakland	MD	21550
Oakvue Mobileminium Assoc.,	C/o Joanne	Dr., Apt			
Inc. – (10) Oakwood East Associates Ltd	Papania 104 East Center	2102	Pittsburgh	PA	15237
Part – (32)	St St		Oakland	MD	21550
Overlook North, Limited Partnership – (60)	104 E Center St		Oakland	MD	21550
Parkwood Village Assoc., Ltd.		1000 Thayer			
Part – (32) Pysell Ridge Limited Part –	C/o Garrettland	Center	Oakland	MD	21550
(30)	104 E Center St 19403 Dans Rock		Oakland	MD	21550
Rjt Rentals Llc – (12)	Rd 1600 Mount	Po Box 46	Midland	MD	21542
Russell-dreisbach, Llc. – (19)	Aetna Rd		Frostburg	MD	21532
Thomas Ricky L- (12) Village View, Limited	938 Teets Rd		Friendsville	MD	21531
Partnership – (28)	104 E Center St		Oakland	MD	21550

Warnick Julie A- (13)	2463 Lower New Germany Rd 1000 Thayer	Frostburg	MD	21532
Garrettland – (100+)	Center	Oakland	MD	21550

Note: New apartment buildings or condominiums that will fall under the requirements of the law will begin participating in the ABCR program within 3 months of being notified by the County.

### 4. Program Monitoring

The Garrett County Department of Solid Waste & Recycling shall oversee the progress and performance of the ABCR Program. However, the apartment and condominium officials will conduct inspections, review service levels, investigate reported or unreported pick-up and disposal complaints, meet with residents or recycling contractor staff to educate or review practices, and review contractor compliance with the recycling contract. Any issues which arise from these visits that are deemed deficiencies on the part of the residents or recycling contractor will be detailed in writing and reported to the violator. The apartment and condominium officials shall initiate actions to correct all deficiencies within 60 days of being notified.

The apartment and condominium officials will also be available to conduct educational seminars and/or tours regarding new materials, practices, and procedures for residents. Also, the owner, manager or council shall be responsible to keep the residents current on new regulations, laws, and mandates affecting recycling in the apartment buildings or condominiums.

### 5. Program Enforcement

The Garrett County Department of Solid Waste & Recycling will ensure that the recycling at apartment and condominiums will be implemented in accordance with the Sections 9- 1703 and 9-1711 of the Environment Article, Annotated Code of Maryland. The County Attorney's Office will determine if a County should enforce the law and what level of enforcement actions should be used. The law allows for fines to a person that violates the recycling or reporting requirements of the law or a civil penalty not exceeding \$50 for each day on which the violation occurs. Further, any penalties collected under the law shall be paid to the county, municipality, or other local government that brought the enforcement action.

### Education--

Educational materials should continue to target the business community and the general public. The County should continue to develop these educational materials as needed. The County is currently using the following approaches for disseminating information about recycling:

• Promotional and educational information is dispersed primarily through word-of-mouth. Materials are also sent out through the refuse site permit program;

- Articles and special announcements are printed in the local newspapers (*The Republican* and *The Weekender*) and disseminated using other media;
- Articles, releases and announcements are printed on the page dedicated for recycling in the online magazine *Deep Creek Times*;
- Municipalities also use media regarding recycling programs for their communities;
- The Garrett County Government website provides information about each Refuse & Recycling Site, ongoing recycling programs, materials accepted; instructions on handling materials; special programming & events and reporting forms;
- Recycling and waste reduction literature is displayed at information sites throughout the County, including the Court House and Visitor's Center; and
- Realty companies

The County also provides a reference and referral service for County businesses wishing to develop or expand recycling programs. County personnel are available to visit business locations to help identify recycling opportunities and assist in identifying material markets.

### Publicity--

Publicity and promotional materials are required to introduce programs to the public and to maintain public support and participation. The County may wish to adopt an overall theme, logo, color scheme, or other tools that effectively unifies waste reduction efforts. Each waste reduction program should be accompanied by a publicity campaign that fits into the overall waste reduction program themes, yet targets the specific audience affected by each program. For example, yard waste programs should target only single-family residents, and Refuse & Recycling Site materials should reach every citizen. Regardless of the audience, publicity campaigns should seek to maximize participation and support for each program.

Visual materials such as posters, brochures, bumper stickers, and refrigerator magnets are effective ways of promoting programs. In addition, equipment that is used to maintain the program can also bear waste reduction program themes.

### WASTE PROCESSING AND DISPOSAL ALTERNATIVES

Garrett County provides and will continue to provide processing and disposal capacity for the majority of waste generated in the County at the County Landfill. Disposal alternatives are discussed below.

### Waste-To-Energy (WTE)

Waste-to-energy (WTE) facilities are the modern incarnation of the older municipal waste incinerators, as opposed to incinerator facilities, which operate primarily as furnaces for burning

waste. WTE facilities are designed to serve as a reliable disposal option while generating significant quantities of power.

As in any combustion process, a solid ash residue is produced. In order to determine disposal requirements for ash, a Toxic Characteristics Leaching Procedure (TCLP) analysis must be performed for representative composite ash samples. The purpose of the analysis is to simulate the concentrations of toxic substances in the ash which may be leached to water through the landfill waste mass. If the TCLP procedure indicates that contaminant concentrations in the leachate will be at hazardous levels, then the ash must be managed and disposed of as hazardous waste at an appropriately permitted facility. Otherwise, disposal at a MSW landfill and recycling are options.

Recycling and reuse of ash from MSW incinerators and WTE facilities are becoming common practice. Ash can be reused at landfills as daily cover or for drainage layers, used as road base material (aggregate for asphalt), or construction material.

WTE facilities are difficult to implement and the amount of time required for siting, permitting, and construction is greater than for other waste processing and disposal technologies. Additionally, the capital cost of a WTE facility is generally higher than for other waste disposal alternatives. Therefore, a WTE facility is not recommended at this time to manage MSW in Garrett County.

### **Anaerobic Digestion Option**

Anaerobic Digestion (AD) in the simplest terms is the process to degrade organic material in the absence of oxygen. Therefore, Anaerobic Digestion breaks down the organic fraction of waste including: paper, yard waste, food and other organic wastes. The process can be accelerated in landfills by introducing a bioreactor.

Benefits to the use of this technology include: Reduction in landfill space that is used, production of a compost product that may be marketable, residual compost may be used as daily cover, and the generation of electricity. The latest research reveals that the separation of undesirable materials out of the anaerobic digester stream enhance the end products that are produced as well as minimizing the environmental impacts created by the digestion process.

Currently Garrett County has found that this technology is very appealing but cost prohibitive. It is hoped that with refinements in the systems and robust competition that cost will come down at the same time that Garrett County waste volumes reach a level that can support the operation of a state of the art anaerobic digestion system.

### **Mixed Waste Processing and Composting Facility**

While composting of homogeneous waste streams such as yard waste has had success in the U.S., composting of mixed solid waste continues to struggle. Numerous problems have been experienced such as fires, odors, and product quality problems. The finished compost must meet regulatory requirements and aesthetic requirements of potential customers. High value markets

8

will only purchase compost that meets maturity standards, causing some projects to send their product to landfills for use as cover or for disposal.

Because of the potential problems associated with the poor operational history of facilities in the U.S. and the costs to develop and operate a facility, this option is not considered viable at this time.

### GARRETT COUNTY LANDFILL

The County Landfill and the Refuse & Recycling Sites are the only solid waste disposal facilities in the County. All waste received by the Refuse & Recycling Sites is transported to the County Landfill for ultimate disposal; recyclables are transported directly to markets. The County Landfill accepts the following waste types generated in the County:

- Residential wastes;
- Commercial wastes;
- Industrial wastes;
- Institutional wastes from schools, hospitals, and government facilities;
- Construction, demolition, and land clearing debris (CDL);
- Dead animals;
- Litter;
- Bulky wastes and white goods;
- Asbestos;
- Sludges; and
- Tires.

Controlled hazardous substances (CHS) and automobiles are not accepted at the County Landfill. Disposal of these materials are managed by the generator and a private company.

