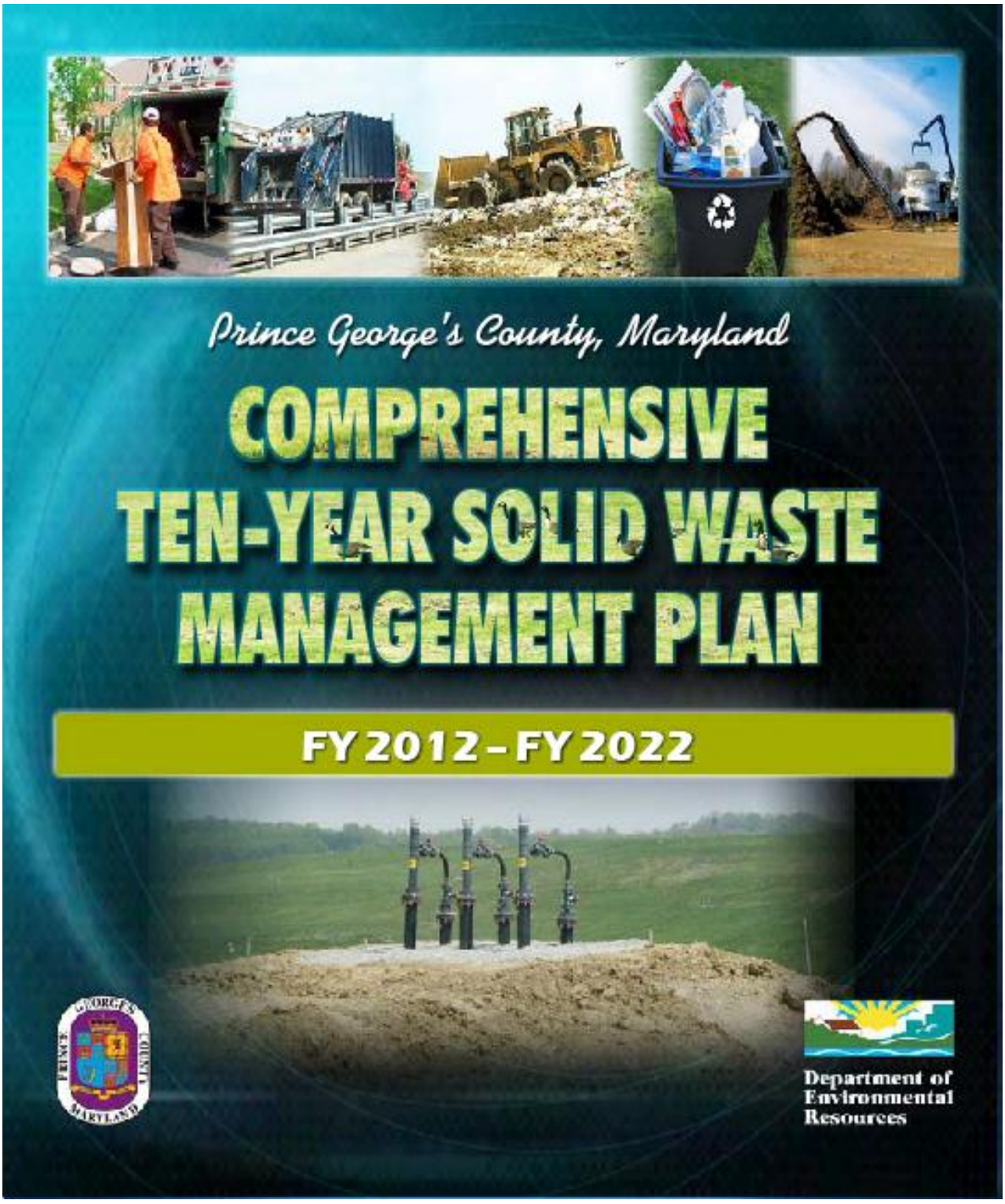
Prince George's County, Maryland
COMPREHENSIVE
TEN-YEAR SOLID WASTE
MANAGEMENT PLAN
FY 2012 – FY 2022
Department of
Environmental
Resources

2012 – 2022

TEN-YEAR
SOLID WASTE MANAGEMENT PLAN

Prince George's County, Maryland

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INTRODUCTION

I. State Requirements of Preparation of the Plan

The Prince George's County 2012-2022 Ten Year Solid Waste Management has been prepared according to Title 9, Subtitle 5, Environment Article, Annotated Code of Maryland, and Regulations .01-.05 under COMAR 26.03.03, entitled "Development of County Comprehensive Solid Waste Management Plans" (Appendix B). The Prince George's County Council adopted the plan by Council Resolution on ___TBD_____.

II. Plan Summary

Prince George's County, although highly urbanized in certain locations, is not as densely populated as a city. As a result, the issues related to solid waste management are highly diversified and challenging. The services presently provided to County residents to meet solid waste disposal needs are adequate. However, during this Planning Period, several changes are anticipated. The County will be taking measures to meet new aggressive recycling goals as outlined in Council Bill 87-2012. Initiatives include a recycling rate of 60% by 2020, food scrap composting, heightened emphasis on multifamily, commercial and industrial recycling and requiring all refuse collectors or haulers licensed by the Department to provide for an opportunity for recycling or show evidence to the Director of an agreement or contract for providing recycling services through another entity. Furthermore, the County will also be researching the feasibility of implementing a change in trash collection services, including switching to once-a-week collection and or a pay-as-you-throw (PAYT) system. Food scrap recycling, mandatory multifamily and commercial recycling reporting and reducing the current number of residential weekly trash pick-up services have proven to have an effect on behavior resulting in increased recycling rates. The County will be moving from landfilling as the primary solid waste management practice, to designing and building a state of the art Solid Waste Transfer Station (TS) that will operate as the primary facility for receiving and transferring the remaining portion of the County's Municipal Solid Waste. The County will also be reviewing options to further divert items that are received at the TS, such as metals, for recycling, thus reducing the amount of refuse to be transferred. This Plan is intended to be a guide and will allow steps to be taken toward the continuous development of an up-to-date solid waste management program that considers maximizing waste diversion.

A. Solid Waste Generation

The United States Environmental Protection Agency (EPA) has been collecting data on waste generation and disposal for more than thirty years. In a 2010 the EPA study revealed that Americans generated about 250 million tons of trash and recycled and composted nearly 85 million tons of this material, equivalent to 34 percent recycling rate.

Over the last few decades, the generation, recycling, composting, and disposal of MSW have changed substantially. While solid waste generation has increased from 3.66 to 4.43 pounds per person per day between 1980 and 2010, the recycling rate has also

increased from less than 10 percent of MSW generated in 1980 to 34 percent in 2010. Disposal of waste to landfill has decreased from 89 percent of the amount generated in 1980 to about 54 percent of MSW in 2010. It should be noted that from 2007 to 2010 generation rates fell slightly from 4.65 pounds per person per day to 4.43 pounds per person per day. In 2010, on average, 1.51 pounds out of 4.43 pounds of waste generated per person per day was recycled or composted. Organic materials continue to be the largest component of MSW generated. Paper and paperboard account for 29 percent, food scraps 13.9 percent, and yard trimmings 13.4 percent. (www.epa.gov/wastes, November 2011)

The waste generation rate dropped to 4.43 pounds per person per year and is likely to remain relatively stable during the next decade. Recovery of elements of the waste stream through recycling has continued to increase significantly over this same period. In 1960, the recovery rate was only 6% through recycling, increasing each year to a recovery rate of 34% in 2010. As recycling markets increase and recycling programs expand, it is expected that this rate will continue to gradually increase over the next ten years. Prince George's County has already exceeded this national average with a 49.11% waste diversion rate (2011 Maryland Recycling Act (MRA) Report) and will continue to make recycling and source reduction significant components for Solid Waste Management.

B. Solid Waste Collection

At present and continuing during this Plan period, the three solid waste collection services provided in Prince George's County will continue to be acceptable to County residents. The three types of services include collection by private contract services, County-contract services and municipality provided or contracted services. County-contract services have been extended to all areas of the County with the exception of a scattering of housing located in the southeastern quadrant of the County.

C. Solid Waste Disposal

Present County disposal programs include a sanitary landfill, recovery sites, rubblefills and a fly ash fill. In addition, numerous private and public material recycling facilities are available in and out of the County to prepare recyclables for end-markets. In general, these types of disposal and recycling programs are expected to continue within the time frame of this Plan. However, the County's one remaining landfill will become a secondary facility and will remain available for use in times of emergency or natural disaster. Existing facilities, along with the planned Solid Waste Transfer Station (TS) that will be constructed during this planning period will be more than adequate to handle the County's entire solid waste stream. Major changes to these programs involve the construction and operation of the County's new TS, increased emphasis on minimizing waste generation, source reduction, increasing recycling through single-stream collections and processing, enforcement of multifamily and commercial recycling, and food scrap composting.

D. Recycling

For years, recycling activities had been occurring in the County; however, in the Spring of 1988, the County launched the first government-sponsored recycling collection programs in five communities across the County. These pilot programs were the first step in a Countywide recycling effort. By 1993, the County developed and opened its own dual stream Materials Recycling Facility (MRF) and implemented residential curbside recycling collection. In November of 2007, the County's MRF was converted to a state of the art single-stream processing facility and the new Residential Curbside Recycling Collection contract was bid for single-stream collection. Providing residents the ability to place all recyclables into the same receptacle without the need to pre-sort materials into different streams (separating out paper) made recycling very convenient. The state of the art single-stream equipment also allowed the County to incorporate additional materials to the list of acceptable items to be recycled, such as plastics #3 - #7. The County also distributed new 65-gallon recycling carts for residential curbside recycling collection. The combination of single-stream recycling and the larger sized recycling receptacles have had the positive result of raising the residential recycling rate by 41%. Since its inception the MRF has surpassed one (1) million tons of recycling. Currently the County has already met and surpassed the State's recycling mandate and Statewide voluntary goals.

Recycling as a waste management tool has been an evolutionary process as existing landfills began to reach capacity and alternatives to landfilling became available. The County has an extensive recycling program and the changes made to the MRF and the collection process allowed the programs to expand. Plastics #3 through #7, coat hangers, aseptic gable top containers, and empty aerosol cans were all added to the recycling curbside collection program. Additionally, rigid plastics were added to the convenience center collection program. Since the MRF is a single-stream processer, the commercial sector has also benefited. Businesses have begun offering single-stream recycling programs for employees and have altered their hauling contracts to include single-stream recyclables. In 2011, the County also let out a new bid for its' County Office Recycling Program (CORP) as a single-stream recycling program, resulting in a recycling increase of 46.5%.

The recycling and source reduction efforts in the County continue to include comprehensive and diverse programs such as: residential curbside recyclables collection, processing and marketing; mandatory multifamily recycling; curbside yard waste material collection and composting; wood waste mulching; collection and marketing of scrap metal, white goods, scrap tires, batteries, and oil; donation of old used latex paint to non-profit organizations, collection of household hazardous waste and recycling and or donation of old electronics and televisions; public schools recycling program coordination and technical assistance; source reduction and recycling education; sustainability education and implementation, government procurement preference for materials with recycled content; and technical assistance to businesses. During this planning period, the County will initiate a food scrap pilot project for the inclusion of food waste at the Western Branch Yard Waste Composting and Transfer Station Facility.

Adding food scraps to the Recycling Program compliment could increase the County's diversion rate by as much as 11%. Also, during this period, new emphasis and oversight will be focused on multifamily recycling and business recycling, to raise the overall recycling rate in the County. Furthermore, the Recycling Section will continue its effort to direct more bulky (household and building materials and furniture) items to donation centers such as Community Forklift, Purple Heart, and other non-profit reuse centers.

E. Public Information and Cleanup Programs

An improved environment, as well as other benefits that can be derived from programs related to solid waste management, are only possible through citizen awareness and participation.

The Recycling Section (RS) and Citizens Concerned for a Cleaner County (CCCC) now Doing Business As (d/b/a) as Keep Prince George's County Beautiful (KPGCB) will continue to expand its public outreach activities to reduce litter, encourage recycling and reuse, and promote good solid waste management practices. The RS and KPGCB will also carry forward with publication and dissemination of information on litter control, recycling and source reduction. Additionally, the RS and KPGCB will continue to provide speakers to community groups and organizations for meetings and or special events, assist other agencies in preventing illegal dumping of waste, review existing ordinances and regulations, aid in environmental education programs in County schools, and formally recognize and award those who have undertaken anti-litter and recycling projects. KPGCB specifically engages the public in volunteerism to clean and keep the environment litter free and beautiful. The RS will also continue to provide recycling and source reduction information on the County's Waste Management Division's webpage and Facebook page, through media alerts and press releases, brochures and flyers, posters, newspapers, direct mail, promotional giveaways, and other means such as radio.

The comprehensive neighborhood cleanups which focus County resources on communities, the Green Team, the Great American Clean-Up, Clean-Up Green-Up Events and various other County cleanup programs will continue, subject to the availability of funds.

CHAPTER I
POLICIES AND ORGANIZATION

I. Planning Background

The Prince George's County Ten-Year Solid Waste Management Plan (TYSWP) is designed to respond to State and local requirements by setting forth a program capable of meeting solid waste acceptance and disposal needs over the next ten years. The TYSWP (Plan) encompasses the entire County and requires close intergovernmental coordination with municipal governments and County agencies. Municipalities conform to provisions of this Plan while maintaining responsibility for some aspects of solid waste management (including refuse collection and some have their own recycling and yard waste composting programs).

II. Solid Waste Management Terms

The following clarifies some of the terms used in this Plan. Additional definitions are included in the Glossary in Appendix A. These definitions should be used to interpret the TYSWP; however, they should not be used to interpret other County laws. For example, the County Zoning Ordinance has its own section of definitions that apply to zoning issues.

Solid Waste (refuse) – means all discarded material and material stored prior to discard, combustible or noncombustible, from all public and private establishments and residences that is not presorted prior to collection for the purpose of recovery for reuse or recycling. Solid waste includes ashes, trash, garbage, rubbish, offal, industrial and commercial refuse and materials used in a manner constituting disposal, but not body parts or ash residuals from coal-fired, electric power generating facilities (pozzolan).

Recyclable Material – means those materials that would otherwise become solid waste and that can be collected, separated or processed and returned to the economic mainstream in the form of raw materials or products.

Solid Waste Acceptance Facility – means any sanitary landfill or rubblefill, processing facility, transfer station, waste incinerator or any other type of facility that accepts solid waste for disposal, treatment, processing, composting, compacting, or the transfer to another solid waste acceptance facility.

Recycling Facility – as defined in Section 21 of the Prince George's County Code, any facility designed and operated for the purpose of receiving, storing, processing and transferring valuable, source-separated materials that would otherwise become solid waste back into the marketplace in the form of valuable, raw materials or products. At least 75 percent of the materials received at the facility must be demonstrably capable of being returned to the marketplace and shall not be processed and stockpiled without identification of a verifiable market. Materials collected and delivered to a recycling facility may not be contaminated with more than a diminutive amount of putrescible (subject to decay) solid waste, hazardous or toxic waste as defined by State or Federal law.

III. County Goals Statement

In 1982, the Prince George's County Council adopted a comprehensive goals statement in approving amendments to the General Plan for Prince George's County. The General Plan has been amended since then by the adoption of master plans. The General Plan establishes the framework for other planning components such as area master plans and functional master plans, solid waste management plans and the annual Capital Improvement Program. It also sets the policy direction in the areas of land use, economic development, environment quality, human resources, housing and transportation.

The amended General Plan goals are intended to provide guidance for the long-range development of Prince George's County. General Plan and other County goals pertinent to solid waste management include:

A. To achieve an improved quality of life through the development of human resources:

   1. by preserving and enhancing safe and pleasant neighborhoods; and

   2. by eliminating harmful or otherwise undesirable environmental impacts such as odor, polluted air, noise and vibration, polluted surface and groundwater, litter and visual blight.

B. To improve the quality of development and maintain a positive image of the County as a good place to live and work:

   1. by improving visual quality of the County through landscaping and aesthetic improvement of streets, highways and commercial and industrial areas; and

   2. by upgrading existing substandard areas through the reasonable application (enforcement) of current codes and ordinances as well as beautification and renewal programs.

C. To play a role in regional development which is increasingly advantageous to Prince George's County:

   1. by continually improving the quality of neighborhoods and housing so as to make the County a more attractive place for desirable economic development projects;

   2. by setting an outstanding example in the preservation of environmental quality;

3. by ensuring the availability of such limited regional natural resources as both surface and groundwater, sand, gravel, energy and agricultural lands; and

4. by maintaining and/or improving the provision of public facilities and services at a level desirable for the residents and businesses of the County.

D. To carefully guide and control the impact of regional growth upon Prince George's County by taking all steps necessary to protect and improve regional water quality standards, while simultaneously working toward the solution of regional waste disposal problems.

E. To preserve and protect environmental quality by providing for the disposal of waste products in a manner compatible with high environmental standards and the need for conserving resources.

F. To protect and improve the quality of neighborhoods by recognizing the role of existing municipalities and encouraging their efforts to preserve the nature of their communities and upgrade their areas.