### Landfill Life

According to the 2012 Annual Solid Waste Tonnage Report submitted by MES to MDE, there are approximately 1,010,957 cubic yards available for Cells 1 through 4. *Exhibit 4-1* presents the remaining life expectancy calculations included in this report.

EXHIBIT 4-1: LANDFILL CAPACITY REPORTED BY MES

Landfill Information <sup>1</sup>	Tonnage
Cumulative tonnage landfilled	
(January 2006-December 2012)	576,926
Tons landfilled in 2012	
( 1/1/12 - 12/31/12)	29,618
Total current tons landfilled	606,544
Estimated total disposal capacity of County Landfill	
(includes Cells 1-4)	1,222,763
Less current tons landfilled	606,544
Available remaining disposal capacity <sup>2</sup>	616,219
Percent of landfill space filled <sup>3</sup>	50%
Remaining life of Cells 1-4 (by tons) <sup>3</sup>	
Estimated closure of Cells 1-4	20 years 2/1/2034

<sup>&</sup>lt;sup>1</sup> Information based on 2012 Annual Solid Waste Tonnage Report to MDE.

Exhibit 4-2 presents projected waste quantities generated, recycled, and landfilled. It is projected that the County Landfill has over 616,000 tons of capacity remaining and the total quantity of waste that will require landfilling in the next 10 years is approximately 420,625 tons. Therefore, it will be necessary for Garrett County to begin contemplation of alternate waste disposal methods, designs or strategies such as Waste-to-Energy (WTE) facilities, anaerobic digestion, or consider new acceptance facilities altogether in the near future.

<sup>&</sup>lt;sup>2</sup> Number may be off due to rounding errors.

<sup>&</sup>lt;sup>3</sup> Number may be off due to rounding errors.

**EXHIBIT 4-2: GARRETT COUNTY WASTE PROJECTIONS** 

		Waste Tonnage	
YEAR <sup>1</sup>	Generated <sup>2</sup>	Recycled <sup>3</sup>	Landfilled
	(Tons)	(Tons)	(Tons)
2010	54,454	18,242	36,212
2011	51,481	22,410	29,071
2012	51,750	19,724	29,618
2013	52,181	22,242	29,939
2014	52,730	22,477	30,253
2015	53,285	22,713	30,572
2016	53,834	22,672	31,162
2017	54,383	23,181	31,202
2018	54,933	23,112	31,821
2019	56,403	24,042	32,361
2020	76,962	23,950	33,012
2021	57,520	24,518	33,002
2022	58,079	24,396	33,683
2023	58,637	24,994	33,643
2024	60,356	25,337	35,019
2025	60,926	25,970	34,956
Total Wast	e Landfilled 2010 -	- 2025:	420,625

<sup>&</sup>lt;sup>1</sup> Historical and projected timeframe.

### **FACILITY SITING CONSTRAINTS**

The siting of a new facility or expansion of an existing one must consider the following siting constraints prescribed by Maryland regulations:

- Topography;
- Geologic Conditions;
- Aquifers' Use and Depth;
- Surface Water (Sources, Flood Plains, Watersheds, Source Water Protection Areas);

Total waste generated by residents, businesses, & visitors projected from Exhibit 3-1.

<sup>&</sup>lt;sup>3</sup> Based on projected recycling tonnages in Exhibit 3-1.

- Soil Type and Characteristics;
- Location;
- Wetlands;
- Existing Water Quality;
- Land Use;
- Planned Long Term Growth; and
- Defined Critical Areas.

A number of these factors are oriented towards facilities that are highly land dependent, including solid waste and CDL landfills, while other facilities may have minimal impact. A brief description of these constraints imposed on solid waste acceptance facilities is listed below.

### **Topography**

Garrett County is entirely within the Appalachian Plateau Province. Throughout Garrett County, the Allegheny Plateau is characterized by broad rolling uplands across which long ridges extend in southwest-northeast directions. As mentioned in Chapter 2, Garrett County is primarily a rural area dominated by woodlands and farms. Increases in recreational and other non-farm uses of the land, particularly in the areas around Deep Creek Lake will influence land use planning. (Maryland Geological Survey)

Landfill sites generally are located in broad valleys, flat plateau areas, and areas which do not have steep slopes. Land which has slopes greater than 15 percent generally is not considered acceptable for landfills due to excessive site grading required to develop landfill cells. While other waste management facilities are not as constrained by the slope of the land, cost factors associated with site work must be considered.

Areas within the 100-year floodplain are not acceptable for development as a land disposal facility due to state and federal regulations. Other waste management facilities must also avoid encroachment into floodplains. Low-lying areas along rivers and waterways may be regulated by federal, state, and local laws due to the presence of non-tidal wetlands.

### Geologic Conditions/Aquifers

Garrett County is part of a distinct physiographic province called the Appalachian Plateau Province. The Appalachian Plateau Provinces are underlain mainly by folded and faulted sedimentary rocks. The bedrock of this region consists principally of gently folded shale, siltstone, and sandstone. Folding has produced elongated arches across the region which expose Devonian rocks at the surface. Most of the natural gas fields in Maryland are associated with

these folds in the Appalachian Plateau. Sedimentary rocks yield small-to-moderate supplies of groundwater (Maryland Geological Survey).

Groundwater resources supply over half of the water used in Garrett County. The last comprehensive study of groundwater (transient conditions) in the County was completed in 2007. The County's groundwater quality is generally considered good. It is, however, important to protect this natural resource for future use.

Ground water utilized in Garrett County is derived from the weathered zone and from the upper part of the hard consolidated rock. When saturated, the soil and subsoil supplies water to many of the springs and shallow dug wells. The hard rocks supply water to the drilled wells and some of the springs. In addition to this large reserve of usable surface water, there is, beneath the surface in the various aquifers, an unknown quantity of ground water which is presently supplying most of the requirements within Garrett County. (Department of Public Works, Garrett County Water & Sewerage Master Plan 2014 Revision).

Landfills can be designed to provide an engineered liner system which will protect ground water quality for most geologic conditions. However, it is prudent to avoid geologic areas where ground water contamination could spread rapidly if the liner system is breached by leachate flows. From a geological perspective, other solid waste facilities can be located in geologic areas where foundation design can accommodate site conditions.

### **Surface Waters**

Garrett County has an abundance of water resources with nearly 1,200 miles of streams and rivers including three major recreational lakes: Jennings Randolph Lake, Youghiogheny River Lake, and Deep Creek Lake. All of these lakes have dams built for flood control and water quality and quantity.

Associated areas along streams and rivers are known as 100-year floodplains. These floodplains support natural resources areas such as wetlands and riparian forests that provide vital wildlife habitat, enhance water quality and lessen flood potential.

As adopted in the Garrett County Code of Ordinance, *Title XV, Chapter 151: Flood Hazard Area; Section 151.021 Flood Plain Zones*, floodplains are defined by the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency.

New development is not allowed in defined areas unless the proposed development activity complies with stringent requirements. The same is required in the Garrett County Sensitive Areas Ordinance adopted June 1997 and amended on May 25, 2010. Section §156.09 Source Water Protection Areas (SWPA), subsection C, wherein it states that no building permit, zoning permit, site plan or subdivision plat shall be approved unless the proposed development activity complies with all of the requirements listed. Additionally, it is prohibited to develop a sanitary landfill or rubble fill in Source Water Protection Areas.

### **Soil Types and Characteristics**

Almost all of the soils in Garrett County can be classified as residual soils since they were formed in place through the mechanical and chemical weathering of the underlying rock formations. The depth, composition and color of the soils are highly related to the composition of the parent rock. In addition to residual soils, some alluvial and colluvial soils are found in Garrett County. Alluvial deposits of well-stratified sand, gravel and clay occur as terrace deposits in the Casselman River Valley, a few miles south of Grantsville, and in the Youghiogheny River Valley north of Friendsville. Colluvial soils are found along any steep slopes and valley margins where they were gravity transported into place as slide rock and soil.

The Soil Survey of Garrett County, Maryland provides detailed information on the types and locations of soils within the County. Exhibit 4-3 presents the various soil associations in Garrett County. The properties of the soils on which a landfill is sited should be considered in planning, design, construction, and closure. Soil characteristics such as texture, erodibility, load-bearing capacity, resistance to slide, permeability, water table elevation, and quantity should be addressed during the site selection process.

### Location

The importance of location varies with the type of solid waste acceptance facility being considered. For Refuse & Recycling Sites and solid waste acceptance facilities, location near residential areas is critical. Facility siting requires consideration of technical, economic, legal, and political issues. The 2008 *Garrett County Comprehensive Plan* and Zoning Regulations will aid in allowable locations of solid waste management facilities. Applicable zoning regulations are described in *Chapter 2*.

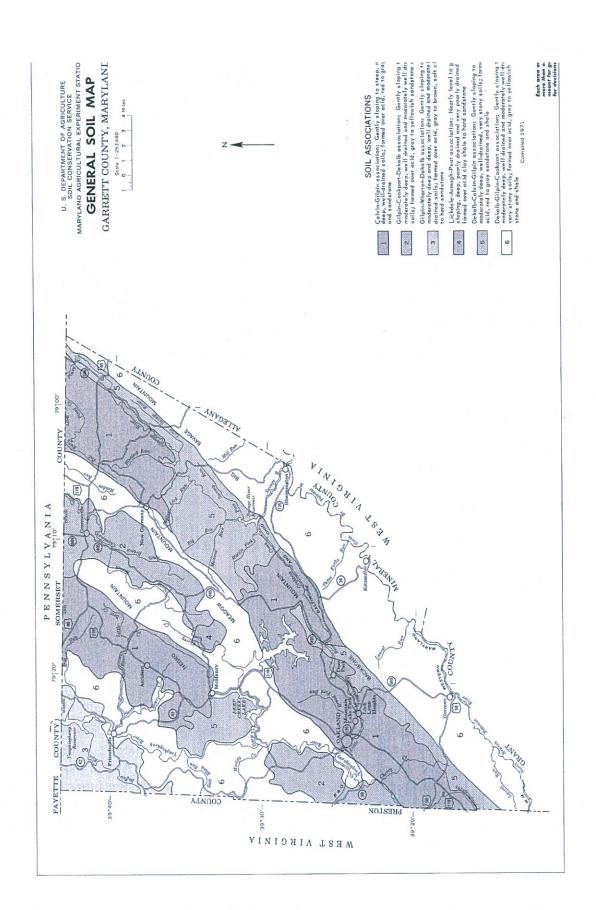
### Wetlands

Areas of non-tidal wetlands exist in Garrett County. Non-tidal wetlands are commonly referred to as inland or upland wetlands and can include areas in Garrett County such as bogs and coniferous swamp forests. Because these environments are self-contained, they support many rare and unique species. The County relies on State laws for the protection of these wetlands.

### Water Quality

Protection of Garrett County's streams and the land along the waterways (stream buffers) is a vital concern. Consequences of careless land development can degrade waterways by increasing pollutant loads, altering waterways, increasing flooding, and elimination of aquatic life. State regulations and criteria for solid waste management facilities require design features to minimize potential impacts on water quality, but care in the siting of a facility should be taken to aid in minimizing these impacts.

# EXHIBIT 4-3: GENERALIZED SOILS MAP OF GARRETT COUNTY



### Land Use

The 2008 Garrett County Comprehensive Plan and the Garrett County Water & Sewerage Master Plan 2014 Revision contains regulations to ensure that development in the County will be located in suitable areas to avoid the adverse impacts on adjacent land use and to ensure compatibility with long term growth patterns. Zoning regulations and ordinances are becoming increasingly stringent around the Deep Creek Lake area. Impacts from solid waste facilities such as odor, noise, dust, and/or adverse traffic impacts for adjacent land users must be considered when siting a facility.

### **Planned Long Term Growth**

As mentioned in *Chapter 1*, the 2008 Garrett County Comprehensive Plan is the main planning document to manage development and growth within the County. As the population continues to grow at a steady rate in the County, it is important for State and County agencies to work together in the future planning of land use and the future needs associated with the demands of the population. The Department of Solid Waste and Recycling should consider the goals of the 2008 Garrett County Comprehensive Plan as a basis for siting future solid waste management facilities.

### **Defined Critical Areas**

Areas of special concern for Garrett County include sensitive natural areas that are important to respect and protect. These areas include:

- Steep slopes;
- Streams and their buffers;
- 100-year floodplains, Floodplain Buffers and Erosion Control;
- Habitats of rare, threatened and endangered species;
- · Wetlands; and
- Source Water Protection Areas.

Policies for preserving and development of these areas can be found in the 2008 Garrett County New Development Plan. Activities which involve any clearing of vegetation, filling, excavating, flooding, or draining are regulated within these wetland areas by MDE. Any proposed activity in these areas should have alternatives evaluated to avoid and minimize the impact to wetlands. Any facility proposed to be built in these areas, including a solid waste management facility, must apply for a permit. All permit applications undergo a stringent review, and if a feasible alternative exists, the permit will be denied.

### EMERGENCY MATERIALS SPILL MANAGEMENT PROGRAM

This section describes the programs and procedures for responding to emergency spills or leakage of hazardous substances within the County. The Emergency Management Department for Garrett County is responsible for responding to emergency spills or releases of hazardous substances and disaster planning. Other agencies to assist the Emergency Management Department in the event of a response are:

- Fire and Rescue Services;
- County Health Officer;
- MDE Hazardous and Toxic Waste Management Administration;
- Center for Radiological Health (CRH/MDE);
- State Fire Marshal's Office;
- State Highway Administration/County Roads Department;
- Maryland State Police/Garrett County Sheriff's Office; and
- U.S. Army, Ft. Meade

A broad variety of hazardous materials are transported by rail and motor vehicle in and through Garrett County. Additionally, there are facilities that use, store or produce hazardous materials in their daily activities. In the event of an accident, these materials can present an immediate threat to life, property, and the environment.

### **Garrett County Hazardous Materials Plan**

The County's *Hazardous Materials Plan* details the procedures to respond to an incident and the proper authorities to contact. The *Hazardous Materials Plan* describes procedures and actions to be taken in the event of a hazardous materials incident. It assigns responsibilities for notification of proper authorities and agencies, and it provides response and support to various departments and agencies within Garrett County.

The Plan is based on the concept that emergency functions for the various groups responsible for responding to hazardous materials incidents will generally parallel their normal day-to-day functions. All local emergency response vehicles have been issued *U.S. Department of Transportation Emergency Response Guidebooks* containing Federal and industry approved protective measures.

It is the responsibility of the Director of Emergency Management to maintain the *Hazardous Materials Plan* and to schedule and organize all exercises. The Plan is tested once a year and is revised and updated as required and as the County's needs change.

### SYSTEM COSTS

The County intends that the Solid Waste Management program will be self-sufficient. To accomplish this, the County will finance the operations of the solid waste program through an enterprise fund based on tipping fees and refuse permits. Debt service and capital expenditures will continue to be funded through an ad valorem tax.

Solid waste management costs are kept separate from general revenue taxes. In this manner citizens are made aware of the financial impact of the program. Tipping fees, refuse permits, and the ad valorem tax rate are reviewed on an annual basis and adjusted as necessary to ensure the program generates adequate revenue to cover its operational cost as well as debt service and capital expenditures.

## CHAPTER 5 IMPLEMENTATION PLAN

### INTRODUCTION

This Chapter presents components of Garrett County's solid waste management system that are to be used during the planning period ending 2024. A combination of continued operation of certain existing programs and facilities, and implementing select new components comprise the Plan of Action.

This Plan is in conformance with the County's Comprehensive Plan, the 2008 Garrett County Comprehensive Plan. While the Comprehensive Plan addresses the need for waste disposal and recycling facilities, it does not directly address specific types of permitted solid waste facilities or programs. Additionally, there are no zoning regulations that pertain to solid waste disposal facilities.