G. To assure the orderly and efficient utilization of land:

1. by coordinating zoning and subdivision actions, water and sewer extensions and other capital improvements to ensure that land development takes place in accordance with approved plans;

2. by staging development so that capabilities of existing and programmed public facilities shall not be exceeded; and

3. by encouraging the preservation of large open space and the continuation of agricultural uses on agricultural lands as a contrast to the urban environment, recognizing that prime soils are an irretrievable resource, that open space is generally a positive factor in preserving air, water quality and resources, and that agricultural land may be used for the land treatment of sewage.

H. To make timely and orderly provisions for needed public utilities, facilities and services:

1. by providing an efficient and innovative system for the minimization, collection, disposal, and recycling of solid waste; and

2. by improving the delivery of public services through the coordinated planning of facilities and programs.

I. To conserve energy and natural resources through source reduction, recycling and procurement of recycled materials.

J. To surpass the State-mandated recycling goal of 35 percent, and voluntary Statewide Recycling goal of 55% through programs which encourage waste reduction and by making recycling more efficient and convenient. This goal is established under the Maryland Recycling Act (Annotated Code of Maryland, Environment Article, Section 9-1706.1 of the Environment Article, Annotated Code of Maryland) and is based upon the County's population, which is greater than 150,000.

K. To meet the County's Recycling goal of 60% by 2020, as identified in Council Bill CB-87-2012.

L. To minimize our dependence on landfilling as the County's sole solid waste management system and to conserve landfill space.

M. To ensure that all County residents and employees have the opportunity or "right" to recycle.

N. To make recycling easy and convenient.

O. To involve the private sector, including local businesses, in providing recycling services.

P. To recycle as many components of the waste stream as feasible.

Q. To involve all sectors of the County (i.e. residential, commercial, institutional, governmental, as well as public and private school systems) in recycling.

IV. County Objectives and Policies

Solid waste management is an important public service and must respond to increasing County growth and development. The objectives and policies of solid waste management set forth the means for providing this vital service for Prince George's County citizens.

A. General Objectives of the Ten-Year Solid Waste Management Plan include:

1. Provide economical, practical and environmentally sound solid waste management systems.

2. Develop solid waste management systems consistent with area master plans, functional master plans, the General Plan, Capital Improvement Program and State, local and Federal laws.

3. Develop a Solid Waste Management Plan that is comprehensive and amenable to new management practices as they become feasible.

4. Continue and expand public involvement and information programs, recycling efforts, cleanup programs and salvage and recovery systems.

5. Address recycling within the County, including ensuring all multifamily properties have an opportunity for its residents and tenants to recycle, requiring all businesses to report tonnages or provide for a recycling plan to be filed with the Recycling Section and requiring all refuse haulers licensed to do business in the County to also provide for recycling services either through their own collection service or by subcontracting with a licensed recycling hauling company.

B. Guidelines and Policies regarding Solid Waste Facilities:

1. Sanitary landfill sites should be located on suitable paved access roads, but screened from general view of the public.

2. Costs and adverse impacts of transporting solid waste over long distances should be minimized.

3. Promising recycling technologies that will promote land and natural resources conservation shall be encouraged and maximized.

4. Promising technologies for the disposal of solid waste should be pursued.

5. Solid waste disposal programs should explore the possibilities of resource recovery as an alternative to traditional solid waste disposal.

6. Encourage waste minimization efforts.

7. All solid waste facilities must be included in the Ten-Year Solid Waste Management Plan prior to the issuance of Building, Grading and Use & Occupancy permits.

8. All Recycling Facilities (as defined in the Definitions and Glossary) must be licensed by the County.

V. Governmental Responsibilities

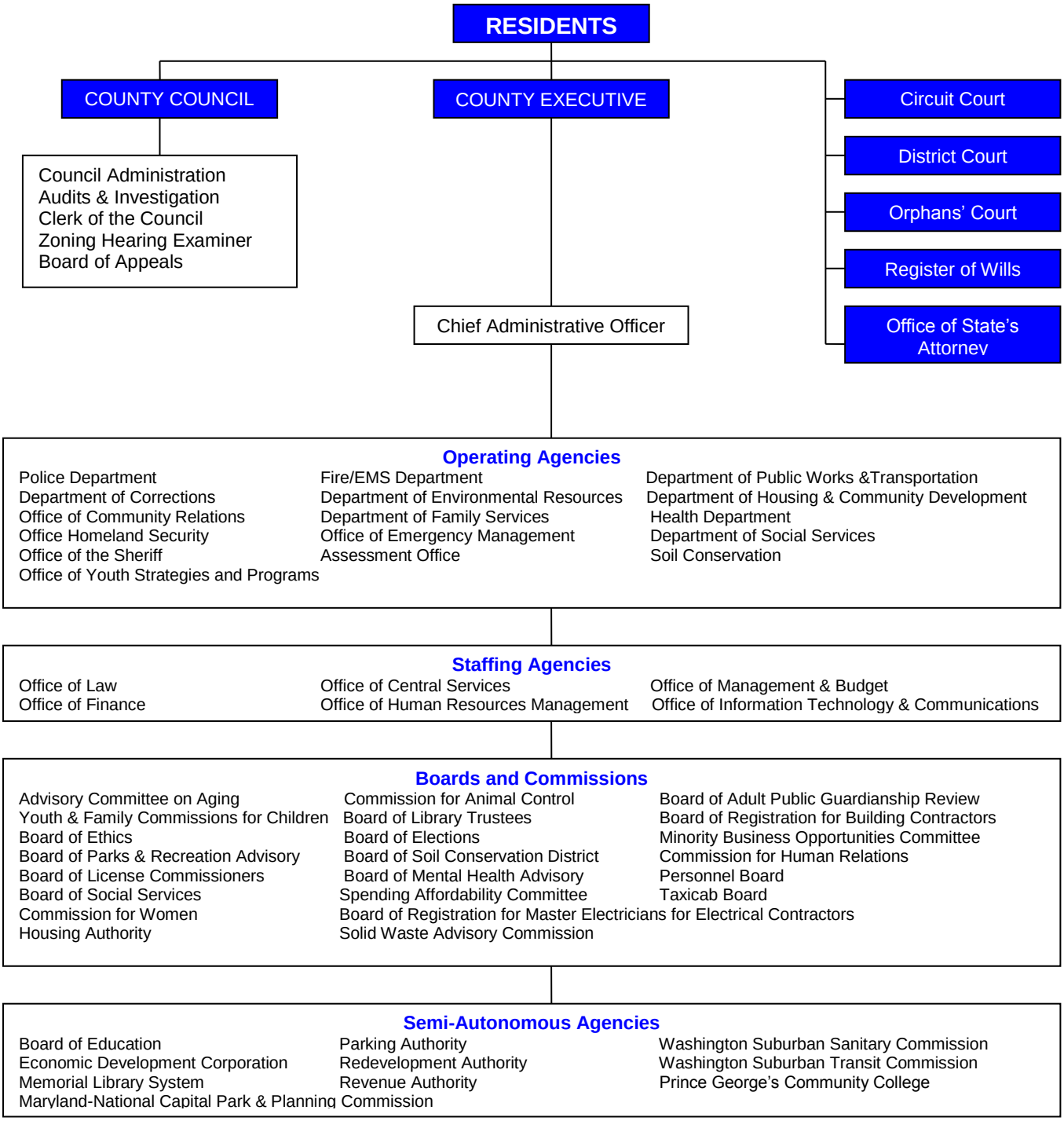
A. Prince George's County Government:

Prince George's County has a charter form of government consisting of an elected, nine-member County Council and a County Executive. The Chief Administrative Officer, who is appointed by the Executive and confirmed by the

Council, assures that solid waste management planning and programming are carried out in conformance with executive and legislative policies and are compatible with overall County goals and objectives. Figure 1-1 presents an organizational chart of the Executive Branch of County Government.

The Government carries out its responsibilities in the solid waste management field through its various departments and agencies.

Figure 1-1
Prince George's County Government Organizational Chart



The Department of Environmental Resources (DER) was established as an agency of the Prince George's County Government in 1984 and is charged under Executive Order 12-1984 with the preparation of the County's Ten Year Solid Waste Management Plan. The Department is responsible for the collection, recycling and disposal of solid waste, preparation of this Plan and the Recycling Plan, and enforcement or ordinances related to solid waste management. The County's solid waste disposal and recycling activities include the operation of the Brown Station Road Sanitary Landfill, the convenience centers, the Household Hazardous Waste and Electronics Recycling Acceptance Site, the Materials Recycling Facility (MRF) and the Prince George's County (Western Branch) Yard Waste Composting Facility. The collection responsibilities consist of contract management for solid waste and curbside recyclables collection, licensing and permitting of waste and recycling vehicles, and all materials recycling facilities. The Department is further responsible for the yearly inspection and permit review for all rubblefills and fly ash fills in the County. The Department also ensures enforcement of the Anti-Litter and Weed Ordinance, Solid Waste Ordinance, Zoning Ordinance, housing and building codes, licensing and permitting, animal control and the Abandoned Vehicle Program. Additionally, the Department is responsible for managing local, state and federally-mandated flood control and watershed improvement programs. Finally, the Department provides staff support Keep Prince George's County Beautiful (KPGCB).

The Department of Public Works and Transportation (DPW&T), through its Office of Highway Maintenance, operates various cleanup programs including the "Adopt-a-Road" and "Adopt-a-Median" Programs, and the removal of litter and debris from County property. This Department also assists DER in cleaning private properties through court order that have been cited for trash and debris and have not been cleaned by the property owner. The costs for cleaning private property are billed to the property owner and can result in tax liens if bills for the cleanup effort are not paid.

The Department's work force is supplemented by participants in various programs of the judicial and correctional systems. The activities and assignments for this multifaceted work force are coordinated by the Special Services Division of the Office of Highway Maintenance. The Department also provides a coordinator to manage its "Adopt-a-Road" and "Adopt-a-Median" programs and the volunteer groups, civic associations and others involved in clearing litter and debris from roadways in the County.

The County Police Department is the principal agency responsible for criminal enforcement of State and County laws regarding littering and illegal dumping.

The County Fire Department's Office of Emergency Preparedness is responsible for coordinating the emergency response of the County Government during times of crisis or disaster. Countywide contingency plans for disaster response are also managed by this Office.

The County Health Department, through its Environmental Engineering Program, is charged with the responsibility of maintaining surveillance of all County solid waste disposal systems to safeguard public health against potential threats from environmental contamination. Specific activities include:

1. Responding to citizen complaints concerning the improper and illegal disposal of solid and liquid wastes and associated public health issues.

2. Inspecting all vehicles desiring a solid waste or recyclables collection license and registration to reduce the nuisance created by improperly equipped collection trucks.

3. Licensing of septage collection vehicles.

4. Reviewing solid waste acceptance, recycling, biosolids, sludge, special medical waste, secondary scrap tire and other special waste disposal facility plans.

5. Inspecting sanitary landfills, recycling facilities, rubblefills and biosolids storage and utilization sites.

6. Evaluating sample data in regards to surface and groundwater quality of the County. Requiring or conducting field samplings when required.

7. Cooperating with the County and municipal governments concerning establishing or upgrading their solid waste management systems.

8. Providing information on disposal techniques to citizens, engineering firms and government agencies.

9. Instituting legal action to abate potential health hazards resulting from solid waste problems when other measures have failed to obtain satisfactory results.

10. Working with County, State and Federal law enforcement and regulatory agencies on cases that deal with the improper disposal of solid and liquid wastes.

B. The Maryland Department of the Environment:

The Maryland Department of the Environment (MDE) has the authority to approve or disapprove, in whole or in part, a proposed County Solid Waste Management Plan or a proposed revision or amendment of a Plan. MDE reviews the proposed plans within 90 days after the proposal is submitted to MDE. MDE may extend the 90 day review period for an additional 90 days for good cause and

after issuing a notice to the County involved. MDE also reviews and approves the County's recycling plan and regulates solid waste acceptance facilities.

C. The Maryland-National Capital Park and Planning Commission:

The Maryland-National Capital Park and Planning Commission (M-NCP&PC) provides information and assistance as required by this Plan and the Zoning Ordinance. The Plan, by law, must be referred to this agency for review. The Planning Board reviews all applications for special exceptions for various solid waste acceptance facilities.

D. The Washington Suburban Sanitary Commission:

The Washington Suburban Sanitary Commission (WSSC), under authority of its Plumbing and Gasfitting Regulations (Chapter 9, Industrial and Special Wastes), requires the pretreatment of sanitary and rubble landfill leachate before these materials may be discharged to WSSC's sanitary sewer system.

VI. State, Local, and Federal Laws

A. Maryland Laws

The State of Maryland comprehensively regulates solid waste management. Under Title 9 of the Environment Article of the Annotated Code of Maryland, the Maryland Department of the Environment regulates the location, design and operation of sanitary landfills incinerators, transfer stations and processing through refuse disposal permits, issued and enforced under the authority of the following sections of the Environment Article:

Subtitle 2, Part II includes the State's requirements for solid waste and recycling planning. It also governs incinerator, landfill and other disposal system permits and contains regulations concerning their operation and administrative provisions.

Subtitle 5 contains specific provisions governing the content of County solid waste management plans and procedures to be followed when the Plan is adopted.

Subtitles 18 and 19 regulate household hazardous waste and toxics in packaging.

In addition, the Maryland Environmental Policy Act (Title 1, Subtitle 3, Natural Resources Article) sets forth the State's overall policy on the environment in considering governmental actions. These include:

1. The protection, preservation and enhancement of the State's diverse environment is necessary for the maintenance of the public's health and welfare and the continued viability of the economy of the State and is a matter of the highest public priority.

2. Each person has a fundamental and an inalienable right to a healthful environment, and each person has a responsibility to contribute to the protection, preservation and enhancement of the environment.

3. The determination of an optimum balance between economic development and environmental quality requires the most thoughtful consideration of ecological, economical, developmental, recreational, historic, architectural, aesthetic and other values.

B. Maryland Regulations

The Code of Maryland Regulations (COMAR) also contains regulations governing solid waste. Most of the direct requirements are contained in Title 26.

Subtitle 3 regulates the development of County Comprehensive Ten Year Solid Waste Management Plan (see Appendix B) and addresses funding.

Subtitle 8, Water Pollution; Subtitle 11, Air Quality; Subtitle 13, Disposal of Controlled Hazardous Substances; Subtitle 17, Water Management and Subtitle 23, Non-tidal Wetlands also have bearing on waste management planning.

C. County Laws

The following Code sections, in effect at the time of adoption of this Plan, identify various sections of Prince George's County law relevant to solid waste management. Subtitle 21 of the County Code specifically addresses Solid Waste Management and Recycling.

Subtitle 2, Division 22, Urban Areas, provides for the creation of urban and suburban areas within the County and uniform procedure for the provision of street cleaning, refuse collection, waste removal and disposal.

Subtitle 3, Section 3-144, Disposal of Animal Carcasses, provides for removal and disposal of animal carcasses.

Subtitle 10A, Subdivision 4, Purchasing, authorizes the County Purchasing Agent to establish a preference for products containing compost material generated by composting operations within the County or for products containing recycled materials. A resolution enacted by the legislative branch in 1994 (CR 42-1994) endorsed procurement of goods with post-consumer recycled content whenever practical and whenever in the best interest of the County.

Subtitle 11, Fire Code, makes the Fire Chief the County official responsible for coordinating responses for emergencies involving hazardous materials. In addition,

Subtitle 11 of the County Code authorizes the Fire Chief to establish safeguards for the manufacture, storage, handling and use of hazardous chemicals or substances.

Subtitle 13, Division 3, Anti-Litter and Weed Ordinance, provides for the removal of weeds and grass beyond specified heights and litter from any improved or unimproved property in the unincorporated areas of the County. Other provisions of the Subtitle are used to enforce similar provisions in commercial and industrially developed complexes throughout the County.

Subtitle 19, Division 1, Air Pollution, declares as public policy the promotion of health, safety and welfare through the preservation, protection and improvement of the air resources of the County. It provides for the regulation by permits of any equipment capable of emitting air contaminants, the prohibition of visible emissions from incinerators and the prohibition of open burning of refuse in most parts of the County.

Subtitle 21, Refuse (Solid Waste Management Ordinance), provides for standards licensing and registration for the collection, transportation, and disposal of solid waste and recyclables (Division 1); establishment and operation of rubblefill sites (Division 2) and a Credit System for County Disposal Facilities (Division 3). Brown Station Road Sanitary Landfill is the only approved municipal solid waste acceptance facility in the County at the present time. There are two privately owned rubblefills where construction and demolition material can legally be deposited. Recyclable materials may be accepted at any approved facility in or out of the County. Subtitle, Division 4, Subdivision 1, which was amended in 2012 with the passing of Council Bill CB-87-2012, also establishes a voluntary recycling program in the County, a recycling goal of 45 percent by 2015, at least fifty-five percent by 2018, and at least sixty percent by 2020, a mandatory requirement for apartment owners to provide recycling opportunities to their tenants, the authority to ban certain materials from the landfill and establishes a surcharge on the landfill tipping fee dedicating to the recycling program, and provides for the implementation of a pilot food composting program in the County by July 1, 2014 for evaluation of the food composting program to be expanded on a County-wide basis by December 31, 2015.