### PLAN OF ACTION

The County's solid waste management system has been reviewed and alternative solid waste management options identified. These options were then evaluated based on need, feasibility, cost, waste reduction, and other factors. Based on the evaluation of the County's existing system and alternative solid waste management options, goals and strategies were identified so that the County's system will continue to provide for the County's waste management needs through the year 2024. The projected quantities of materials recycled and landfilled for the 10-year planning period are provided in *Exhibit 5-1*.

The goals presented in this Plan will be updated every three years when the Plan is updated. Progress in meeting these goals, and the goals themselves, will be evaluated, and new or expanded programs will be examined for implementation as necessary. Each of the goals, along with an implementation strategy, is discussed below:

## GOAL 1 <u>Provide efficient and economical refuse collection services to County</u> residents, businesses, and institutions.

The County evaluated alternative collection systems, including licensing, contracting, franchising, and public operation. It is, however, beneficial for the County to continue to utilize the current refuse collection system, a combination of private haulers and municipal collection. Advantages to maintaining the current collection system include:

• The current system promotes competition between private haulers and provides County residents with quality service; and

• There has been interest expressed by private haulers for developing comprehensive collection services (both refuse and recyclable materials) to meet the needs and requests of both the County and residents.

**EXHIBIT 5-1: WASTE PROJECTIONS** 

	Waste	Generatio	eneration (tons) Recycling (tons) Landfil		Landfilled		
Year	MRA 1	Non- MRA <sup>2</sup>	Total	MRA <sup>3</sup>	Rate 4	Waste (tons)	
2012	42,115	9,635	51,750	19,724	46.83%	29,690	
2013	42,458	9,723	52,181	19,921	46.92%	29,939	
2014	42,907	9,823	52,730	20,120	46.89%	30,253	
2015	43,359	9,926	53,285	20,322	46.87%	30,572	
2016	43,532	10,302	53,834	20,525	47.15%	31,162	
2017	44,254	10,129	54,383	20,730	46.84%	31,202	
2018	44,399	10,534	54,933	20,938	47.16%	31,821	
2019	45,941	10,462	56,403	21,147	46.03%	32,361	
2020	46,066	10,896	56,962	21,359	46.37%	33,012	
2021	46,850	10,670	57,520	21,572	46.04%	33,002	
2022	46,944	11,135	58,079	21,788	46.41%	33,683	
2023	47,757	10,880	58,637	22,006	46.08%	33,643	
2024	48,821	11,535	60,356	22,226	45.43%	35,019	

Notes

<sup>&</sup>lt;sup>1</sup>MRA waste includes residential, commercial, institutional, and non-hazardous industrial waste.

<sup>&</sup>lt;sup>2</sup> Non-MRA waste includes CDL, Wood Waste, Clean Fill Material, Disaster Cleanup, Contaminated Soil, sludge, and asbestos.

MRA Recycling includes cardboard, newsprint, white paper, mixed paper, plastic bottles glass bottles, aluminum cans, white goods, yard waste, rendering waste, textiles/cloth, toner cartridges, tires, electronics, tires to cement kilns, and cameras/canisters.

<sup>&</sup>lt;sup>4</sup> The recycling rate is determined by the quantity of MRA-approved recyclables divided by the quantity of MRA waste generated.

The County will further evaluate the need to require reporting of refuse collection quantities by private haulers and may implement this through ordinance or licensing requirements.

Methods to prevent litter will be further assessed and may include a combination of the following methods:

- Requirements for bear-proof waste collection containers;
- Prohibiting continual curbside placement of waste collection containers; and
- Increased public education through newspaper ads and realty companies.

## GOAL 2 Continue to meet and exceed the Recycling Rate and Waste Diversion -Statewide Goals Act (2012) of 20 percent as required by the State for counties with populations less than 150,000.

The County's recycling program is currently based on voluntary participation but mandatory reporting from businesses. *Exhibit 5-1* presents the projected quantities of waste generated and recycled through 2024 under the existing and planned programs.

The County will continue efforts to increase participation in recycling programs to reduce the volume of material requiring disposal. The County will monitor and evaluate programs for effectiveness and efficiency and make changes as necessary to maintain and exceed State requirements. Furthermore, the County will continue to expand recycling programs as opportunities, technologies, and markets develop. These programs will be evaluated annually, as part of the County budget process. Increased participation will be realized through the following efforts:

- Consistency Among Refuse Collection Sites The County will strive to offer collection of magazines, office paper, #1 plastic & #2 plastic and electronics at all refuse & recycling sites.
- Target Additional Materials The County will evaluate the markets and feasibility of implementing recycling collection programs for tin cans, mixed paper, mattresses and additional plastics. The County has already established a successful program for electronics recycling, which will be continued and upgraded as necessary.
- Increase Educational Efforts The County will increase educational efforts in schools, libraries, the Chamber of Commerce and with local Real Estate companies. The County will strive to indicate on the website and all literature that recycling is offered free of charge.

- Support of Curbside Recycling The County will continue to support curbside recycling efforts in the incorporated municipalities and community associations; and
- Continue to solicit recycling reports from businesses The County will continue to contact businesses and discuss recycling & require businesses to report the quantity of material recycled on an annual basis.

# GOAL 3 Provide accessible facilities for the sanitary and efficient acceptance, transportation, and disposal of solid waste generated within Garrett County.

The County currently operates a landfill and six refuse & recycling sites for disposal of solid waste and recycling. A recent evaluation of the remaining capacity in the landfill indicates that an additional 20 years remains. Therefore, the landfill is adequate for the planning period.

The current six refuse & recycling sites appear to be adequate to handle current needs and near-term growth; however, the County will monitor material quantities to verify that the sites remain adequate. If necessary, another refuse & recycling site will be constructed.

The County will assess the need to increase user fees through the Refuse Permit Program (including bag and bulk item stickers) to more equitably cover operating costs of the refuse & recycling sites.

## GOAL 4 Support public education on sound waste management practices, with particular emphasis on source reduction and recycling.

To achieve continued success with source reduction and recycling programs, Garrett County residents and businesses need to be kept informed and educated on existing and new solid waste management programs. The County will continue to use existing educational programs and vehicles such as *The Republican*, the *Weekender* and the online magazine *Deep Creek Times*.

The County also understands the importance of expanding educational and promotional activities to reach wider audiences and promote newly developed programs. For example, should the County implement a new program, a cohesive publicity and education campaign will be developed. Such a campaign will require development of program themes, educational and promotional materials, and advertisements and announcements. Publicity will be timed accordingly with implementation schedules for the new program. Promotional and educational activities will continue after the program is established; however, information can most likely be disseminated through existing vehicles.

In the area of litter control, the County will continue to rely on Wildlife Services for development of educational materials.

# GOAL 5 Promote partnering and cooperating between the County and incorporated municipalities, businesses, institutions, organizations and neighboring counties for waste diversion programs.

Due to the rural nature of Garrett County and the relatively small permanent population, some waste management services, such as countywide curbside recycling, are cost prohibitive. However, through partnering and cooperating with municipalities, organizations, institutions and businesses, some services can be expanded with less investment from the County. Such programs include:

- Curbside Recycling A few municipalities already participate in limited curbside recycling programs. Municipal employees pick up materials and deliver them to the refuse & recycling sites. The County will support and encourage partnering among municipalities and among community organizations. At Contract time, joining with another organization or neighboring County can be beneficial during negotiations with independent haulers.
- Business Recycling Similar to residential curbside recycling, additional business
  recycling can be realized through cooperative efforts. The Recycling Coordinator
  can facilitate cooperative arrangements for recycling services among neighboring
  businesses. The Coordinator can also work with businesses on incentives for
  employees and assist with expanding small recycling programs that are
  struggling.
- Household Hazardous Waste (HHW) HHW programs can be cost prohibitive for small communities; however, costs can be reduced through cooperation between municipalities and neighboring counties and/or cooperation with volunteer fire fighters who already have training with hazardous materials.

## GOAL 6 Promote new recycling programs; Re-charge old recycling programs; and support new Bills, recycling laws and mandates.

• There was a growing concern regarding the disposal of computers, electronics, covered electronic devices and video display devices in landfills. These devices (electronics) can contain hazardous materials such as lead, mercury and hexavalent chromium in circuit boards, batteries and cathode ray tubes (CRTs).

A program for the separate collection from citizens, municipalities and businesses of electronics was created to reduce the quantity of these materials being landfilled. The program may include, but may not be limited to, computers, computer monitors, laptops computers, TVs, PDAs, peripherals, telephones, printers, fax machines, copiers, VCRs, camcorders, DVD players, CD players, calculators, typewriters, cell phones, etc.

 Garrett County Solid Waste and Recycling Division designed a collection program for Garrett County residents. The recycling program is free, however this may or may not change based on market conditions. Immediately upon collection, all fluorescent bulbs, tubes and Non-PCB ballasts are placed directly into pre-paid mailing containers provided by an independent recycling contractor; this method of storage will eliminate breakage. When the containers are full, they are sent to the recycling contractor for processing and recycling.

Garrett County shall collect, but not be limited to, compact fluorescent bulbs (CFL's), 4' lamps, 8' lamps, U-tubes and Non-PCB ballasts, however this may or may not change based on market conditions or requirements.

• Garrett County is continuously researching the markets for additional materials to recycle in the area. Due to the challenging rural location, it is difficult to find a market for tin cans and plastics #3 - #7. Additionally, costs associated with glass recycling are exceptionally high and research continues for a cheaper method to recycle this material.

### A. Special Events Subject to the Recycling Program:

Environment Article, §9-1712, <u>Annotated Code of Maryland</u>, requires special events organizers to provide for recycling at special events that meet the following three criteria:

- 1. Includes temporary or periodic use of a public street, publicly owned site or facility, or public park;
- 2. Serves food or drink; and
- 3. Is expected to have 200 or more persons in attendance.

Projected attendance may be estimated based on past attendance, number registered to attend, the venue's seating capacity, or other similar methods.

In consultation with municipalities, the County has identified the following public sites within the County that host or may host special events meeting the above criteria. In addition to the sites listed individually, special events taking place on any local, State, or Federally-owned streets are also included in the Special Events Recycling Program (SERP).

- Municipally-owned sites <u>Broadford Lake Park</u>, Pittsburgh Ave., Oakland, Md. 21550, 301.334.9222
   <u>Friendsville Community Park</u>, Friendsville, Md. 21531 877.848.3518
   <u>Glades Town Park</u>, 301 G Street, Mtn. Lake Park, Maryland 21550
- 2. Town Fairground Garrett County Fairgrounds, 219 Mosser Rd., McHenry, Md. 21541, 301.387.5400
- Community Center <u>Avilton Community Center</u>, 8295 Avilton-Lonaconing Rd., Lonaconing, Md., 21539, 301.689.2513
   Flowery Vale Senior Fitness Center, 204 S. South St., Accident,

Md., 21520, 301.746.8050

Friendsville Community Center, 947 Community Dr., Friendsville, Md., 21531, 301.746.5300

Grantsville Senior Center, 125 Durst Court, Grantsville, Md., 21536, 301.895.5818

Kitzmiller Community Center, 104 W. Center St., Kitzmiller, Md., 21538, 301.453.3445

Mary Browning Senior Center, 104 E. Center St., Oakland, Md., 21550, 301.334.9431, Ext. 6134

Pleasant Valley Community Center, 975 Joni Miller Rd., Oakland, Md., 21550, 301.334.2826

Swanton Community Center, 3335 Swanton Rd., Swanton, Md., 21561, 301.387.9191

### County-owned sites: Garrett County Board of Education

40 S. 2<sup>nd</sup> Street Oakland, Md. 21550 301.334.8900

### Accident Elementary School

534 Accident Bittinger Road Accident, Maryland 21520 301.746.8863

### Broad Ford Elementary School

607 Harvey Winters Road Oakland, Maryland 21550 301.334.9445

### Crellin Elementary School

115 Kendall Drive Oakland, Maryland 21550 301.334.4704

### Friendsville Elementary School

1<sup>st</sup> Avenue Friendsville, Maryland 21531 301.746.5100

### Grantsville Elementary School

P.O. Box 9 Grantsville, Maryland 21536 301.746.8662

Route 40 Elementary School 17764 National Pike Frostburg, Maryland 21532 301.689.6132

Swan Meadow School 6709 Garrett Highway Oakland, Maryland 21550 301.334.2059

Yough Glades Elementary School 70 Wolf Acre Drive Oakland, Maryland 21550 301.334.3334

Northern Middle School 86 Pride Parkway Accident, Maryland 21520 301,746,8165

Southern Middle School 903 Broad Ford Road Oakland, Maryland 21550 301.334.8881

Northern High School 371 Pride Parkway Accident, Maryland 21520 301.746.8668

Southern High School 345 Oakland Drive Oakland, Maryland 21550 301.334.9447

Hickory Environmental Educational Center 604 Pride Highway Accident, Maryland 21520 301.746.7038

State-owned sites:
Big Run
349 Headquarters Lane
Grantsville, Maryland 21536
301.895.5453

Casselman River Bridge 349 Headquarters Lane Grantsville, Maryland 21536 301.895.5453

Deep Creek Lake 898 State Park Road Swanton, Maryland 21561 301.387.5563

Herrington Manor 222 Herrington Lane Oakland, Maryland 21550 301.334.9180

New Germany 349 Headquarters Lane Grantsville, Maryland 21536 301.895.5453/301.746.8359

Swallow Falls 222 Herrington Lane Oakland, Maryland 21550 301.334.9180

Youghiogheny Wild & Scenic River 898 State Park Road Swanton, Maryland 21561 301.387.5563

Federally-owned sites: Jennings Randolph Lake

Mt. Zion Road Swanton, Maryland 21550 301.334.9180

Youghiogheny River Lake Mill Run Road Friendsville, Maryland 21531 301.746.5248

### B. Materials and Obligations:

Special events organizers are responsible for:

- 1. Providing and placing recycling receptacles adjacent to each trash receptacle at the event (except where already existing on site);
- 2. Ensuring that recycling receptacles are clearly distinguished from trash receptacles by color or signage;
- 3. Providing any other labor and equipment necessary to carry out recycling at the event;
- 4. Ensuring that materials placed in recycling receptacles are collected and delivered for recycling; and
- 5. Paying any costs associated with recycling at the special event;

Special events organizers may fulfill the requirement to ensure materials are collected and delivered for recycling through one or more of the following methods:

- 1. Self-hauling the materials to the County recycling drop-off site;
- 2. Contracting with a recycling hauler to collect the materials and deliver them for recycling; or
- 3. Receiving prior agreement from the site owner to use an existing recycling collection system available at the site.

The special events recycling program must include collection of at least #1 and/or #2 plastic containers, aluminum beverage containers, glass containers, and paper. The special events organizer must assess the availability of food scraps recycling services for the event. If services are available, the special events organizer must provide for food scraps recycling, including provision of separate containers for organic and non-organic recyclables

Recycling at a State-owned site must follow the State agency's recycling plan, if available. Recycling at a federally-owned site must follow any applicable federal recycling plan. If no State or federal recycling program is available for the site, the special event organizer must set up a recycling program in accordance with the SERP. Recycling at municipally-owned sites must follow any additional regulations established by the municipality.