Subtitle 26 includes several divisions that deal with tagging, impoundment and disposal of abandoned vehicles, defined as those that are wrecked, dismantled, or are not displaying valid tags. County law provides for the removal of such vehicles from public property and from private property with permission of the property owner. This Subtitle also requires that the Department of Environmental Resources notify the last registered owner, store impounded vehicles for a minimum of 21 days and ultimately, if left unclaimed by the owner, to sell them to the general public or scrap dealers at public auction.

Subtitle 27, Zoning, provides for the establishment of specific regulations governing the development and use of property based on regulations and use limits that apply to each specific zoning category. The Zoning Ordinance, together with the

requirements of Subtitle 21, governs the specific locations and conditions attached to any solid waste acceptance or disposal facility in the County.

D. Major Federal Laws Affecting Municipal Solid Waste Management[1]

Resource Conservation and Recovery Act (RCRA): In 1965 the Solid Waste Disposal Act was passed to improve solid disposal methods. It was amended in 1976 by the Resource Conservation and Recovery Act (RCRA), which itself was amended, most significantly, in 1984.

Subtitle D or RCRA governs the environmentally safe operation of solid waste management facilities. At a minimum, state waste disposal facilities must comply with Federal standards, although states may adopt more stringent standards. Subtitle D also established a program under which states may develop and implement solid waste management plans. The United States Environmental Protection Agency's (EPA) role has been limited to setting the regulatory requirements and standards that states must follow in designing and operating their solid waste disposal facilities. Responsibility for developing and implementing these standards lies with each state.

Subtitle F or RCRA, also known as Section 6002, requires the Federal government to participate actively in procurement programs fostering the recovery and use of recycled materials and energy. It requires Federal agencies and other groups receiving Federal funds to procure items composed of the highest percentage of recovered materials practicable and to delete requirements that products be made from virgin materials.

Subtitle C of RCRA regulates the generation, transportation, treatment, storage, or disposal of hazardous wastes. Wastes designated by RCRA as hazardous are excluded from Subtitle D incinerator and landfill facilities and must be discarded at facilities permitted under the Subtitle C regulations.

Clean Air Act of 1970: Under the Clean Air Act, landfills and incinerators must meet performance standards that limit emissions of individual pollutants such as methane into the air. Facilities must meet these standards by using the best available technology. The Clean Air Act Amendments of 1990 added requirements for additional controls on stationary sources, including those for nitrogen oxides, mercury and sulfur dioxides.

Clean Water Act of 1977: The Water Pollution Control Act Amendments of 1972 was amended in 1977 to become The Clean Water Act. It applies to waste disposal facilities generating ash-quench water, landfill leachate and surface water discharges. Disposal of ash water and landfill leachate can present problems for solid waste facilities because many wastewater treatment plants cannot accept these discharges. These fluids must be pretreated prior to being sent to the wastewater treatment plant.

[1] From Reporting on Municipal Solid Waste: A Local Issue, November 1993, United States Environmental Protection Agency, Office of Solid Waste.

The 1987 reauthorization of the Clean Water Act, called the Water Quality Act, mandates site-specific requirements for facilities that discharge to streams where the best available technology still fails to meet water quality standards. Facilities generating surface water discharges must use best available technology to treat and control these discharges and must obtain a state discharge permit. It also requires storm water management plans for facilities whose storm runoff volume exceeds specified limits.

Safe Drinking Water Act of 1984: The protection of water wellhead areas, the sources of springs or streams, as defined in the Safe Drinking Water Act may affect municipal waste disposal facilities. Facilities located in wellhead areas must comply with state and local restrictions on their activities, including design specifications that may add significantly to the cost of the facility.

Public Utilities Regulatory and Policy Act (PURPA, 1978): Developed to encourage co-generation and small power producers to supplement existing electrical capacity, PURPA requires investor-owned utilities to purchase electrical power from co-generators or small producers, such as municipal incinerators, at rates developed by state public utilities boards and overseen by the Federal Energy Regulatory Commission. PURPA therefore guarantees a market and a fair price for the energy produced to control and mitigate risks associated with small power-producing projects.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, commonly known as Superfund, 1980): Under CERCLA, municipalities can be held liable for current and past waste disposal practices involving hazardous materials and the release of these materials into the environment. CERCLA applies to any environmental cleanup, and substantial number of the sites currently listed as Superfund sites are municipal landfills.

VII. Federal, State and Local Permits

A. Introduction

Federal, State, and local laws, which may pose constraints on the establishment, construction and operation of sanitary landfill, are expressed in various regulations and zoning and permit requirements. The major permits and regulations, which are pertinent to the establishment of a landfill and a resource recovery facility, are summarized below.

B. County Permits/Licenses

1. Use and Occupancy Permits are required prior to the use or operation of any new facility or prior to the use and operating of any existing facility, which changes owner or tenant. The permit certifies compliance with all zoning laws and with other fire, environmental and health requirements that are reviewed before the permit is issued.

2. Grading and Building Permits are required to perform any work incidental to construction and to construct or alter any building.

3. Recyclables Acceptance Facility Designation Licenses are required for any new or existing recycling facility or for an extension or alteration of an existing facility.

4. Construction-Demolition Fill Licenses are required to engage in the operation of a rubblefill.

5. Refuse and Recyclables Collection Vehicle and Facility Registration, Permit and License are required for collection vehicles and acceptance facilities.

6. A WSSC Discharge Authorization Permit (DAP) is required for the discharge of sanitary and rubble landfill leachate to WSSC's sanitary sewer system.

C. State Permits

1. New Source Air Quality Permit is required by EPA and issued by the Air and Radiation Management Administration of the Maryland Department of the Environment (MDE). The permit governs particulate emissions from new stationary sources. The Sandy Hill Landfill has been classified as a new source and is subject to this regulation. Brown Station Road is covered by the Emission Guidelines.

2. Title V Permit is required by MDE for many potential sources of air pollution including landfills.

3. Prevention of Significant Deterioration (PSD) Permit is required by EPA and issued by the State. PSD requirements include pollution control technology and air quality, public review and impact analysis.

4. National Pollution Discharge Elimination System (NPDES) Permits are required for process water and no-contact cooling water discharges. They are also required for storm water discharges from most industrial sites including the County landfill sites.

5. Groundwater Appropriations Permit is required for wells by the Water Management Administration of MDE.

6. Maryland Water Pollution Control Act specifies procedures for determining compliance with Maryland Water Quality Standards for thermal discharges, for alternate effluent limitations and the technology to minimize environmental impacts from intake structures.

7. Refuse Disposal Permit is required and issued by MDE for the establishment of sanitary landfills, transfer stations, rubblefills, incinerators and processing facilities. During the planning period, MDE may require a permit for food and yard waste composting facilities.

8. Groundwater Discharge Rubblefill Permit is required and issued by MDE.

9. Sewage Sludge Utilization Permit is required to dispose of biosolids at a landfill site or for land disposal and is issued by MDE.

10. Permit to Construct is required and issued by MDE for the construction, installation or alteration of any fuel-burning equipment capable of emitting air contaminants.

11. National Ambient Air Quality Standards are mandated by the Federal Clean Air Act and establish the minimum safe concentration of a pollutant in an air shed region.

D. Federal Permits

1. Dust Exposure Standards are reflected in the Occupational Safety and Health Act (OSHA), which sets limits on respirable and total dust.

2. General Industrial Standards are also part of OSHA and set limits on the amount of noise exposure.

3. Interference with Air Navigation and Federal Aviation Administration (FAA) Regulations require notification to the FAA of any stack exceeding 200 feet in height.

VIII. Solid Waste Planning and Prince George's County Development

As land continues to be developed in the County, the policies and objectives of solid waste management must accommodate the increased waste generation and decreased availability of land for solid waste management activities. Policies and objectives promoting recycling and waste minimization conform to this changing nature of land use by reducing the quantities of waste needing disposal.

Future development in the County is proposed to take advantage of existing infrastructure and to avoid urban sprawl. New development or re-development will be encouraged in portions of the County that are already densely populated. These development policies will contribute to lower transportation and hauling costs and more convenient collection of solid waste. In addition, infill development promotes the efficient use of existing collection systems and acceptance facilities.

CHAPTER II
PLANNING BACKGROUND

I. Demographic Projections

A. Introduction

The County's future growth pattern has important effects on the costs, sizing and siting of solid waste management facilities. Population, employment, households and dwelling units are the four major parameters affecting the demand for a facility. The amount of waste generated, the amount of land available for solid waste management uses and the structuring of waste disposal and collection systems are also factors that must be considered.

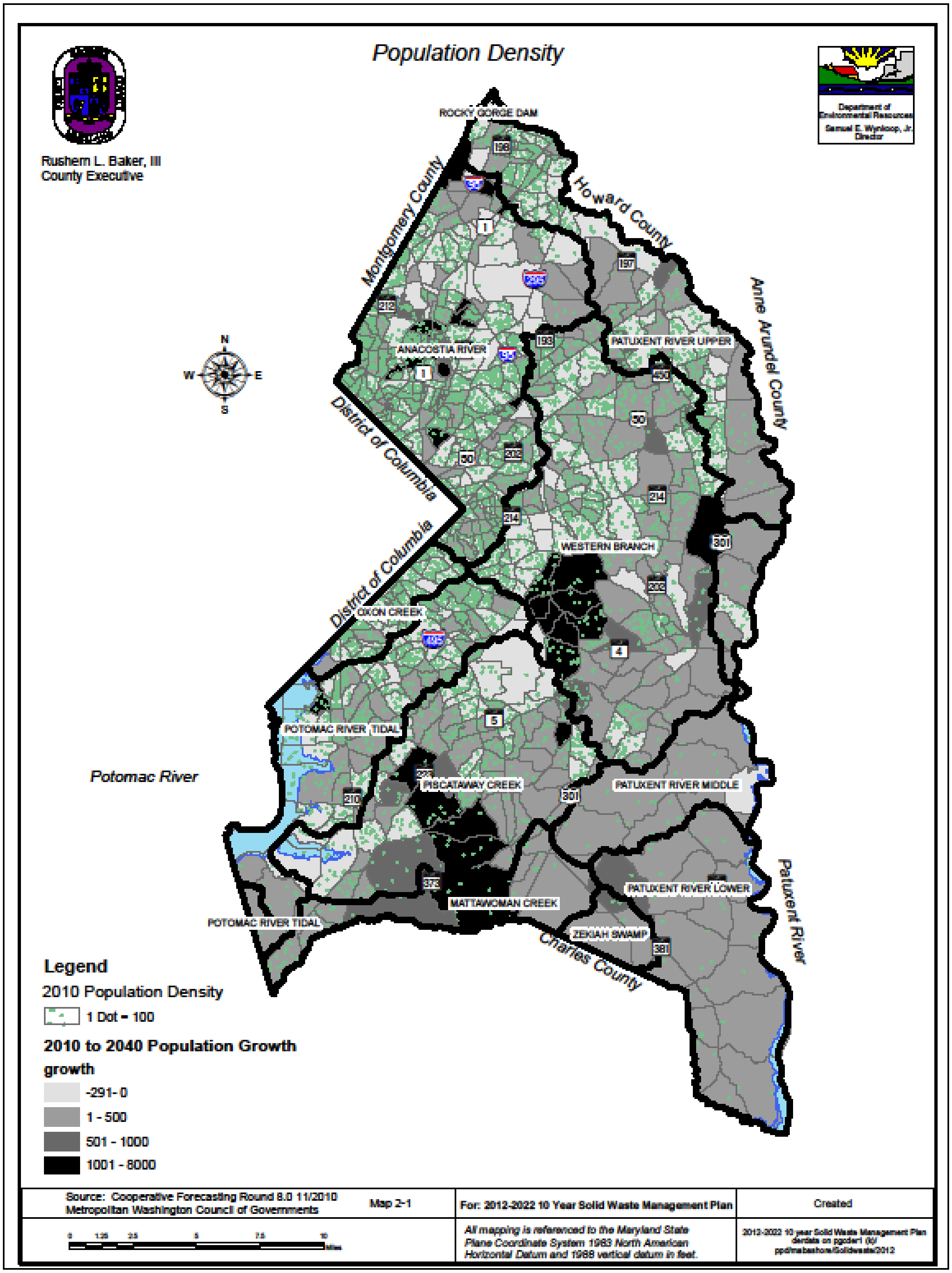
The most recent forecasts of growth for Prince George's County are contained in the Round 8.1 Cooperative Forecasts, prepared by the Prince George's County Planning Department, Maryland-National Capital Park Planning Commission (M-NCPPC) in conjunction with the Metropolitan Washington Council of Governments. These forecasts cover the time period from 2010 to 2040, and they are shown in Table 2-1 and Map 2-1.

Table 2-1
PRINCE GEORGE'S COUNTY FORECAST: 2010 – 2040
ROUND 8.1 COOPERATIVE FORECASTS

	2010	2015	2020	2025	2030	2035	2040
Total Population	863,420	881,379	899,712	926,744	950,030	972,926	995,303
Total Employment	342,588	356,958	377,879	408,138	427,514	457,275	497,652
Total Households	304,042	323,364	336,404	348,604	359,878	370,144	379,317
Total Dwelling Units	328,182	342,144	355,942	368,850	380,779	391,641	401,347

Source: Prince George's County Planning Department (M-NCPPC), Round 8.1 Cooperative Forecasts, 2012

Map 2-1



Population Density
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Samuel E. Wynkoop, Jr. Director
ROCKY GORGE DAM
Montgomery County
Howard County
Anne Arundel County
ANACOSTIA RIVER
PATUXENT RIVER UPPER
District of Columbia
District of Columbia
WESTERN BRANCH
OXON CREEK
POTOMAC RIVER TIDAL
Potomac River
PISCATAWAY CREEK
PATUXENT RIVER MIDDLE
PATUXENT RIVER LOWER
MATTAWOMAN CREEK
POTOMAC RIVER TIDAL
ZEKIAH SWAMP
Charles County
Patuxent River
N
S
E
W
Legend
2010 Population Density
1 Dot = 100
2010 to 2040 Population Growth
growth
-291 - 0
1 - 500
501 - 1000
1001 - 8000
Source: Cooperative Forecasting Round 8.0 11/2010
Metropolitan Washington Council of Governments
Map 2-1
For: 2012-2022 10 Year Solid Waste Management Plan
Created
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

B. Population

By the year 2010, the total population of Prince George's County reached 863,420. The population is expected to increase by 49,571 between 2010 and 2020 and by 50,318 from 2020 to 2030. By the year 2040 the County's population will reach 995,303. Over the three decades from 2010 to 2040 the population will grow by 131,883 or over 15.3 percent. This growth will generate physical, economic and environmental pressures on the County's solid waste management systems.

During the 1990s, the central and southern portions of the County experienced an increased amount of population growth. In the southern portion of the County, large residential housing developments encouraged population growth in this area of the County. Between the years 2000 and 2010 infill development encouraged population growth inside the Capital Beltway. Population growth will continue primarily throughout the central and southern portions of the County from the year 2010 to 2030. However, some growth will occur in the northern part of the County. Factors such as the future expansion of transportation by Metro Rail/Metro Bus, job opportunities and housing will play an important role in this growth within the County.

C. Employment

In the period between 2010 and 2020 total employment in the County will increase by 35,291 jobs (Table 2-2). Most of the growth is forecast to occur along the Capital Beltway, Interstate 495/95.

Between 2010 and 2040 an increase of 155,064 jobs is forecast in the County. The northern half of the County will remain the dominant employment center but new concentrations of growth will occur in the central and southern sections with growth expected in major developments like the National Harbor, University Town Center, Westphalia, and the Base Realignment and Closure (Joint Base Andrews). It is forecasted that the 2030 to 2040 ten-year period will experience the greatest gain in employment growth.

D. Households

An increase of 32,362 households will occur between 2010 and 2020 and 23,474 more households are forecast from 2020 to the year 2030 (Table 2-2). Households are expected to further increase by 19,439 between 2030 and 2040. The largest amount of household growth will occur outside the Capital Beltway. Largo and Bowie, the areas south of Laurel and along Routes 50 and 450 will be the focus of major sites of new household growth.

After the year 2010, the southern portion of the County will also experience more intense household growth. The growth will occur in areas along Indian Head Highway, Branch Avenue, Pennsylvania Avenue and the southern portion of the Capital Beltway. Infill development and additional growth will occur between the Capital Beltway and Route 301, the Central Avenue Corridor, and along Route 450. Infill development inside the Capital Beltway will characterize household growth between the years 2010 and 2020. In the southern portion of the County new

growth will continue along Branch Avenue and Route 301 and in the north along Route 1. These trends generally will continue from the year 2020 to 2030.