### C. Stakeholders:

The following stakeholders will be involved in the SERP:

- 1. Department of Solid Waste & Recycling: Responsible for overseeing the activities and assuring that all properties that potentially host events falling under the recycling mandate in §9-1712 are included in the SERP; and
- 2. Department of Solid Waste & Recycling, in cooperation with Environmental Health Services, 1025 Memorial Drive, Oakland, MD., 21550, 301.334.7760; Liquor Control Board, Fred Thayer III Courthouse Administrative Office Bldg., 203 South 4<sup>th</sup> Street, Oakland, Maryland 21550, 301.334.1925, Office of the Maryland State Fire Marshall, 1201 Reisterstown Road, Pikesville, Md., 21208, 800.525.3124; Permits & Inspections, Fred Thayer III Courthouse Administrative Office Bldg., 203 South 4<sup>th</sup> Street, Oakland, Maryland 21550, 301.334.7470: Responsible for communicating the requirements of the law to prospective special events organizers and owners/operators of publicly-owned sites in the County. This office will also assist special events organizers

- in setting up recycling programs; monitor the progress and performance of the SERP; and develop and communicate any additional requirements for recycling under the SERP at county-owned sites. Develop a recycling reporting form to be used by special events organizers in reporting recycling activity to the County.
- 3. Special Events Organizer: Responsible for providing recycling bins and ensuring collection for recycling in accordance with the requirements in §B, beginning (the later of October 1, 2014 or the date the Plan amendment is adopted). Perform recordkeeping and submit the recycling reporting form to the County.

### D. Program Monitoring:

The Department of Solid Waste & Recycling and special events organizers will monitor progress and performance of the SERP.

Recycling at events subject to the SERP will be ensured as follows:

- 1. Special events permits issued for use of county sites will include a statement on the permit application that requires recycling for events subject to the SERP. The application form will require a certification that the special events organizer will provide for recycling in accordance with the requirements of the SERP; and
- 2. A fact sheet or other informational document outlining the requirements of the SERP will be distributed with each special event permit issued by the county.

The special event organizer is responsible for monitoring the implementation of recycling at the special event. Special event organizers must oversee placement and labeling of recycling receptacles and collection and recycling of recyclables. Performance of any recycling contractor engaged for compliance with the SERP must be monitored by the special event organizer. The special event organizer must promptly take action to correct any deficiencies in the contractor's performance.

A special event organizer is responsible for maintaining the following records:

- 1. Any contracts for recycling service;
- 2. A list of the types of recyclables accepted for recycling;
- 3. If food scraps recycling is not provided at the event, a description of efforts made to identify available organics recycling services and the reasons organics recycling was determined to be unavailable;
- 4. The quantity of recyclables collected for recycling at the event; and
- 5. The quantity of solid waste collected for disposal at the event.

No later than 30 calendar days after the final day of the special event, the special event organizer must complete and submit to the Department of Solid Waste & Recycling the Special Event Recycling Report on a form provided by the County.

### E. Program Enforcement:

The Department of Solid Waste & Recycling may conduct inspections of the event to ensure compliance with the SERP. If a violation of the SERP is detected, the County may pursue an enforcement action against the special event organizer. A person that violates the SERP is subject to a civil penalty not exceeding \$50 for each day the violation exists. Any penalties collected for violation of the SERP must be paid to the County, or other local government that brought the enforcement action.

### **SUMMARY**

Garrett County has in place an integrated solid waste management system which incorporates the elements of waste reduction, recycling, and landfilling. This plan conforms with the County's Comprehensive Land Use plan and is designed for the succeeding 10-year period (through 2024). The plan addresses the following elements:

- Waste reduction is incorporated in the form of the "Swap Shop" at the Refuse & Recycling Sites and an informal policy within the County government. The County will purchase small storage containers or Lean-To's for each of the Refuse & Recycling Sites. These containers will be used to keep "Swap Shop" items dry and organized.
- Recycling in Garrett County includes both residential and commercial waste programs. The Refuse & Recycling Sites accept recyclable material free-ofcharge from residents, businesses and visitors. In addition, recycling activity by businesses is reported to the Department of Solid Waste and Recycling on an annual basis and the data is incorporated into the recycling report submitted to MDE. Several Municipalities have established limited curbside recycling. The County will promote a more comprehensive curbside collection for municipalities and community associations.
- The County has exceeded the State's 20 percent recycling rate; nevertheless, the County plans to increase recycling by targeting additional materials and increase the number of collection points (as needed).
- The County Landfill is the only waste disposal facility in the County. The facility is owned and operated by the County. It is expected that this facility will have the capacity for all waste disposal needs for 20 years. All waste types generated in the County will be disposed of at the County Landfill with the exception of Controlled Hazardous Substances (CHS) and automobiles. CHS will continue to be managed through private contractors and exported out-of-county for disposal.
- Emergency spills, including petroleum spill cleanup materials, are managed through the County's Emergency Management Department. Petroleum spill cleanup materials are disposed of at the County Landfill.
- County residents are participating in a new fluorescent and compact light recycling program. The bulbs and lamps are accepted at the Landfill location only

- to minimize possibilities of breakage. The Recycling Coordinator will continue to monitor this program and determine whether funds from the Solid Waste & Recycling Enterprise funds should continue to be used for this program. Expansion of this program will also be considered.
- The Landfill, Kings Run, Bumble Bee, Garrett Hwy., and Grantsville Refuse & Recycling Sites all offer electronics, computer and covered electronic devices and video display device, recycling. Residents and businesses may bring in any electronic item and recycle it free of charge. Only 19" televisions are accepted in the program. The program should be assessed often to find a processor that delivers containers and picks up materials free of charge; or for a processor that pays for the electronics materials.
- A Recycling Plan for the Garrett County Public Schools and Garrett College has been established. The recycling program runs smoothly. The Board of Education picks up materials collected at the 8 Elementary Schools, 2 Middle Schools and 2 High Schools. All of the materials are delivered to a Refuse & Recycling site. Garrett College handles most of the recycling in house and delivers materials to the nearest Refuse & Recycling site in Garrett County. A few materials are sent out for processing (i.e., toner cartridges, batteries). Each year, both entities are responsible for reporting the total recycling tonnages to the Recycling Coordinator.
- Pursuant to House Bill 1, adopted in April, 2012, all owners or councils of owners of Garrett County Apartment Buildings and Condominiums that contain 10 or more dwelling units are required to provide recycling to their tenants. The law requires a program to be in place by October 1, 2014. Although Garrett County Department of Solid Waste & Recycling is not required to enforce or manage this program, this office can require property owners or managers of apartment buildings or council of unit owners of condominiums to provide a report of all recycling activities on an annual basis. The Recycling Coordinator should educate the owners, managers of apartment buildings or council or unit owners of condominiums on the principals of recycling so they can provide their tenants with correct and complete information on the Garrett County Recycling Program.
- Pursuant to Special Events Recycling, Senate Bill 781, and in accordance with Environment Article, §9-1712, Annotated Code of Maryland, special events organizers are required to provide recycling receptacles adjacent to each trash receptacle, to ensure recycling receptacles are clearly distinguished from trash receptacles, and ensure that recyclable materials are collected for recycling. Special event organizers must conduct recycling in accordance with this Plan. Event Organizers are responsible for reporting their recycling activities to the Department of Solid Waste & Recycling. A person that violates the Special Events Recycling Program (SERP) is subject to a civil penalty not exceeding \$50 for each day the violation exists. Any penalties collected for violation of the SERP

must be paid to the County, or other local government that brought the enforcement action.

- The Solid Waste and Recycling Program is financed through ad valorem taxes, tipping fees, and the Refuse Permit Program (including bag and bulk item stickers). The County will consider increasing fees through the Refuse Permit Program and perform an assessment of the tipping fees to more equitably cover refuse disposal and recycling costs at the Refuse & Recycling Sites.
- Implementation of this Plan will be in conformance to the schedule presented in *Exhibit 5-2*.