Table 2-2

COUNTY GROWTH PATTERNS: 2010 - 2040

Source: M-NCPPC, Prince George's County Planning Department, Round 8.1 of Cooperative Forecasts, 2012

Population

Year	Population	10 Yr. % Change	10 Yr. Change
2010	863,420	-	-
2020	899,712	4.20%	36,292
2030	950,030	5.59%	50,318
2040	995,303	4.76%	45,273

Employment

Year	Employment	10 Yr. % Change	10 Yr. Change
2010	342,588	-	-
2020	377,879	10.30%	35,291
2030	427,514	13.14%	49,637
2040	497,652	16.41%	70,138

Households

Year	Households	10 Yr. % Change	10 Yr. Change
2010	304,042	-	-
2020	336,404	10.64%	32,362
2030	380,779	13.19%	44,375
2040	401,347	5.41%	20,568

Dwelling Units

Year	Dwellings	10 Yr. % Change	10 Yr. Change
2010	328,182	-	-
2020	355,942	8.45%	27,760
2030	380,779	6.98%	24,837
2040	401,347	5.40%	20,568

E. Dwelling Units

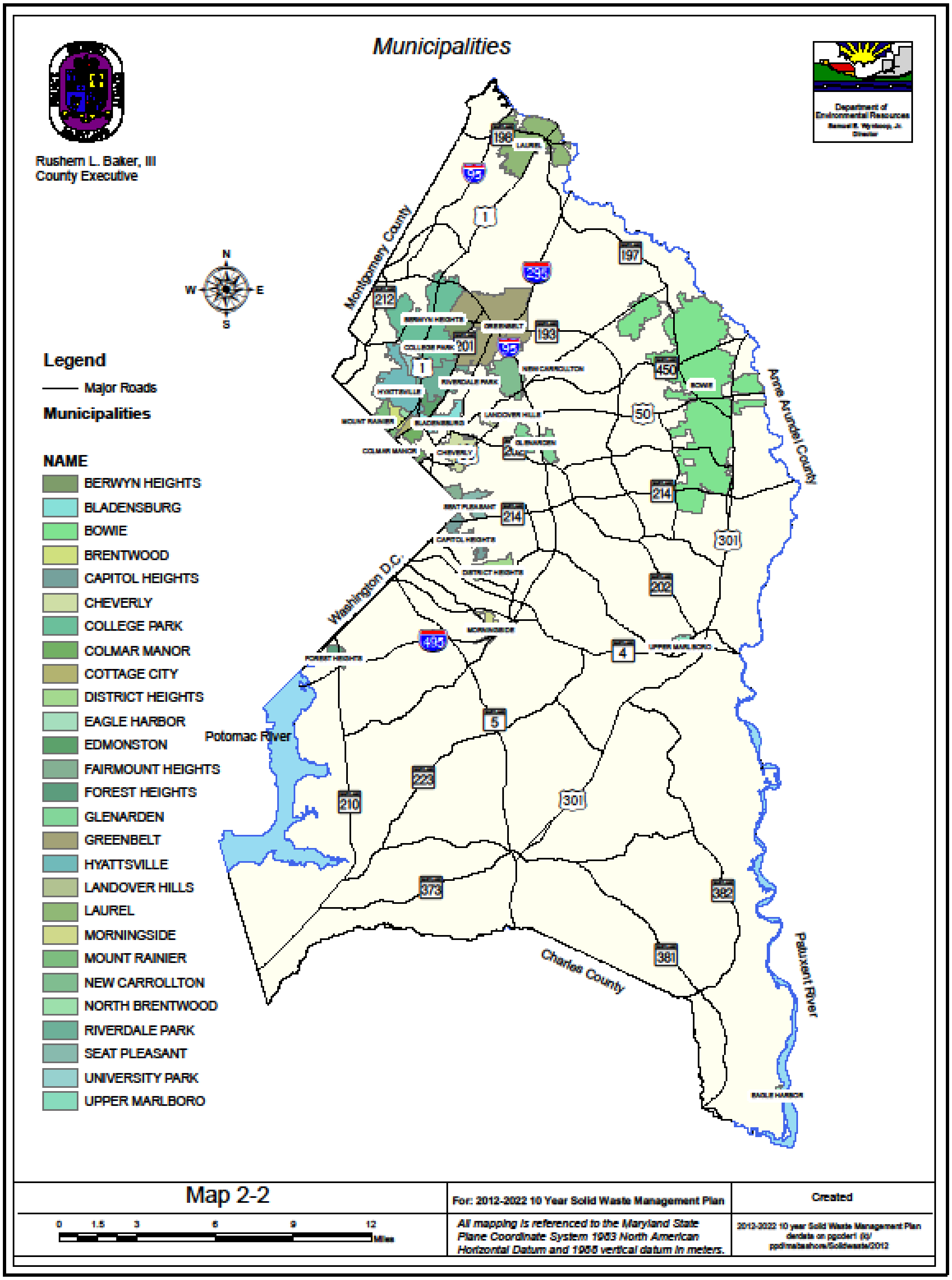
Dwelling units are expected to increase by 27,760 between 2010 and the year 2020. An increase of 24,837 dwelling units is expected to occur from 2020 to 2030 and an additional 20,568 between 2030 and the year 2040.

II. Municipalities and Government Properties

Map 2-2 illustrates the locations of the 27 incorporated municipalities in Prince George's County. The locations of the major government facilities, parklands and municipalities in the County are shown in Map 2-3. The municipalities and other government institutions are responsible for collecting their own solid waste; however, these entities utilize the County's disposal facilities, must comply with the County's waste regulations and are a part of this Solid Waste Plan. Table 2-3 shows the 2010 Census population for the municipalities in Prince George's County.

The municipalities do not have separate solid waste plans, as determined through a survey, but are involved with some aspects of recycling including yard material composting, recyclables, and oil and white goods collection for recycling. Some municipalities provide for their own curbside recyclables collection while others are served by the County collection program. Additionally, most municipalities utilize the County's Materials Recycling Facility (MRF) and the Yard Waste Composting Facility (Western Branch). Further discussion of solid waste management practices of the governmental facilities and the municipalities is presented in Chapters III and IV.

Map 2-2


Municipalities
Rushern L. Baker, III
County Executive
Department of Environmental Resources
N
W
E
S
Legend
Major Roads
Municipalities
NAME
BERWYN HEIGHTS
BLADENSBURG
BOWIE
BRENTWOOD
CAPITOL HEIGHTS
CHEVERLY
COLLEGE PARK
COLMAR MANOR
COTTAGE CITY
DISTRICT HEIGHTS
EAGLE HARBOR
EDMONSTON
FAIRMOUNT HEIGHTS
FOREST HEIGHTS
GLENARDEN
GREENBELT
HYATTSVILLE
LANDOVER HILLS
LAUREL
MORNINGSIDE
MOUNT RAINIER
NEW CARROLLTON
NORTH BRENTWOOD
RIVERDALE PARK
SEAT PLEASANT
UNIVERSITY PARK
UPPER MARLBORO
Montgomery County
Washington D.C.
Anne Arundel County
Potomac River
Charles County
Patuxent River
Map 2-2
0 1.5 3 6 9 12 Miles
For: 2012-2022 10 Year Solid Waste Management Plan
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in meters.
Created

Map 2-3

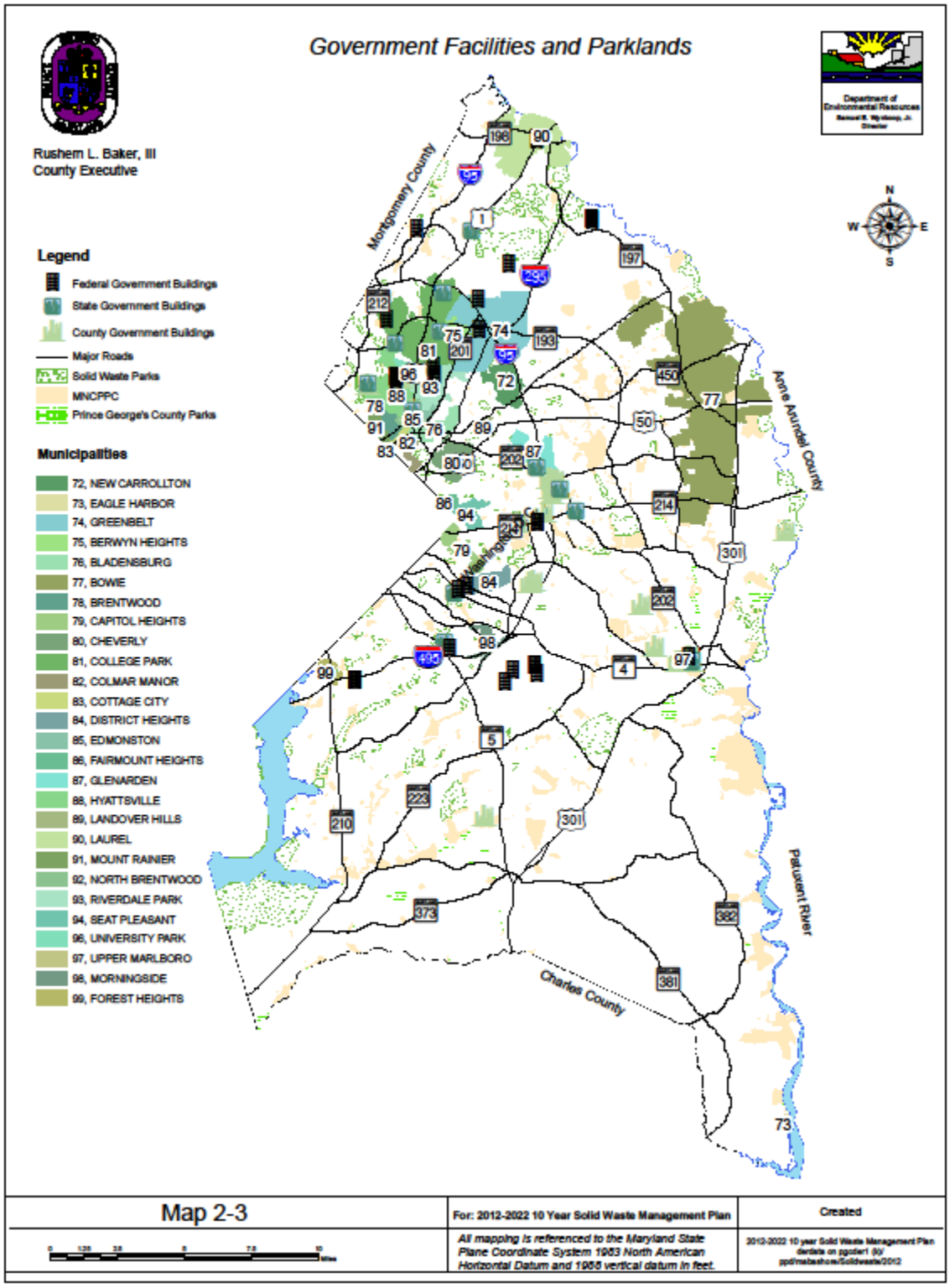

Government Facilities and Parklands
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Legend
Federal Government Buildings
State Government Buildings
County Government Buildings
Major Roads
Solid Waste Parks
MNCPPC
Prince George's County Parks
Municipalities
72, NEW CARROLLTON
73, EAGLE HARBOR
74, GREENBELT
75, BERWYN HEIGHTS
76, BLADENSBURG
77, BOWIE
78, BRENTWOOD
79, CAPITOL HEIGHTS
80, CHEVERLY
81, COLLEGE PARK
82, COLMAR MANOR
83, COTTAGE CITY
84, DISTRICT HEIGHTS
85, EDMONSTON
86, FAIRMOUNT HEIGHTS
87, GLENARDEN
88, HYATTSVILLE
89, LANDOVER HILLS
90, LAUREL
91, MOUNT RAINIER
92, NORTH BRENTWOOD
93, RIVERDALE PARK
94, SEAT PLEASANT
96, UNIVERSITY PARK
97, UPPER MARLBORO
98, MORNINGSIDE
99, FOREST HEIGHTS
Montgomery County
Anne Arundel County
Charles County
Patuxent River
N
S
E
W
Map 2-3
For: 2012-2022 10 Year Solid Waste Management Plan
Created
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

Table 2-3
MUNICIPAL POPULATION & DWELLING UNITS 2010

MUNICIPALITY	POPULATION	DWELLING UNITS
BERWYN HEIGHTS	3,123	1,051
BLADENSBURG	9,148	3,826
BOWIE	54,727	20,687
BRENTWOOD	3,046	1,046
CAPITOL HEIGHTS	4,337	1,622
CHEVERLY	6,173	2,395
COLLEGE PARK	30,413	8,212
COLMAR MANOR	1,404	415
COTTAGE CITY	1,305	500
DISTRICT HEIGHTS	5,837	2,212
EAGLE HARBOR	63	58
EDMONSTON	1,445	483
FAIRMOUNT HEIGHTS	1,494	589
FOREST HEIGHTS	2,447	927
GLENARDEN	6,000	2,256
GREENBELT	23,068	10,433
HYATTSVILLE	17,557	6,837
LANDOVER HILLS	1,687	549
LAUREL	25,115	11,397
MORNINGSIDE	2,015	922
MT. RAINER	8,080	3,601
NEW CARROLLTON	12,135	4,256
NORTH BRENTWOOD	517	183
RIVERDALE PARK	6,956	2,058
SEAT PLEASANT	4,542	1,806
UNIVERSITY PARK	2,548	919
UPPER MARLBORO	631	310
MUNICIPAL TOTAL	235,813	89,550

***Source:** U.S. Department of Commerce, Bureau of the Census, 2010
NOTE: Dwelling units include single family detached, single family attached (townhomes), multifamily units, mobile or trailer, and other.

III. Zoning Requirements

The following discussion identifies specific regulations that were in effect at the time of adoption of this Plan. However, all local ordinances are subject to change at any time through the enactment of new legislation. Therefore, the discussions of various requirements established in County law and, in this specific instance of the Zoning Ordinance, are intended only as a general guide. The definitions used in this section of the Plan are applicable to the Zoning Ordinance and do not apply to the Solid Waste Plan. This plan shall not be used to create or enforce local land use and zoning requirements.

The activities related to the collection, transfer, disposal and recycling of solid waste are regulated, as are all land uses, by Subtitle 27 of the County Code, also referred to as the Zoning Ordinance. However, public and private activities are regulated somewhat differently.

A. Public Facilities

The establishment of a public facility or land use, such as a County-owned sanitary landfill, is subject to approval by the District Council (the County Council acting on planning, zoning and land-use issues) either by

1. inclusion in the Capital Improvement Budget, which is approved by the County Council and which sets forth location and use of the buildings; or

2. by separate resolution upon submission to the District Council of any impact study setting forth the effects of such buildings and uses upon the area which would be affected. This includes consideration of the project as it relates to the appropriate area of functional master plan, or other plan, approved by the District Council (Section 27-295, Prince George's County Code).

B. Private Facilities

Private activities related to the management of solid waste are regulated in a variety of ways as shown on Table 2-4 and Table 2-5. Most of the uses associated with the management of solid waste are allowed in most industrial zones either outright, under special conditions, or by special exception. The majority of these uses are prohibited in any form. However, there are two noteworthy exceptions. The simple collection of recyclable materials as a temporary use is permitted in almost all zones. Also, private sanitary landfills and rubblefills are permitted in many zones, including the lower density residential zones, but only upon approval of a special exception.

Table 2-4

ZONING REQUIREMENTS RELATING TO SOLID WASTE MANAGEMENT ACTIVITIES IN COMMERCIAL ZONES (Prince George's County Code, 1999)						
Solid Waste Management Facilities/Activities	Commercial Zones					
	C-O	C-A	C-S-C	C-W	C-M	C-R-C
Trash Removal Service						
Collection of Recyclable Materials a) temporary	P	P	P	P	P	
b) all other						
Paper Recycling-Collection Center[i]					SE[ii]	
Recycling Plant, Except as otherwise specified						
Recycling Rubber						
Recycling Textiles						
Recycling-Nonferrous Metals						
Sanitary Landfill or Rubblefill	SE	SE	SE		SE	
Transfer Station						

■ Not permitted **P** Permitted **SE** Special exception required **S-P** Special permit required

[i] Only for collection, storage and shipping.
[ii] Permitted by right under certain conditions, otherwise a special exception is required.

Table 2-5

ZONING REQUIREMENTS RELATING TO SOLID WASTE MANAGEMENT ACTIVITIES IN INDUSTRIAL AND RESIDENTIAL ZONES (Prince George's Code, 1999)										
Solid Waste Management Facilities/Activities	Industrial Zones					Selected Residential Zones[iii]				
	I-1	I-2	I-3	I-4	U-L-1	R-O-S	O-S	R-A	R-E	R-R
Trash Removal Service	P[iv]	P								
Collection of Recyclable Materials a) temporary	P	P	P	P	S-P[v]	P	P	P	P	P
b) all other	P	P		P	SE					
Electronics Recycling Facility	SE[57]	SE[57]								
Paper Recycling-Collection Center[vi]	P	P		P	P					
Recycling Plant, Except as otherwise specified	SE	P		P	SE					
Recycling Rubber	SE	P		P	SE					
Recycling Textiles	SE	P	P	P	SE					
Recycling-Nonferrous Metals	SE	P		P	SE					
Sanitary Landfill or Rubblefill	SE	SE				SE	SE	SE	SE	SE
Transfer Station		SE[57]	SE							

■ Not permitted **P** Permitted **SE** Special exception required **S-P** Special permit required

57 Transfer Station Permitted use without the requirement of a Special Exception provided:

(A) The site on which the use is located is operating as a an existing construction and demolition processing and recycling facility within five miles of access to a State Highway of arterial classification or higher; and

(B) The facility is approved for acceptance of Municipal Solid Waste generated in Prince George's County pursuant to the Prince George's County FY 2002-2011 Ten Year Solid Waste Management Plan.

57 Electronics Recycling Facility Permitted without a special exception provided:

a) All operations shall be confined to the interior of a wholly enclosed building. There shall be no outdoor storage and/or unattended drop offs of materials or equipment;

b)The facility shall not accept material from individual residents and shall not operate as a public drop-off center.

c) The use and occupancy permit application shall include an operations plan and checklist indicating the methods by which the facility intends to comply with the approved certification standard;

d) Within twelve (12) months after issuance of any use and occupancy permit to an electronic recycling facility, the occupant shall obtain, and at all times thereafter, maintain certification under the most recently adopted Responsible Recycling (R2) standard, e-steward standard, or an equivalent standard determined by the Department of Environmental Resources to meet or exceed these standards;

e) Following initial certification, each electronic recycling facility shall certify to the Department of Environmental Resources in January of each calendar year that the permitted facility is certified under the R2 or equivalent approved standard; and

f) In the event an electronic recycling facility fails to obtain the required certification within twelve (12) months after the issuance of the use and occupancy permit, or fails to maintain such certification, the Department of Environmental Resources shall revoke the use and occupancy permit and operations must cease until the certification is obtained.

[iii] No other residential zones permit any of the uses in this table except for the temporary collection of recyclable materials.
[iv] With conditions, including detailed site plan approval.
[v] In accordance with requirements for temporary uses found in Section 27-260 and 27-261.
[vi] Only for collection, storage and shipping.

C. Landfills/Rubblefills

The specific requirements for sanitary landfills and rubblefills[vii] are contained in Section 27-406 of the Zoning Ordinance. In the R-E zone, a special exception may only be approved if the site is the extension of an existing fill or abuts land for which an approved special exception has not expired. Other requirements include the submission of an updated Countywide inventory of the locations, haul routes and estimated loads per day for all approved and pending special exceptions for surface mining, sand and gravel wet processing, sanitary landfills and rubblefills and related nonconforming uses certified after 1974. This information must be considered in two of the general special exception findings found in Section 27-317, specifically that the proposed fill not adversely affect the health, safety, or welfare of residents or workers in the area and that it not be detrimental to the use or development of adjacent properties or the general neighborhood. Another requirement for rubblefills is a demonstration of need based on a 15-year projection of County growth.

D. Transfer Stations

Specific requirements for special exceptions for transfer stations[viii] are contained in Section 27-416.02 of the Zoning Ordinance. These regulations control the hours of operation and building setbacks. All activities pertaining to the transfer of solid waste are required to be conducted in a wholly enclosed building. The applicant is also required to identify measures that will be taken to control any noxious and offensive odors. All State of Maryland permits, including a transfer station permit, must be obtained before the transfer station can operate.

E. Recycling Activities

The County regulates recycling activities in a number of ways depending on the nature of the operation and the associated impacts. For example, the temporary collection of recyclable materials is permitted by right in a rather broad spectrum of zones, whereas other collection of recyclable materials is limited to industrial zones. Such collection centers are generally permitted by right in the

[vii] Section 27-107.01 defines a Sanitary Landfill as a planned, systematic method of refuse disposal where waste material is placed in the earth in layers, compacted and covered with earth or other approved covering material at the end of each day's operation, or any method of in-ground disposal of biosolids other than for fertilization of crops, horticultural products, or floricultural products in connection with an active agricultural operation or home gardening. A "Sanitary Landfill" includes a "Rubblefill" for construction and demolition materials.

[viii] A place or facility where solid wastes are taken from a transportation unit or collection vehicle and placed in another transportation unit or collection vehicle for transport to a solid waste acceptance facility. The movement or consolidation of solid waste at the point of generation is not a Transfer Station. A "Materials Recovery Facility," as defined in Section 21-143 of the Prince George's County Code, and a "Waste Material Separation and Processing Facility" and "Recycling Plant," as defined in this Section 27-107.01, are not Transfer Stations.

industrial zones. A recycling plant[ix], on the other hand, requires a special exception in the less intensive industrial zones essentially because a recycling plant involves the breaking down of recyclable materials and may include such equipment as grinders, which have associated noise and dust impacts.

The recycling of rubber, non-ferrous metals and textiles is a manufacturing process, which is therefore limited to industrial zones. Finally, a waste material separation and processing facility is restricted to the I-2 Zone only. A waste material separation and processing faclity[11] uses biological or chemical processes in the separation or organic solid wastes from recyclable materials and therefore is placed in a more restrictive zoning category.

IV. Land Use

The Prince George's County Approved General Plan, Adopted October 2002, makes comprehensive recommendations for guiding future development within Prince George's County, Maryland. The plan proposes three development tiers within the County (the Developed, the Developing, and Rural Tiers) and proposes policies to guide development with each tier. The plan recommends goals, objectives, policies, and strategies for the following plan elements: Environmental Infrastructure, Transportation Systems, Public Facilities, Economic Development, Housing, Revitalization, Urban Design, and Historic Preservation. Plan implementation through future intergovernmental coordination, public participation, planning regulatory measures, and plan monitoring is described. The General Plan, authored by the Prince George's Planning Department, Maryland-National Capital Park and Planning Commission (M-NCPPC) covers a projection of 25 years. The Prince George's County 2035 General Plan is scheduled for Plan Approval/Planning Board Adoption in the summer of 2014.

Prince George's 2035 General Plan Anticipated Schedule	
Task	**Estimated Completion**
Kick-Off/Pre-planning	Winter 2011
Community Outreach and Plan Development	Spring 2012 – Summer 2012
Release of Preliminary Plan	Fall 2013
Joint Public Hearing	Fall 2013
Plan Approval/Planning Board Adoption	Summer 2014

Source: Prince George's County Planning Department

The land developed in the County is monitored by the M-NCPPC. The latest land use inventory of Prince George's County is based on the Master Property File of the State Department of Assessments and Taxation. The property file showed that as of March 25, 2010 there was a total of 276,799 acres of land in the County. This total does not include some utility rights-of-way such as the Potomac Electric Power Company, or dedicated streets and highways.

[ix]Section 27-107.01 defines a Recycling Plant as any establishment in which a finished product is broken down (excluding biological or chemical decomposition) with the intent of either making a new product or reusing the disassembled parts. Vehicle demolition, salvage, and storage operations are not included.

Approximately 57 percent of the County's land was developed in 2010. Developed land for the purpose of this plan is defined as properties with an improvement value of $15,000 or greater. The following table illustrates land availability in the county by land use.

AZC Code	Developed Acres	Undeveloped Acres	Total Acres
Residential	117,507	73,870	191,377
Commercial	10,794	4,550	15,344
Industrial	11,147	8,555	19,702
Farm	19,262	28,900	48,162
Other	0	2,149	2,149
Total	158,710	118,024	276,734

Source: Maryland Tax Assessor's File, Accessed March 25, 2012

Locating suitable parcels of land for solid waste management activities involves a determination of surrounding land uses and their compatibility with these activities. Most solid waste management activities are permitted only under special exception, according to County zoning laws. As a result, a land parcel selected for a waste management activity would require a specific site evaluation for its compatibility with surroundings land uses before a permit is granted.

CHAPTER III
SOLID WASTE GENERATION, COLLECTION, ACCEPTANCE AND RECYCLING FACILITIES

I. Generation

Actual generation of solid waste only can be estimated. There are records of disposal at waste acceptance and recycling facilities, but waste importation and exportation statistics are not readily available. Analyses of existing data and national average waste generation rates imply that municipal solid waste (MSW) importation and exportation levels in Prince George's County are approximately equal. Future waste generation projections to year 2025 are shown in Table 3-1, below:

Table 3-1

Prince George's County Waste Generated Projections					
	2009	**2010**	**2015**	**2020**	**2025**
	TONS	**TONS**	**TONS**	**TONS**	**TONS**
Residential	182,566	176,855	185,877	191,193	194,673
Commercial	168,940	158,718	166,815	171,585	174,708
Mixed	27,046	37,343	39,248	40,370	41,105
Witness Burns	0	13	14	14	14
Fluff	82,108	128,930	135,507	139,382	141,919
Asbestos	100	151	159	163	166
Land Clearing	0	0	0	0	0
Demolition Debris	200,642	223,372	234,767	241,481	245,876
Concrete	0	0	0	0	0
Industrial	0	0	0	0	0
Institutional	0	0	0	0	0
Controlled Hazardous Sub.	0	0	0	0	0
Dead Animals	0	0	0	0	0
Bulky or Special Waste	0	0	0	0	0
Scrap Tires	873	637	669	689	701
Sewage Sludge	0	0	0	0	0
Soil	0	17	18	18	19
Special Medical Waste	1,259	1,196	1,257	1,293	1,316
Septage	0	0	0	0	0
Total Waste Disposed	**663,534**	**727,232**	**719,240**	**657,609**	**585,880**
Total Waste Recycled	**576,278**	**793,503**	**879,071**	**986,413**	**1,088,064**
Total Waste Generated	**1,239,812**	**1,520,735**	**1,598,311**	**1,644,022**	**1,673,944**

*Future values are forecasted based on the expected increase in population in Prince George's County, according to Maryland Department of Planning data Round 8.1 Forecast and National Average Waste Stream Growth by EPA.

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Future years' projections were developed on the basis that the amount of waste generated would increase at the same rate as the population, and by national average waste stream growth derived from "Municipal Solid Waste Generation, Recycling, and Disposal in the United States 2 Facts and Figures for 2010" prepared by the United States Environmental Protection Agency (EPA). Total MSW levels were generated by adding the actual waste quantities received at the County landfill with the total annual recycling tonnages. A growth factor allowing for Prince George's County population growth was applied to generate the final projected totals.

The EPA reports the solid waste generation has increased from 3.66 to 4.43 pounds per person per day between 1980 and 2010. In 2010, the recycling rate increased to 34 percent from 10 percent in 1980. This same report indicates that annual trends in Municipal Solid Waste (MSW) characterizations have decreased slightly from 2007 to 2010. In 2007, the average waste generated was 4.65 pounds per person per day. In 2010, the average waste generated decreased to 4.43 pounds per person per day. The decrease in waste generated may be largely attributed to source reduction initiatives and somewhat to the economy. The average generation rate is expected to remain relatively stable through the next ten years due to the effect of source reduction programs. Should source reduction efforts cause a larger decrease in waste generation, projections will be reflected in the next update of the TYSWP. Specific generation rates for paper and paperboard, plastics, food, and yard trimmings are all projected to increase at the greatest rates, while generation rates for glass, metals, wood, and textiles are projected to increase at lower rates.

A. Solid Waste Import and Export over County Lines

In June 1984, a County ban on imported trash took effect. The ban prohibits the dumping of out-of-County trash at County solid waste acceptance facilities. Banning out-of-County waste assures that County businesses and residents receive the full benefit of facilities funded by Prince George's County and serves to extend the capacity of existing solid waste acceptance facilities. Prior to the ban, approximately 30 percent of the waste received yearly at the two landfills in the County was imported from outside the County. A year after the ban was enforced, the waste received at the Brown Station Road Sanitary Landfill (BSRSL) and Sandy Hill Sanitary Landfill (SHSL) decreased by 3.4 and 10.1 percent, respectively.

Beginning in July 1991, the County required that solid waste generated in Prince George's County and not eligible for disposal in a rubblefill be disposed of only at designated solid waste acceptance facilities, BSRSL and SHSL. Failure to observe this waste stream control provision could subject the hauler to the loss of a Collector's License or County vehicle registration.

In May 1994, in the case of *C. A. Carborne v. Town of Clarkstown*, the United States Supreme Court ruled that local laws, termed "Flow Control" ordinances, which directed solid waste to specific disposal facilities, violated the Commerce Clause of the United States Constitution. These ordinances were instituted primarily as a means of financial assurance for solid waste facilities developed with public funding. Although the County can no longer regulate the flow of waste, it can direct some of it through

alternative measures. Subsequent court cases have upheld localities' use of contracts, which stipulate a disposal site as a contract condition. Prince George's County's contracts with residential waste haulers have been modified in this regard by requiring delivery of the collected waste to the County landfill. In addition, the County rebates some of the municipalities' tipping fees, an action which serves as an inducement for them to use County facility. Finally, the County has adjusted tipping fees to maintain waste deliveries at prior years' levels. Tipping fee adjustments do not ensure that County waste will be taken to the County landfill, but these economic incentives result in a relatively stable level and continuous flow of waste. These measures do not affect the flow of construction and demolition material to private facilities since tipping fees are set by the facilities' operators.

Some wastes are exported from the County. They include municipal solid waste, portions of County-generated recyclables and hazardous materials that are removed from the County through contracts with hauling and salvage/recovery companies. These materials are generated primarily from commercial activities. During calendar year 2010, approximately 1,593 Maryland Recycling Act (MRA) and Non MRA tons of recyclables were reported as processed outside the County. The County does not regulate the flow of construction and demolition debris, and it is estimated that as much as 55 percent of the construction and demolition material disposed in the County is imported from other jurisdictions. The County's only MSW Landfill, the Brown Station Road Sanitary Landfill, does not accept commercial construction and demolition debris and allows limited residentially-generated loads.

II. Collection

There are three solid waste collection services in Prince George's County: County services, municipal services and private collection services.

County refuse collection services are provided through County collection trucks for white goods, and contracts with private refuse collection firms that are awarded to the lowest responsive and responsible bidders for refuse, bulky, and yard waste. Most households receive curbside collection service and reasonable accommodations are made for elderly and disabled individuals. Fiscal year 2011 collection fees were a uniform $230.24 household per year, and fiscal year 2012 collection fees were a uniform $230.33. Collection fees will be increased yearly based upon increases to the Consumer Price Index as reported for the Greater Washington Metropolitan Area. Fees for this service are levied as a separate charge on the annual real estate tax bill. The County has 101 trash and garbage districts consisting of 30 contracts involving 20 private refuse collection contractors providing refuse collection services to about 155,000 households.

County recycling collection services are provided through County contracts with private recycling collection firms. The County has 14 recycling districts consisting of 4 contracts involving 4 recycling collection contractors servicing approximately 165,000 households. There are more households receiving recycling collection service than trash collection service, due to some municipalities participating in the County's recycling program. Fiscal year 2012 recycling

surcharge was $58.16 per unit in unincorporated areas and $46.53 per unit for participating municipalities.

The County does not provide refuse or recycling collection service to commercial or industrial establishments, apartments (rental units), or other non-County institutional uses. Residents living in incorporated towns and cities receive solid waste collection from their municipal government. Each municipality provides refuse collection services to all private residences within their boundaries and, in limited instances, extends service to apartments and small businesses. Municipalities either use their own equipment for refuse and litter collection, or contract for the service. The refuse collection system in the incorporated areas includes service for a total of about 50,000 single family households. Solid waste quantities delivered to the County's landfills from the larger municipalities are shown on Table 3-2.

TABLE 3-2
MUNICIPAL WASTE DELIVERIES
CALENDAR YEAR 2010

Municipality	Tons
City of Bowie	11,267
City of College Park	4,893
City of Laurel	2,748
City of Hyattsville	4,305
City of New Carrollton	3,458
Town of Cheverly	1,671
City of Greenbelt	1,620
Town of Riverdale Park	88
City of Mount Rainier	1,221
Town of Berwyn Heights	1,164
Town of University Park	893
Town of Fairmount Heights	689
Town of Landover Hills	582
Town of Upper Marlboro	153
Town of Bladensburg	34
Town of Eagle Harbor	0

For Recycling Curbside Collection service, a total of 9 municipalities have County contract service, while 17 provide collection with their own forces and 1 municipality directs its residents to the County's convenience center.

In the southern rural areas of the County, residents contract directly with private collectors for refuse collection services. The County also provides two solid waste and recycling Convenience Centers (drop-off facilities) at Missouri Avenue and Brown Station Road. The County is considering the addition of two convenience centers, one to be located in the northern part of the County and the other in the southern area of the County.

A. Curbside Collection of Recyclables

Recyclables, including paper, newspaper, magazines, telephone books, corrugated containers, paper board, hard and soft bound books, aluminum, glass, narrow and wide mouth plastic containers numbers #1 through #7, aseptic gable top juice and milk containers, frozen food containers and packaging, steel and bimetal containers, coat

hangers, and empty aerosol cans are collected from approximately 165,000 single family homes by County-contracted haulers. Recyclables from homes in Berwyn Heights, Bowie, Brentwood, Cheverly, College Park, Colmar Manor, City of District Heights, Edmonston, Glenarden, Greenbelt, Laurel, Morningside, Mount Rainier, New Carrollton, North Brentwood, Seat Pleasant and University Park are collected by the municipalities. The Town of Eagle Harbor does not provide recycling pick-up service, but instead refers its' residents to the County's convenience centers, which are not in close proximity of the town. During this planning period the County plans to conceptualize a new southern area drop off location that will include collection containers for recycling. It is anticipated that Eagle Harbor will have more convenient access to this facility and will be finally able to conveniently participate in the County's recycling efforts.