# **EXHIBIT 5-2: IMPLEMENTATION SCHEDULE**

o o		Calendar Year	/ear	
lask	2014	2015	2016	Ongoing
Support Refuse Collection System in the County Maintain Refuse & Recycling Sites				•
Consider Hauler Reporting Ordinance				
Implement Litter Prevention Methods				0
A CAMPAIN TO THE PARTY OF THE P				
Meet and Exceed Recycling Goals				
Monitor Waste Reduction and Recyclng Program			***************************************	0
Support Curbside Recycling in Municipalities & Community Associations		TOWN CONTROLLED		0
Add Office Paper, Magazines, Plastics & Electronics to all Refuse & Recycling Sites Threstigate Markets for Tin Cans Matheeses and Mixed Plastic Recycling				0
Establish & Monitor Garrett County Public School Recycling Plan				0
Establish an Apartment Building and Condominium Recycling Program				
Review & Monitor Special Events Recycling Program & Report on Recycling				0
Maintain Maidadeu 2020 Recycling Kafe, Exband Floerianning to Center in the Constitution				0 0
Support Private Recycling Ventures				0
Maintain Accessible Facilities for Solid Waste Disposal				•
				0
~	And a constitution of the			0
Increase User Fees through the Refuse Permit Program (including, bag & bulk stickers)		- think and the state of the st	<del></del>	
Support Public Education on Solid Waste Management	**************************************			
Advertise in Local Newspapers				٥
Dissentinate Information through the Refuse Pennit Program	The second secon			0
Promote Cooperation w/County & Municipalities, Businesses & Orgs.				
Promote Cooperative Agreement among Municipalities, for Curbside Recycling Create Cooperative Relationships between Businesses to Encourage Recycling				0
Identify Oportunities for Regional Recycling Efforts				0
Investigate Partnership for HHW Program				

# APPENDIX A RETAIL OUTLETS SELLING BULK ITEM STICKERS

Retail Business	Address	Phone Number	Hours of Operation	Individual bag stickers?	Bulk item stickers?
Chestnut Ridge Liquors & Valero Gasoline	2534 Chestnut Ridge Rd. Grantsville, MD 21536	301-895-3197	Mon – Thurs 5 AM – 10 PM Friday 5 AM – 12 AM Saturday 6 AM – 12 AM Sundays 8 AM – 8 PM	Yes	Yes
Deep Creek Shop n' Save	24586 Garrett Highway Market Square McHenry, MD 21541	301-387-4075	Mon – Thurs 7:30 AM – 9 PM Fri – Sat 7:30 AM – 10 PM Sundays 7:30 AM – 9 PM	Yes	Yes
Arrowhead Market	19746 Garrett Highway Oakland, MD 21550	301-387-4020	24 Hours a Day Everyday	Yes	Yes
Swanton Grocery, Gas & Liquor	3562 Swanton Road Swanton, MD 21561	301-387-5701	Sun – Thurs 6 AM – 9 PM Fri – Sat 6 AM – 10 PM	Yes	Yes

<sup>\*\*</sup>Trash bags with attached individual bag stickers are accepted at all six refuse & recycling sites and the Garrett County Landfill. Non-refrigerant appliances with attached bulk item stickers are accepted ONLY at the 135 Backbone Mountain, Bumble Bee, Grantsville, Kings Run and Garrett Hwy. refuse and recycling sites. Appliances with FREON may be taken to the Garrett County Landfill for a fee of \$10.

## APPENDIX B DISPOSAL TIPPING FEES

## GARRETT COUNTY SOLID WASTE DISPOSAL & RECYCLING FACILITY TIPPING FEES EFFECTIVE AUGUST 1, 2013

DESCRIPTION	RATE	UNIT
Brush, all types	\$45.00	ton
Chips In	No Charge	
Clean Fill Material	No Charge	
Construction & Demolition Debris, including pallets	\$45.00	ton
Contaminated Soil, Non Hazardous	\$45.00	ton
Commercial Waste	\$45.00	ton
Industrial Waste, Non Hazardous	\$45.00	ton
Land Clearing Debris	\$45.00	ton
Municipal Solid Waste	\$45.00	ton
Refrigerators/Freezers/Air Conditioners/Dehumidifiers	\$10.00	each
Shingles	\$45.00	ton
Sludge	\$45.00	ton
Stumps	\$75.00	ton
Tires: less than 17"	\$3.00	each
Tires: less than 17" w/rim	\$6.00	each
Tires: 17" to 24"	\$10.00	each
Tires: 17' to 24" w/rim	\$15.00	each
Tires: greater than 24"	\$100.00	each
Tires: greater than 24" w/rim	\$110.00	each
There is an additional surcharge for the above tires left at the main cell		
Tires: Passenger car tires by weight	\$250.00	each
Tires: Truck tires by weight	\$250.00	each
Tires: Equipment tires by weight	\$250.00	each
Surcharge for tires dumped with loads at cell (front-loaders)	\$4	.00
White Goods	\$45.00	ton
White Goods: surcharge for white goods dumped at	\$5.00	each
locations other than the main landfill.		
Yard Waste	\$45.00	ton
Minimum fee over the scales	\$1.00	

Note: One ton is 2000 U.S. pounds.

	Contact Person	Website(s)	Title & Location of Ordinance	Ordinance Name	
	City Operations Department Garbage Collection & Recycling Services 970.375.5004 <a href="http://www.durangogov.org/index.aspx">http://www.durangogov.org/index.aspx</a> ?NID=665	http://www.co.laplata.co.us; click on the Department link; click County A to Z; Select Code Enforcement. http://library.municode.com/index.aspx?clientId=13098&stateId=6&stateName=Colorado	La Plata County, Colorado, Code of Ordinances; Chapter 46 – Solid Waste: Article II: Collection and Disposal; Division 2. Regulations: Section 46-57 Unsecured Trash, Rubbish or Refuse Containers	Unsecured Trash, Rubbish or Refuse Containers Adopted December 18, 2008 by La Plata County	COLORADO  La Plata County
	Solid Waste Placerville Office 2850 Fairlane Court, Building C Placerville, CA 95667 Local Number: 530.621.5300	http://edcgov.us/ http://edcgov.us/Government/EMD/SolidWaste/Bear_Resistant_Garbage_Can_Requirements.aspx	Article V- Responsibilities of Solid Waste Generators; Title 8- Health and Safety; Chapter 8.76 Solid Waste	Bear Resistant Garbage Can Encl. Adopted May 2002 Updated through 10/19/10	CALIFORNIA  El Dorado County
	USDA Forest Service Nevada Division of Wildlife (NDOW) 24-Hour dispatch 775.688.1331	www.ndow.org  http://www.tahoewildbears.org/ordina nce.htm	Chapter - Prevention of Wildlife Access To Refuse [this is a model ordinance to be amended for each city or county as needed]	Model Bear Feeding Ordinance Implemented in 1997	LAKE TAHOE, NEVADA  Nevada Department of Wildlife
	City of Gatlinburg Samitation Department 865.436.5959	http://www.ci.gatlinburg.tn.us http://www.wildlifemanagement.info/g atlinburg/enforcement.htm	Title 17- Refuse and Trash Disposal; Chapter 1- Refuse; Section 17-111- Animal resistant garbage collection devices	Animal Proof Enclosure Ordinance # 2188 Adopted September 1999	GATLINBURG, TENNESSEE

		Reasons For Instituting Ordinance	
	Was becoming a growing problem in mountain areas, including in City of Durango.	Nuisance bears were rummaging through residential garbage.	COLORADO
•		The federal and state campgrounds voluntarily started instituting bear proof containers prior to the ordinance.	CALIFORNIA
	DOW recognizes that bears rummaging through garbage cans or foraging on fruit trees may constitute a nuisance, and frighten residents. But, first, it is the residents' responsibility to remove or make the attractant inaccessible before further steps are taken by NDOW.  Research of various ordinances and created a "model" ordinance pertaining to bear proof containers.	Bear complaints have risen sharply in the last ten years, due in part to the increase in people living in bear	LAKE TAHOE, NEVADA
			GATLINBURG, TENNESSEE