Commercial, industrial, institutional sectors of the community, and multi-family rental facilities must arrange for their own recyclables collection services. In many cases, the existing waste refuse hauler also provides recyclables service.

During this planning period, the County will implement a pilot food scrap composting demonstration project at the Western Branch Yard Waste Composting and Transfer Station Facility. In the event that the County expands food scrap composting beyond the commercial sector to include a residential food scrap composting pilot project, the County will plan to incorporate collection of food scraps with yard waste collection. For commercial collection, existing waste refuse haulers and institutional sectors may also provide food waste collection services.

B. Public School Recycling

In 2009, House Bill 1290 was passed requiring the County to develop a School Recycling Plan. The Prince George's County's School Recycling Plan was approved by the Maryland Department of Environment (Appendix G).

With the passing of the 2012 House Bill 805, the Prince George's County Board of Education was required to develop and implement recycling programs for all facilities under the jurisdiction of the County Board. The Prince George's County Recycling Section (RS) coordinated efforts with the Prince George's County Public School System and the private sector to implement free recycling collection programs within the County schools. Collection is provided by private contractors.

C. Transport Practices

In accordance with Section 21-105 of the Prince George's County Code, all solid waste and recyclables collection vehicles are required to obtain a license and permit from the Department of Environmental Resources, RS, for collection of said materials.

The types of vehicles used by private contractors vary from large, 30 to 40 cubic yard compactors for commercial collection to 20 to 25-cubic yard packers and smaller trucks for residential collection. The majority of these contractors have acquired vehicles

with compacting equipment. There has been an increasing trend for commercial contractors to use large 40-cubic yard roll-off units. These roll-off units are principally used in large institutional and commercial areas in combination with stationary compaction units.

Several public agencies, including the Prince George's County School Board and the Maryland-National Capital Park and Planning Commission, utilize solid waste collection packer trucks to provide service to some of their facilities. These agencies and the State Highway Administration also use medium-size dump trucks for litter collection and/or solid waste removal from their areas of responsibility.

Federal and State governments are responsible for providing solid waste collection services for those areas under their jurisdiction. Some large commercial establishments use their own tractor-trailer units to carry solid waste from their stores and warehouse locations to the disposal points within and outside of the County.

D. Collection of Homogeneous Waste

1. Bulky Items

The term "bulky items" includes such items as refrigerators, washing machines, dryers, freezers, (commonly referred to as white goods), discarded furniture, tires, bedding, playground equipment, bicycles and other miscellaneous items too large for normal household collection. The Department of Environmental Resources, Waste Management Division, provides bulky trash collection service, totaling about 79,000 individual pickups per year. White good items and televisions from residences are collected at the curb by County forces on a scheduled appointment basis in all areas of the County except incorporated areas. After removal of Chlorofluorocarbon (CFC) refrigerant and capacitors, the white goods, as well as other scrap metal wastes, are delivered to a recyclables processor. Televisions are placed at the County's electronics recycling site for donation to non-profit organization(s) for reuse, or for recycling. All other bulky items, such as furniture, are handled by the County's contracted refuse haulers. The use of this service continues to grow. Given the increased demand for bulky service, a new application was added to the County's website, allowing residents greater accessibility to schedule a pick-up by submitting requests using the internet and bulky pick-up scheduling by phone has been moved to the County's new non-emergency 311 Call Center. Additionally, Reuse Centers have been posted on the Waste Management Division's internet homepage to inform residents where they may donate some of their bulky items, especially used home building materials, and resource links such as Craig's List for free exchange of furniture, white goods and building materials and an electronics recycling locator link have been posted to help inform the public of viable options to divert waste.

Bulky items are also delivered to solid waste disposal or recyclables acceptance facilities by private citizens and municipalities. In addition, bulky trash items have been collected during various cleanup campaigns initiated by both the County Government and citizen's groups. It is anticipated that the County's bulky trash collection service will continue.

2. Yard Material

Leaves, grass, tree limbs and brush are collected under the County-contracted household refuse collection. Tree limbs must be less than three inches in diameter and placed at the curb in four-foot length bundles each weighing 60 pounds or less. These materials are delivered to the County's Western Branch Yard Waste Composting Facility located outside of Upper Marlboro. Yard material is estimated to be 10 percent of the total waste stream.

The Department of Environmental Resources, Waste Management Division, provides curbside collection of yard waste, which includes leaf collection. Therefore, in an effort to eliminate duplicate efforts and reduce cost, the Department of Public Works and Transportation (DPW&T) eliminated its leaf sweeping collection program in 2010. DPW&T continues to provide special tree limb collection services throughout the year for trees damaged during wind, rain, hurricane, tropical storm, ice and snow storms. The service is provided as a result of a direct request from a citizen. Some municipalities also provide this service, and citizens should contact their respective municipal governments directly.

3. Food Waste

During this planning period the County will implement a pilot food scrap composting demonstration project and shall evaluate food scrap composting for County-wide expansion. Expansion of a food scrap composting program may include collection of food waste under the County contracted residential yard waste refuse collection service. In the event that the County provides curbside collection, food waste would be commingled with yard waste and delivered to the County's Western Branch Composting Facility.

4. Scrap Tires

Although Prince George's County requires that scrap tires be disposed of in a lawful manner, the disposal of scrap tires is a County-wide problem. As a result of increasing regulation, the cost of scrap tire disposal at private and public facilities has increased. Although the higher costs have resulted in illegal and indiscriminate dumping of scrap tires by individuals and/or what appears to be by small businesses, the larger tire dealers and fleet owners abide by the law and pay the increased cost to properly dispose of the scrap tires. Because tires are prohibited by law from being landfilled, a scrap tire collection area has been established at the Brown Station Road Sanitary Landfill. The County contracts

with a licensed tire hauler for processing, disposal, or reuse. The contractor is also required to promote recycling options when marketing the scrap tires. The County provides residential bulky pick-up service for tires and also allows residents to deliver up to five scrap tires per year to the landfill for free disposal.

5. Household Hazardous Waste and Electronics

Prince George's County opened a permanent Household Hazardous Waste Collection and Electronics Recycling Site in 2000. County residents may deliver household hazardous waste for proper disposal and old unwanted electronics and televisions for recycling and or reuse to the site located at the Brown Station Road Sanitary Landfill for free.

To ensure the proper handling and disposal of the hazardous materials that are collected at the Household Hazardous Waste Acceptance Site, the County has contracted with a licensed hazardous waste disposal company. The professional team oversees the collection of items and materials at the drop-off facility. As an added convenience, the site is designed to be a drive through location. The County provides on-premise collection for elderly and disabled residents. Established non-profit organizations may also receive, from the County's electronics collection site, used electronics and televisions for the purpose of reuse.

The Collection and Recycling of Fluorescent and Compact Fluorescent Lights that Contain Mercury (as required by House Bill 685) must be outlined in the County's TYSWP. Prince George's County began collecting fluorescent lighting in conjunction with the Household Hazardous Waste Acceptance Program in 2004 and continues to accept these materials. The County contracts with Care Environmental Corporation to manage and handle the materials collected at the Household Hazardous Waste Acceptance Site. Care Environmental Corporation packages and transports fluorescent and compact fluorescent lights to one of two locations, Environmental Quality (EQ) Florida, located in Tampa, Florida, and EQ Industrial Services Headquarters, located in Ypsilanti, Michigan. From there, the final destination of the fluorescent and compact fluorescent lights is Clean Lites Recycling, Inc., located in Madison, Michigan. In addition to directing residents to our Household Hazardous Waste Acceptance Facility to dispose of fluorescent lighting, the County also maintains and provides a vendors list to the public which includes companies that accept fluorescent and compact fluorescent lights for proper disposal. The County may also refer residents to the Maryland Department of the Environment's on-line Recycling Directory.

6. Abandoned Vehicles

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The Department's Property Standards Division operates an Abandoned Vehicle Program, which provides for the removal and ultimate sale of vehicles

that are wrecked, dismantled, or not currently licensed. These types of vehicles can be removed from public properties or from private property with the permission of the owner. Many apartment complexes and shopping centers work with the County by posting signs warning violators that inoperative, abandoned or unlicensed vehicles can be towed and impounded. The County's program is focused on removing offending vehicles after a 48-hour period following a violation.

During Calendar Year 2010, the Vehicle Audit impounded 1,123 abandoned vehicles.

7. Litter

Litter is a persistent problem. Much of this type of debris is highly visible along roadsides, in stream beds and, in many cases, in larger quantities on vacant unimproved property. Aside from causing visual blight, litter contributes to the degradation of water quality, provides breeding areas for rodents and mosquitoes and may result in unsafe driving conditions.

DER enforces the Anti-Litter and Weed Ordinance, which prohibits the accumulation of trash and debris on private property. The law is applicable outside of incorporated municipalities and is most often applied to developed and undeveloped residential property. A violation notice is issued to the property owner requiring that litter be removed. If the owner does not comply, the property can be cleaned by the County or contractual forces. Failure of the property owner to pay for the cost of the cleanup can result in a tax lien to recover the costs.

Specific cleanup program efforts conducted in the County generate approximately 6,000 tons of trash annually and include the following:

* **Roadside Cleanup on Landfill Approach Roads** – A crew and truck collects about 10 tons of waste a year. The crew is also used to assist in roadside cleanups in other areas when not maintaining the landfill approach roads.

* **Road Cleanup by County Forces** – Removal of trash and debris from County roadsides is conducted primarily by County employees of DPW&T.

* **Adopt-A-Road Program** – This roadside cleanup program functions as a collaborative effort between DPW&T and local civic, business, or fraternal organizations. The volunteer organization coordinates roadside cleanup activities twice per year. DPW&T provides trash bags, safety equipment and collection of all bagged trash after the cleanup. Adopt-A-

Road Team signs displaying the name of the volunteer group are erected along the adopted roadways.

* **Non-Roadside Cleanup by County Forces** – This program is tasked with removal of trash, debris, abandoned items, evictions debris from County properties and right-of-ways other than roadsides.

* **Limb Collection** –Tree limbs are collected in the course of a roadside cleanup, after a storm.

* **Daily Inmate Program** – Five to seven inmates from the County Correctional Center and persons ordered by the court to serve community service perform roadside cleanups on weekdays. This work is overseen by a Corrections Officer, and supervised by DPW&T's Special Services Division of the Office of Highway Maintenance.

* **State Highway Administration Roadside Cleanup** – The State Highway Administration (SHA) operates a comprehensive roadside cleanup program designed to maintain safety and improve the appearance of interstate, primary and secondary roadways. This program provides for monthly interstate and primary road cleanup, secondary road cleanup and mowing, which is provided on a 6 week cycle. In addition to these regular removal services, the program also provides for two roving dump trucks to remove large items from interstate/primary roads and emergency spot removal of accident debris. SHA makes use of eight inmate crews, 4 crews per the two shops in Prince George's County, contractors and temporary employees for grass cutting and litter collection, in addition to its normal staffing. SHA's Roadside Cleanup Program is supplemented by the Adopt-A-Highway Program in which volunteers coordinate cleanup activities four times per year.

* **Prince George's County Comprehensive Community Cleanup Program** – The Comprehensive Cleanup Program, originally established in 1986 is designed to revitalize, enhance, and maintain unincorporated (non-Municipal) areas of the County. The Department of Environmental Resources (DER) works with organized Civic and Homeowners Associations to provide a concentrated focus of County cleanups and maintenance services to their community over a two-week period. A total of (21) Comprehensive Community Cleanups are scheduled each year (16 Cleanups from March – June and 5 Cleanups from late September – October).

Currently, with over 90 active cleanup areas in DER's rotation, the County can schedule a community for this program approximately once every 4 years. These services include housing code enforcement, abandoned vehicle tagging and towing, bulky trash collection, roadside litter

collection, tree trimming, storm drainage maintenance and storm drain water quality testing. DER intends to continue providing comprehensive cleanup services to the community.

* **Watershed Cleanup Activities** – The Department of Environmental Resources works with local environmental organizations and civic groups to organize various volunteer stream cleanup events. The County provides volunteers with trash bags, gloves, roll-off containers, and disposal fee waivers for all trash, debris, and recyclables collected. Volunteer groups are also encouraged to adopt and monitor local streams through DER's "Stream Teams" program. These efforts help to promote environmental Awareness.

8. Land Clearing Materials

The Environmental Engineering Program of the Division of Environmental Health processes burning requests in connection with land clearing operations. Land clearing debris is waste material from land clearing operations: earthen material such as clay, sand, gravel, and silt; topsoil; tree stumps; root mats; brush and limbs; logs; vegetation; rock; and construction and demolition debris. Granting or denial of permission to burn materials in Prince George's County is subject to code criteria specified in the State's Air Management Regulations relating to the control of open fires and fire safety. The open burning of stumps, brush, and logs from the clearing of forested land generally constitutes the impermissible burning of solid waste. However, a permit may be issued by the County for such materials where the land is being cleared for agricultural purposes, or the material constitutes yard waste from a single-family home. Waste generated when a forested lot is cleared for the construction of a housing development or commercial buildings is solid waste and therefore should not be open-burned. The decision to issue an open-burn permit is fact intensive and must be evaluated on a case by case basis. It should be stressed that there are practical alternative methods to burning, including recycling, composting, and disposal at permitted refuse disposal facilities.

9. Rubblefill Materials

A rubblefill is a landfill in which construction or building demolition rubble is placed in a controlled manner. Rubble is a type a solid waste that includes land clearing debris, demolition debris and construction debris as defined in the Plan Glossary.

It is the policy of Prince George's County to use rubblefills for the disposal of construction and demolition materials and to discourage use of sanitary landfill space for its disposal. It is also the County's policy to locate rubblefills on previously disturbed land such as abandoned sand and gravel mines, in areas where the natural slope is less than 15 percent, where environmental

constraints are minimal, and on the basis of demonstrated need. The County discourages clearing and excavation of forests and wetlands for rubblefills. Rubblefills will not be approved if they will affect County groundwater resources or the groundwater resources of other counties.

Total construction, demolition, land clearing and rubblefill materials disposed and managed in County during 2010 was 454,095 tons. This information is extracted from the Maryland Department of the Environment Annual Report Solid Waste Management in Maryland, Calendar Year 2010.

10. Fly Ash

Fly ash can best be described as the fine, solid particles of noncombustible residual material removed from a solid fuel-burning combustion chamber. While "pozzalan" is defined in Section 15-407 of the Environmental Article, Annotated Code of Maryland as the finely divided residue resulting from combustion of ground or powdered coal and is released by combustion gases, the fly ash described herein is not pozzalan material.

GenOn Energy, Inc. is the owner or operator of the Chalk Point generating station located in Prince George's County. The Chalk Point electric generating station produces electricity from the use of the following energy sources: coal, natural gas, or oil, with a total electric generating capacity of 2,401 megawatts. Coal combustion byproducts (CCB) are the residuals generated by or resulting from the burning of coal. The Brandywine and Gibbons Road solid waste storage facility receives CCBs primarily of fly ash and bottom ash, both pozzolan materials. Up to 360,000 cubic yards of fly ash and up to 106,000 cubic yards of bottom ash may be generated per year depending on electricity demand. GenOn Energy proactively markets both fly ash and bottom for reuse in commercial products such as concrete, grout, aggregate, and other high silica products. In 2011, approximately twenty-one (21) percent of fly ash was sold for beneficial reuse and nearly fifty (50) percent of bottom ash was sold for beneficial reuse.

11. Sewage Sludge, Biosolids and Septage

As a waste product of sewage treatment plants, biosolids have unique characteristics that make them potentially beneficial. The term biosolids is used to define sewage sludge that is a byproduct of municipal wastewater treatment plant treated in accordance with the state and federal regulations for beneficial use. All municipal residuals that are not utilized beneficially are considered sewage sludge. Transportation of biosolids within the County requires special permits. In 2010, according to the Maryland Department of the Environment (MDE), 73,942 wet tons of biosolids were generated in the County and 9,939 tons of biosolids were applied to land in the County.

The County, with the assistance of the Washington Suburban Sanitary Commission, has the overall responsibility for the management of biosolids that are, or will be, generated at wastewater treatment plants within the County, or at regional facilities used by the County.

Biosolids (or sewage sludge) is a generic term used to describe the residual solids arising from the treatment of water and wastewater. Biosolids can be either liquid or semisolid, depending upon the amount of water removed prior to disposal. Water treatment sludge is quite gelatinous and difficult to de-water and consists primarily of sediment and chemical coagulants used to precipitate the solids from raw water. Wastewater biosolids, which are typically high in organic matter, consist or grit particles, organic solids, cultured microorganisms, chemical coagulants and inorganic precipitants. Utilization of sewage sludge is regulated by MDE's Solid Waste Program while water treatment plant sludge and other sludge's are classified as solid waste.

Prince George's County recognizes that a comprehensive biosolids management program requires a balance of technologies and approaches to assure safe and efficient biosolids management. Wherever practical, Prince George's County) promotes the beneficial reuse of wastewater biosolids through agriculture, silviculture (the planting of trees), revitalization of former sand and gravel mines or other uses. The County particularly endorses the use of subsurface injection as a means of applying biosolids with minimal disruption of farming practice and the surrounding communities. However, due the increased solids content of the biosolids, all biosolid applications in the County for the past several years have been surface applied. In addition, two biosolids incinerators are located at the Western Branch Wastewater Treatment Plant. Further handling of biosolids in the County is addressed in greater detail in Appendix D and the County's Ten-Year Water and Sewerage Plan.