Applicability	
Requires all new homes to have bearresistant garbage containers (new residential units and/or guest quarters, as well as additions greater than 500 square feet to existing residential buildings).  Applies to those portions of Placer County five thousand feet above sea level and higher, in elevation.  Any person receiving a 30-day notification by the County that installation of an approved bear resistant garbage enclosure is required. (grandfathered in)  The owner, lessee, resident or person exercising physical control of any private property, including businesses, shall at all times maintain and use an approved container for collection, storage, and disposal of garbage.	COLORADO
Requires the installation of bear-resistant garbage can enclosures in conjunction with the construction of new residential units on parcels that lie within the boundaries of the Silver Fork, Tahoe Truckee Unified, and Lake Tahoe Unified School Districts. The ordinance is intended to enhance public health and safety by eliminating conditions that attract bears to inhabited areas.  Those portions of El Dorado County 4,000 feet above sea level and higher in elevation.  If there is a complaint by an existing resident. (grandfathered in)  The owner of any property, including any residence, commercial establishment, or institution, or industry, vacant or occupies, shall be responsible for the satisfactory storage and removal of all solid waste accumulated on that property.  In instances where a person rents or leases to another, the property owner shall be responsible for solid waste generated or stored on those premises if waste remains on premises during/ beyond the tenant term.	CALIFORNIA
The ordinance would be imposed on those who fall to "bear proof" garbage containers or who put garbage where bears can get to it.  Many have had the containers custom painted or fabricated to match their homes. Home Depot sells a Greenlee ® trash can for about \$250.  It is the residents' responsibility to remove or make the attractant inaccessible FIRST.  The best success has been with the ordinance in Homeowner Associations. By-laws were written to include new containers. The Associations split the cost of the containers with the residents to purchase a metal container that held 2 32-gallon trash cans.	LAKE TAHOE, NEVADA
The entire area within the city limits of Gatlinburg on the west side of the Foothills Parkway, the area north of the National Park Service boundary on either side of the western prong of the Little Pigeon River between Parkway and the Foothills Parkway boundary bounded on the north by LeConte Street and the Skyland Park and Winfield Heights subdivision, the entire limits from Low Gap Road on the east and to the south of Highway 321 and Parkway.  All restaurants within Gatlinburg City Limits.  Rental companies are responsible for cleaning up any trash caused from the bears. The rental companies explain to all renters about proper trash disposal procedures.	GATLINBURG, TENNESSEE

Placement S C C C C C C C C C C C C C C C C C C	Type of Container	
Trash containers shall be placed out for collection at the edge of the right-of-way of a street or alley. Recycling containers shall be placed for collection along the curbside of the property being served. Such placement shall not be within any fenced or enclosed area. Wildlife-Resistant Refuse Containers shall be unlatched when placed out for collection. Trash and recycling containers shall be placed so as to leave a four-foot clearance around the containers and recycling containers shall be placed so as to leave a four-foot clearance around the containers and recycling containers shall be placed out for collection no earlier than 6:00 a.m. on the day of collection and must be removed from the right-of-way no later than 8:00 p.m. on the day of collection.  The unit must be installed prior to final and/or occupancy approval for all new residential construction.	A fully enclosed structure containing four sides and a roof or cover. The door must have a latching mechanism. The sides of the structure must extend to within 2" of the ground, and ventilation opening must be covered with a heavy gauge steel mesh or other material. Wild-proof refuse container (WPRC) or Wildlife resistant refuse container (WRRC)	COLORADO  La Plata County
A site plan that clearly designates the location and name of the bear-resistant garbage can enclosure must be approved by the Environmental Management Department. Bear resistant garbage can enclosures shall be located within 20 feet of a county maintained road, or other road if subject to garbage pickup service, but not closer than 10 feet from the edge of pavement or curb. The enclosures shall not be located within a road right of way or easement.  The unit must be installed prior to final and/or occupancy approval for all new residential construction.	A secured enclosure made of metal or equivalent with a secured door or doors in front of the enclosure, weather resistant, and makes the contents of the garbage can enclosure inaccessible to bears.	CALIFORNIA  El Dorado County
Containers are to be outdoors away from homes. Typically, no more than 25 feet from road.	A fully enclosed structure containing four walls and a roof. Walls must extend to ground and door to not have more than 3/8-inch gap along the bottom. The latching device must be of sufficient strength and design to prevent access by wild life.	LAKE TAHOE, NEVADA  Nevada Department of Wildlife
In alleys, containers shall be placed on or within six (6) feet of the alley line in such a position as not to intrude upon the traveled portion of the alley.  On streets, containers shall be placed adjacent to and back of the curb, or adjacent to and back of the ditch or street line if there is no curb.	Animal resistant, not just bear proof. Strong, durable, rodent/insect proof closed container, not less than 20 or more than 35 gallons in capacity. They may not exceed 75 pounds. Plastic bags are not acceptable.	GATLINBURG, TENNESSEE

Penalties

A party authorized to investigate a report of an apparent wildlife disturbance shall determine that a person's failure to comply has occurred, and he or she may issue a summons and complaint to that person.

A summons and complaint issued by an enforcement officer shall contain the name of the defendant, shall identify the offense charged, including a citation of the statute or resolution section alleged to have been violated, shall contain a brief statement or description of the offense charged, including the date and approximate location thereof, and shall direct the defendant to appear before the county court at a stated time and place.

or for leaving out for curbside pick-up. trash, rubbish or refuse on the premises the purpose of storing or containing after exclusively use that container for payment of the fine and agree to thereno less than 12 months a WPRC or either purchase or lease for a period of violation, a violator may instead elect to complaint. In lieu of paying for the a notice of violation with a reasonable fine as set forth below. Failure to correct enforcement officer, also result in the First Violation: At the discretion of the WRRC within the time period for for issuance of a summons and time, not to exceed 72 hours, is grounds issuance of a notice of violation and a

Violations shall be punished by the following progression of sanctions:

 For the first violation, a verbal or written warning will be issued to the responsible party.

you pay" model ordinance that was presented to communities with bear populations for possible adoption. The

The council crafted a "three strikes and

2. For a second violation within two years of receiving a verbal or written warning for a prior incident, the responsible party will be required to purchase or construct a bear-proof collection bin, container or structure and install within thirty days of the violation, or take such other corrective action as may be required by the El Dorado County Environmental Health Division.

Penalty. Every person who shall violate any provision of this chapter shall be punished by a fine not to exceed \$500 per offense.

Each day that a violation shall occur shall be a separate offense. (Ord. #2188, Sept. 1999)

bears can get to it. It is important to note that a garbage can enclosure

ordinance would be imposed on those who fail to "bear proof" garbage containers or who put garbage where

Injunctive or other relief: In addition to any penalty, violation of the provisions of this chapter may be remedied by obtaining injunctive relief, or by a restraining order, or other appropriate equitable remedy by the city. (Ord. #2188, Sept. 1999)

community education and to assist lowincome families become bear-proof. (GCE) costs about \$700 and holds two garbage cans. Money collected from violations would be used for

PENALTIES (Continued)		
Subsequent violation. Offenders who continue to violate this section or continue to fail in achieving timely compliance as set forth in any previous notice of violation shall be subject to a graduated fine schedule as set forth below.  Penalties. Pursuant to C.R.S. § 30-15-402(1), any person who or entity that violates this section shall be guilty of a class 2 petty offense, punishable as follows:  a. A fine not exceeding \$200 for first notice of violation.  b. A fine not exceeding \$300 for second notice of violation.  c. A fine not exceeding \$500 for each additional notice of violation.	La Plata County	COLORADO
3.Any successive violation within two years of a second violation, shall be punishable as an infraction with a fine of not less than \$100.00.  Except in cases where a different punishment is prescribed by an ordinance of the county, any person convicted of a misdemeanor for violation of an ordinance of the county is punishable by a fine of not more than five hundred dollars (\$500), or by imprisonment not to exceed six (6) months, or by both such fine and imprisonment.	El Dorado County	GALIFORNIA
<ol> <li>First Violation: Written citation and warning that if preventative measures are not implemented, offender may be required to install an approved wildlife resistant container at his/her expense.</li> <li>Second Violation: Offender will be required to install an approved wildlife resistant container at his/her expense.</li> <li>Third Violation: Offender will be required to install an approved wildlife resistant container at his/her expense and pay a fine equal to the cost of an approved wildlife resistant container.</li> </ol>	Nevada Department of Wildlife	LAKE TAHOE, NEVADA
Financial assistance: Those persons living within the areas where animal resistant containers or enclosures are required, may be eligible for financial assistance to defray a portion of the cost of compliance. Those persons who qualify for project assistance as determined by the Douglas Cherokee Economic Authority shall be eligible for a grant from the city in an amount not to exceed 50% of the actual cost of compliance.	GATLINBURG, TENNESSEE	