The County Health Department inspects and licenses approximately 74 vehicles (with capacities ranging between 50 – 1,500 gallons) septage vehicles annually. Following licensures, the trucks may be permitted by WSSC to use the public sewage system for disposal. Septage is disposed of in one of the three designated manholes located in the County.

III. Acceptance Facilities (All mapping is referenced to the Maryland State Plane Coordinate System and Map Coordinates are indicated on the Maps)

An acceptance facility is a sanitary landfill, rubblefill, processing facility, transfer station, incinerator or any other type of facility that accepts solid waste for disposal, treatment processing, composting, compacting, or the transfer to another acceptance facility. All solid waste acceptance facilities must have the appropriate zoning, including Special Exception, if necessary, prior to inclusion into this Plan. The State cannot issue a permit for a solid waste acceptance facility that is not included in this Plan.

Prince George's County presently relies on the sanitary landfill method to dispose of municipal solid waste. The facility currently active and accepting waste is the Brown Station Road Sanitary Landfill (BSRSL). The Sandy Hill Sanitary Landfill (SHSL) ceased accepting waste in the summer of 2000. The locations of these landfills and the other waste acceptance facilities are shown in Map 3-1. The siting of new facilities is governed by the County's Zoning Ordinance and this Plan.

Sanitary landfills cannot accept the following materials: vegetative yard waste, acids, diseased animal carcasses, automobiles, caustics, whole metal drums and tanks, explosives, pesticides, paints, poisons, radioactive materials, scrap tires, septage, infectious medical waste, liquids or materials containing free liquids of any type. BSRSL provides a collections site for residential household hazardous wastes and electronics and discarded tires, while holding a Secondary Tire Collections Facility permit with the State. These wastes are properly managed and subsequently removed for off-site handling. Truckloads of separately collected yard waste for final disposal are prohibited from placement in the landfill. BSRSL provides a collection site for yard waste material and transports it to the County's Western Branch Yard Waste Composting Facility where it is composted or mulched. Additionally, the landfills do not accept petroleum waste or petroleum contaminated soils characterized as hazardous or containing free flowing liquids. BSRSL will only accept contaminated soils from County-owned facilities or as approved by the State for eventual use as daily waste cover material. The disposal responsibility for other contaminated soils rests with the landowner or the party responsible for the spill.

Landfills are subject to extensive regulation under State and Federal law. BSRSL is in full compliance with all of these regulations including the Federal Resource Conservation and Recovery Act and the Clean Air Act.

Solid waste disposal at the County landfill has varied over the years depending on recycling rates and tipping fees. Table 3-3 gives the total tonnage received at the BSRSL during the last three years.

TABLE 3-3
SOLID WASTE TONNAGE RECEIVED
AT THE BROWN STATION ROAD SANITARY LANDFILL

	CY2009	CY2010	CY 2011
Total Managed	433,075	450,974	396,313
Total Diverted	2,773	1,734	1,244
Total Waste Received	435,848	452,708	397,557

A. Brown Station Road Facility

Brown Station Road Facility Operation at BSRSL commenced in 1968. This facility is owned and operated by the County. It is located centrally in the County, approximately two miles northwest of the Town of Upper Marlboro (see Map 3-2 for location). The active part of the landfill is bounded by Brown Station Road and the Western Branch waterway. Present land use characteristics of the area are predominantly low density residential. The facility currently serves as the primary waste acceptance facility for the County.

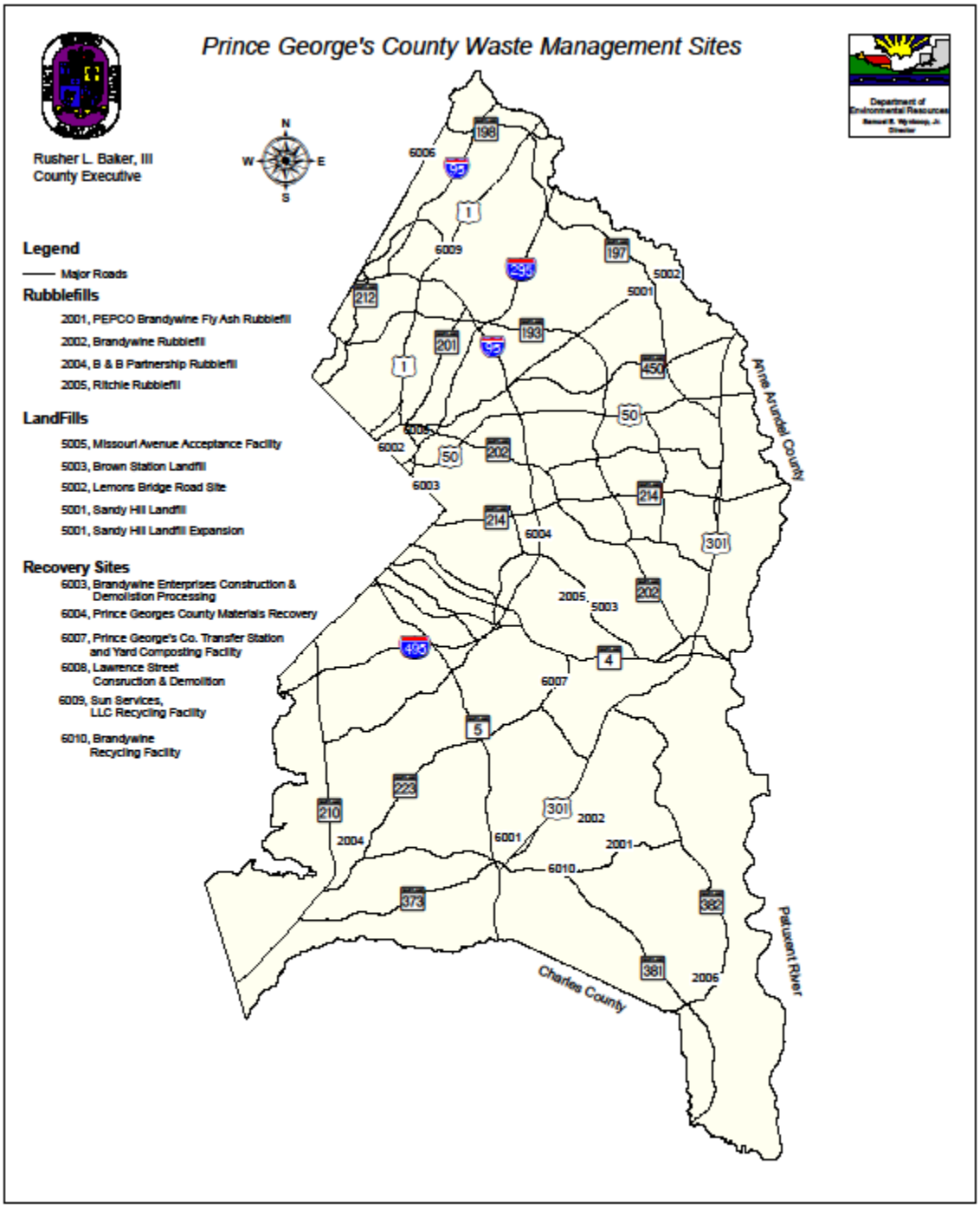
The Maryland Department of the Environment (MDE), through permit approval, authorized the completion of the Brown Station Road Sanitary Landfill (BSRSL) vertical extension and provided for the extension of the landfill in a horizontal direction to the northwest. This results in an actual fill area of 134 acres known as Area "B". This permit is progressively renewed every five years and the landfill now operates under State Permit 2010-WMF-0589 through October 5, 2015. BSRSL land holdings were enlarged to 850 acres in 1979 with the acquisition of the Barger Tract, which provides a source of earthen borrow material for daily and intermediate cover. Additional land was also purchased between the Landfill and Route 202 to provide a buffer zone. Additionally, land was purchased along Brown Station Road to enhance the buffer zones and provide additional area for borrow. In all, the County now holds 1,450 acres of land associated with this Facility.

The older and officially closed section of the Landfill (known as Area "A") and the major portions of Area "B" (Active Area/RCRA Compliant) include extensive landfill gas collection and end-use components that control landfill gas as required by the Clean Air Act, Emission Guidelines (implemented by the MDE). These control methods include ability to supply landfill gas (LFG) to the nearby County Correctional Center (CCC) complex and to an onsite electrical generation facility located at the BSRSL, and provides a separate landfill gas flaring facility to ensure total gas control. The CCC Landfill Gas-to-Energy Facility utilizes LFG for three internal combustion engine generators located within the CCC complex and is considered the primary electrical power source for the complex. LFG is also utilized as the primary fuel source for the CCC boilers. The boilers produce process steam for onsite laundry and kitchen services and are utilized as the primary source of heat for the complex. Electrical power that is not consumed by the CCC is marketed via an agreement with the Northeast Maryland Waste Disposal Authority (NMWDA). This results in a dependable revenue stream for the County. The BSRSL Landfill Gas-to-Energy Facility utilizes LFG as a fuel source for the generation of electrical power among four engine generators with approximately 85% of production also marketed via the NMWDA. As required by the Clean Air Act, Emission Guidelines, LFG collection infrastructure will continue to expand within the BSRSL Area B as required.

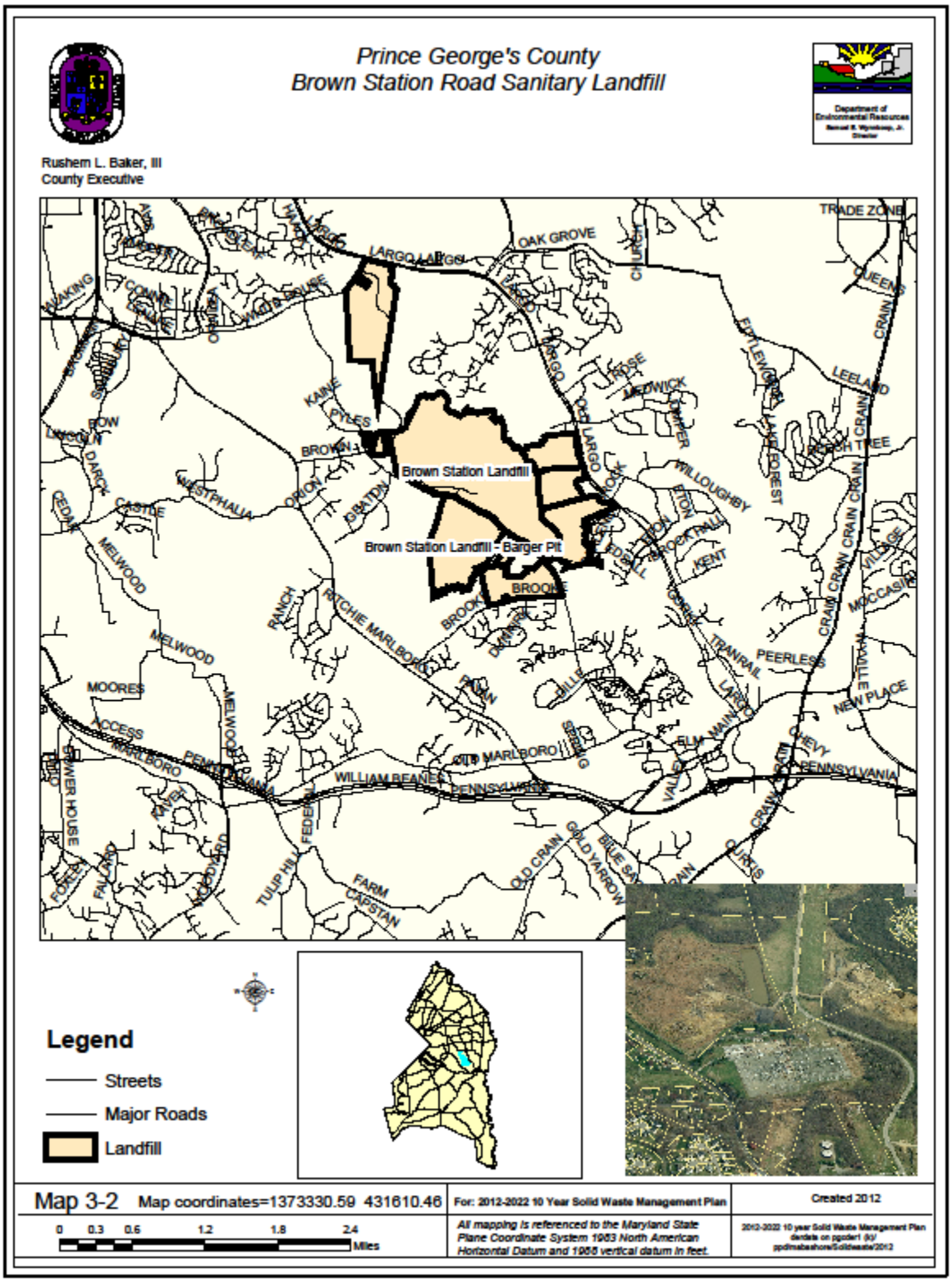
The first landfill cell in Area "B" (Cell 9) was placed into service in June 1992, with progressive cell construction and utilization. All 11 cells have been constructed, with final Cells 11 and 1 currently inactive pending future utilization. Area "B" is equipped with leachate collection, conveyance, storage, and pretreatment systems that discharge a maximum of 120,000 gallons per day to the Washington Suburban Sanitary Commission (WSSC). The Leachate Pretreatment Facility utilizes aerobic Sequencing Batch Reactors (with anaerobic potential) to pre-treat leachate to prescribed levels dictated by the discharge permit issued by WSSC. Final treatment is accomplished at the WSSC Western Branch Wastewater Treatment Plant.

Prince George's County continues developing a business plan to manage municipal solid waste (MSW) while considering efficient use of the existing BSRSL permitted capacity, which is programmed to year 2020. The plan may include options such as a waste transfer station, and conception for a North County Convenience Center and a South East County Convenience Center. An expanded Brown Station Road Convenience Center and an expanded Missouri Avenue Convenience Center are planned for FY 2013 and FY 2014.

Map 3-1


Prince George's County Waste Management Sites
Department of Environmental Resources
Rushor L. Baker, III
County Executive
N
W
E
S
Legend
Major Roads
Rubblefills
2001, PEPCO Brandywine Fly Ash Rubblefill
2002, Brandywine Rubblefill
2004, B & B Partnership Rubblefill
2005, Ritchie Rubblefill
LandFills
5005, Missouri Avenue Acceptance Facility
5003, Brown Station Landfill
5002, Lemons Bridge Road Site
5001, Sandy Hill Landfill
5001, Sandy Hill Landfill Expansion
Recovery Sites
6003, Brandywine Enterprises Construction & Demolition Processing
6004, Prince Georges County Materials Recovery
6007, Prince George's Co. Transfer Station and Yard Composting Facility
6008, Lawrence Street Consruction & Demolition
6009, Sun Services, LLC Recycling Facility
6010, Brandywine Recycling Facility
Anne Arundel County
Patuxent River
Charles County
Map 3-1
0 1.5 3 6 9 12
Miles
For: 2012-2022 10 Year Solid Waste Management Plan
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.
Created 2012

Map 3-2


Prince George's County
Brown Station Road Sanitary Landfill
Department of Environmental Resources
Rushern L. Baker, III
County Executive
Brown Station Landfill
Brown Station Landfill - Barger Pit
Legend
Streets
Major Roads
Landfill
Map 3-2
Map coordinates=1373330.59 431610.46
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
0 0.3 0.6 1.2 1.8 2.4
Miles
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

B. Closed Sandy Hill Landfill Facility

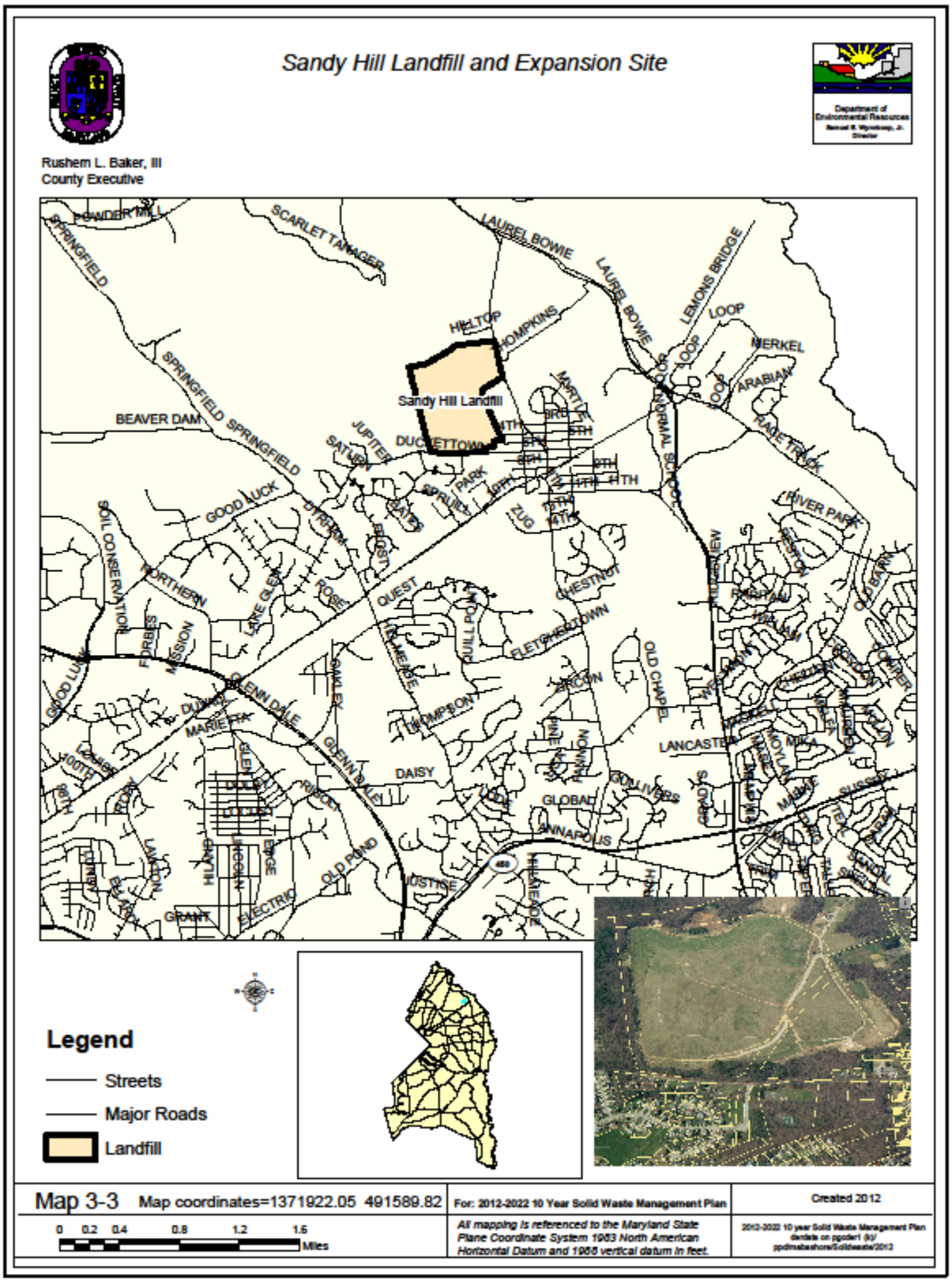
To fulfill the disposal needs of the northern portion of Prince George's County, a 249-acre site north of Bowie was acquired in 1977 by the Maryland-National Capital Park and Planning Commission, at the direction of the County Government (Map 3-3). The Planning Commission, in consultation with the County Government, awarded a contract in May 1977 to Waste Management, Inc. (WMI) to design and operate the landfill under contract with the Commission and to develop a recreational end-use plan. The Commission applied to the Maryland Department of Health and Mental Hygiene for a landfill permit and for a license from the County in the fall of 1977. Hearings were held before a State Health Department hearing examiner in late November and mid-December. The examiner rendered a decision in March 1978, and the permit and license were issued shortly thereafter. The landfill, operating under permit number 89-16-14-10A, opened in May 1978. In 1992, the Maryland-National Park and Planning Commission leased the landfill to the County.

The Sandy Hill facility was the primary municipal waste acceptance facility for the northern portion of the County. The original fill area was intended to receive waste until alternative facilities were permitted and prepared to receive waste. In 1992, as a measure to extend the life of the existing landfill, the County requested State approval of a design modification to increase the landfill's volume. A permit (1992-WMF-0128) allowing the vertical expansion of the existing landfill was issued by MDE on May 1, 1997. The expansion was designed to minimize any impact to subsequent development of the site as a park.

Although the County acquired 134 acres on the west side of Sandy Hill and applied for a permit for approximately nine million cubic yards of landfill refuse capacity, the project was not constructed and the landfill ceased accepting waste on June 23, 2000. Plans to cap the landfill were prepared and construction of the closure cap for the landfill began in April 2003. Closure certification by the Maryland Department of the Environment is pending vegetative stabilization and repairs and upgrades to the landfill gas collection and control system and the storm water management system. The County's engineering consultants prepared the bid documents for the required repairs and improvements for completion of the closure construction project. Work began in the summer of 2011 and the County anticipates completion of closure related activities by the summer of 2012.

Due to the closure of Sandy Hill Sanitary Landfill no portion of the landfill can be used for expansion purposes. Under Federal regulations, the County is required to provide 30 years of post closure care for the Sandy Hill Landfill. Future plans for the site include development of a park by the Maryland National Capital Park and Planning Commission.

Map 3-3


Sandy Hill Landfill and Expansion Site
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Sandy Hill Landfill
Legend
Streets
Major Roads
Landfill
Map 3-3
Map coordinates=1371922.05 491589.82
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
0 0.2 0.4 0.8 1.2 1.6
Miles
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

C. Prince George's County Materials Recycling Facility (MRF)

MRFs are designed to accept and process recyclables for transportation to end markets. Prince George's County owns and operates such a facility for the purpose of processing recyclables from its single family curbside collection program. Construction of the County's recycling facility (Map 3-4) was completed in October of 1993 to receive, sort and prepare for market recyclables collected from over 150,000 single family homes. In March of 2007, the County began a modernization project of the facility. The County's MRF operator, Waste Management- Recycle America, converted the existing structure into a state-of- the art single-stream processing facility. In November of 2007, Prince George's County changed its residential recycling curbside collection from a dual stream collection to a single-stream collection, making recycling much more convenient for County residents. All materials are now collected and delivered together. Additionally, the County went from a 22 gallon recycling bin to a 65-gallon wheeled recycling cart. New carts were distributed to more than 165,000 residents. Residents may still also use the yellow bin.

The new single-stream processing equipment allowed the County to expand the acceptable types of materials for recycling. Materials now processed at the facility include all paper products including newspapers and inserts, magazines, paperboard (cereal and cracker boxes), telephone books, hard and soft back books, craft paper bags and gift wrap, catalogs, and corrugated cardboard, aseptic/gable-top milk and juice cartons, frozen food packaging, glass food and beverage containers, narrow neck and wide mouth food and beverage containers, plastic and metal coat hangers, small plastic flower pots, plastic grocery bags and stretch film that are all inserted and tied off within a plastic bag, aluminum and steel cans, empty aerosol cans, aluminum foil and aluminum pie plates and trays. Through the advance technology in use, materials are sorted and separated by the equipment, baled and marketed as was previously accomplished using the dual stream system. The facility is able to process in excess of 500 tons of materials per day.

Several private MRF's operate in the County. These facilities must receive an annual license from the County to accept recyclables generated in or out of the County (Table 3-4).

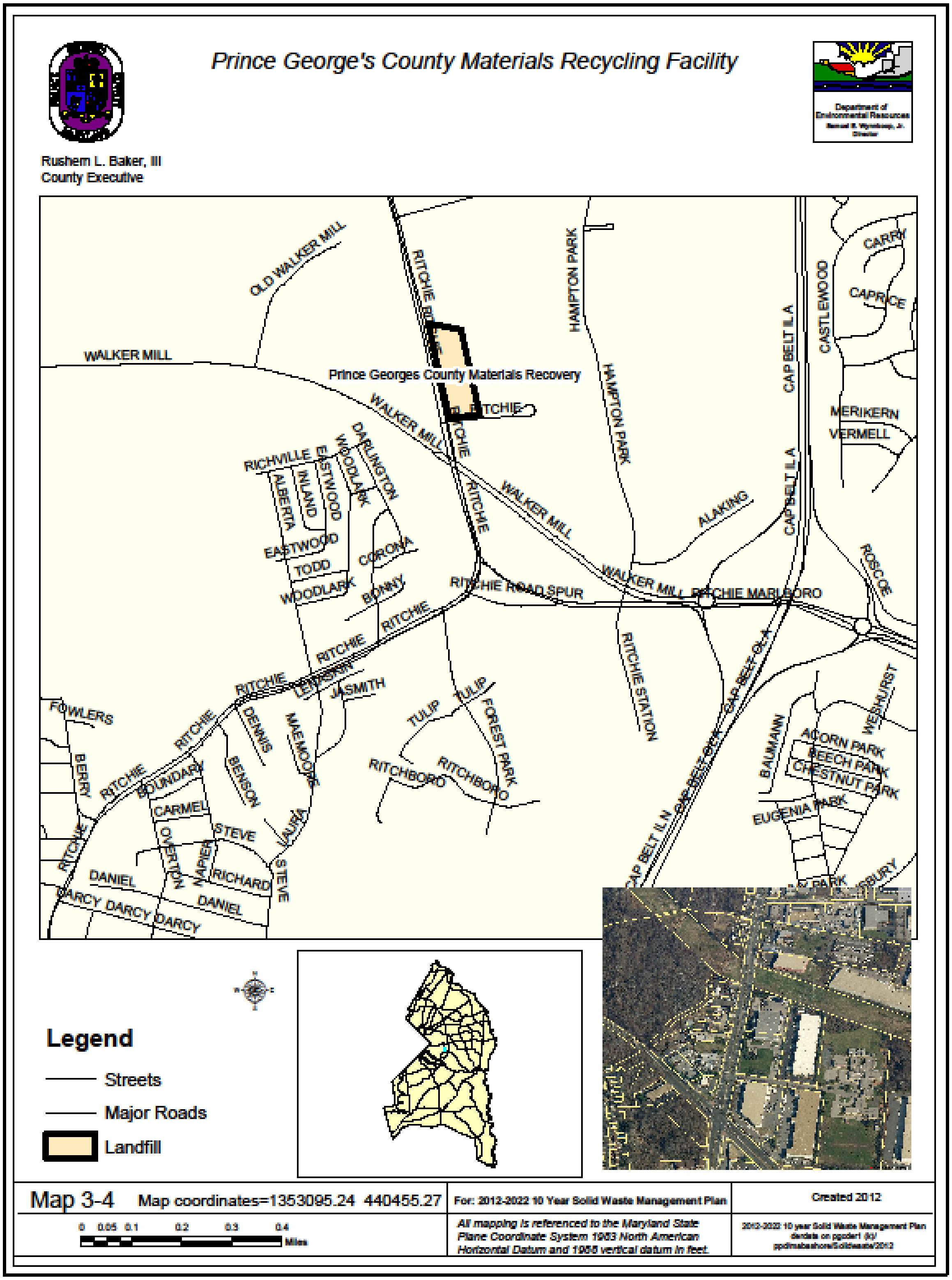
Along with the annual license application, the facilities must also report the amount of recyclables received and processed from Prince George's County. The recyclables processed at these MRF's come primarily from the commercial sector. The tonnages reported are used by the County to report the annual recycling rate to the State, as required.

TABLE 3-4

LICENSED MATERIAL RECYCLING FACILITIES

Consolidated Waste Industries, Capitol Heights, MD
Encore Recycling, Laurel, MD
GSS Automotive Recycling, Landover, MD
Metro Re-Uz-It, Hyattsville, MD
World Recycling, Cheverly, MD

Map 3-4



Prince George's County Materials Recycling Facility
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Prince Georges County Materials Recovery
WALKER MILL
OLD WALKER MILL
RITCHIE
HAMPTON PARK
CAP BELT IL A
CASTLEWOOD
CARRY
CAPRICE
MERIKERN
VERMELL
RICHVILLE
ALBERTA
INLAND
EASTWOOD
WOODLARK
DARLINGTON
CORONA
TODD
BONNY
ALAKING
RITCHIE ROAD SPUR
RITCHIE MARLBORO
ROSCOE
RITCHIE STATION
JASMITH
TULIP
FOREST PARK
RITCHBORO
FOWLERS
BERRY
BOUNDARY
DENNIS
MAE MOORE
BENSON
CARMEL
STEVE
LAURA
OVERTON
NAPIER
RICHARD
DANIEL
DARCY
BAUMANN
WESHURST
ACORN PARK
BEECH PARK
CHESTNUT PARK
EUGENIA PARK
CAP BELT IL N
Legend
Streets
Major Roads
Landfill
Map 3-4
Map coordinates=1353095.24 440455.27
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
0 0.05 0.1 0.2 0.3 0.4 Miles
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

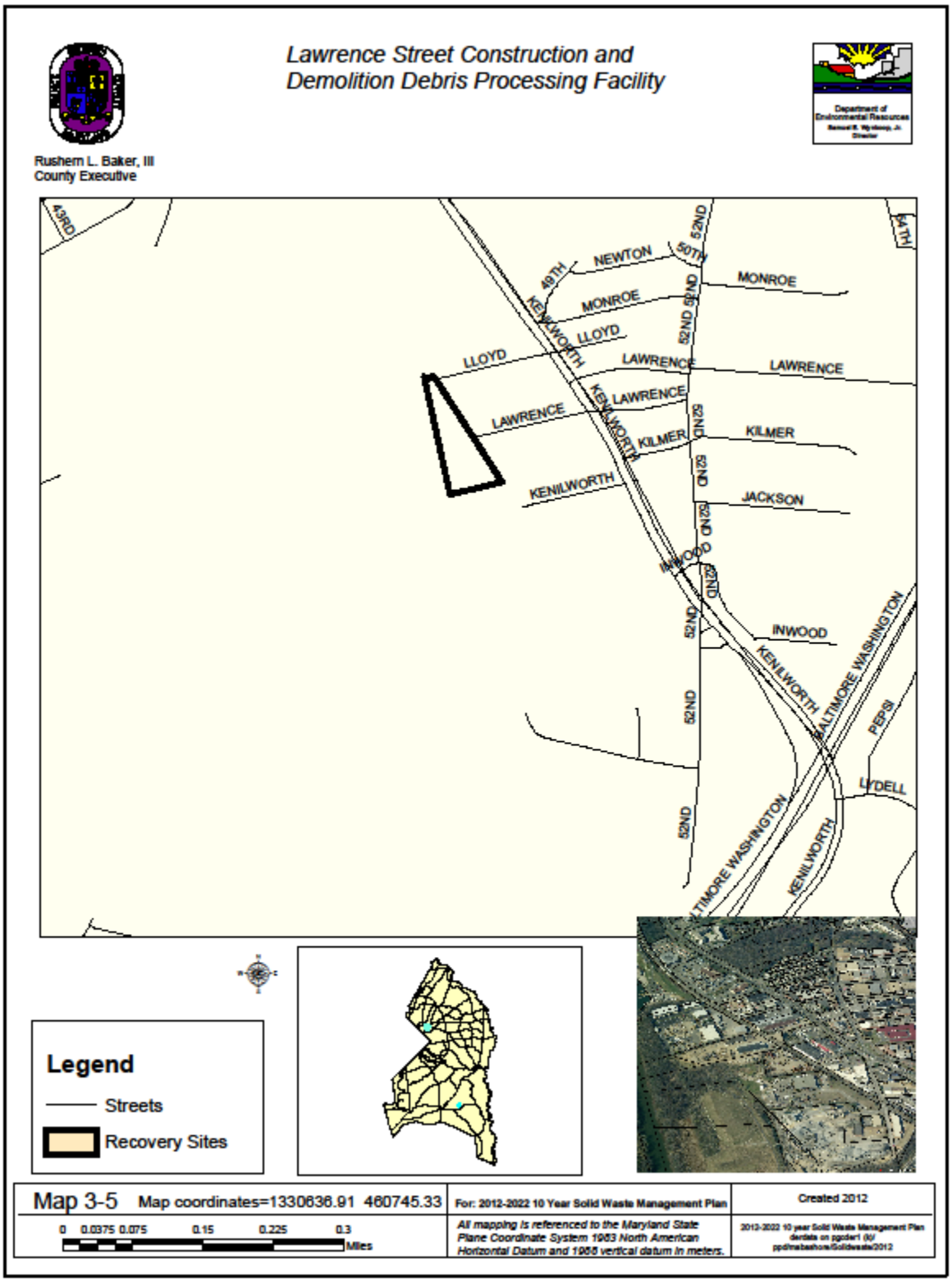
D. Convenience Centers (Drop-off Sites)

The County operates two Convenience Centers for solid waste at 3501 Brown Station Road Sanitary and 12701 Missouri Avenue in Cheltenham (Map 3-6). These are public drop-offs primarily for residential solid waste disposal for those not served by trash collection. Both sites also have facilities for dropping off all of the same recyclable materials presently collected in the County curbside program and for rigid plastics such as plastic toys and plastic lawn furniture. Residents can also recycle used oil and antifreeze at the two drop-off facilities. The Missouri Avenue Convenience Center, which is situated on 7 acres, has an Oil Operations permit #2012-OPT-27072, a National Pollutant Discharge Elimination System (NPDES) permit # 1PG0035, a Soil Conservation District permit SC#32-11, and a Prince George's County Department of Public Works and Transportation (DPW&T) permit 20768-2010. The Brown Station Road center is covered by the Brown Station Road Sanitary Landfill permits. Additionally, there are numerous businesses in the County that accept various items for recycling and or reuse (Appendix C). During this planning period, the County will be conceptualizing the addition of one or two additional convenience centers.

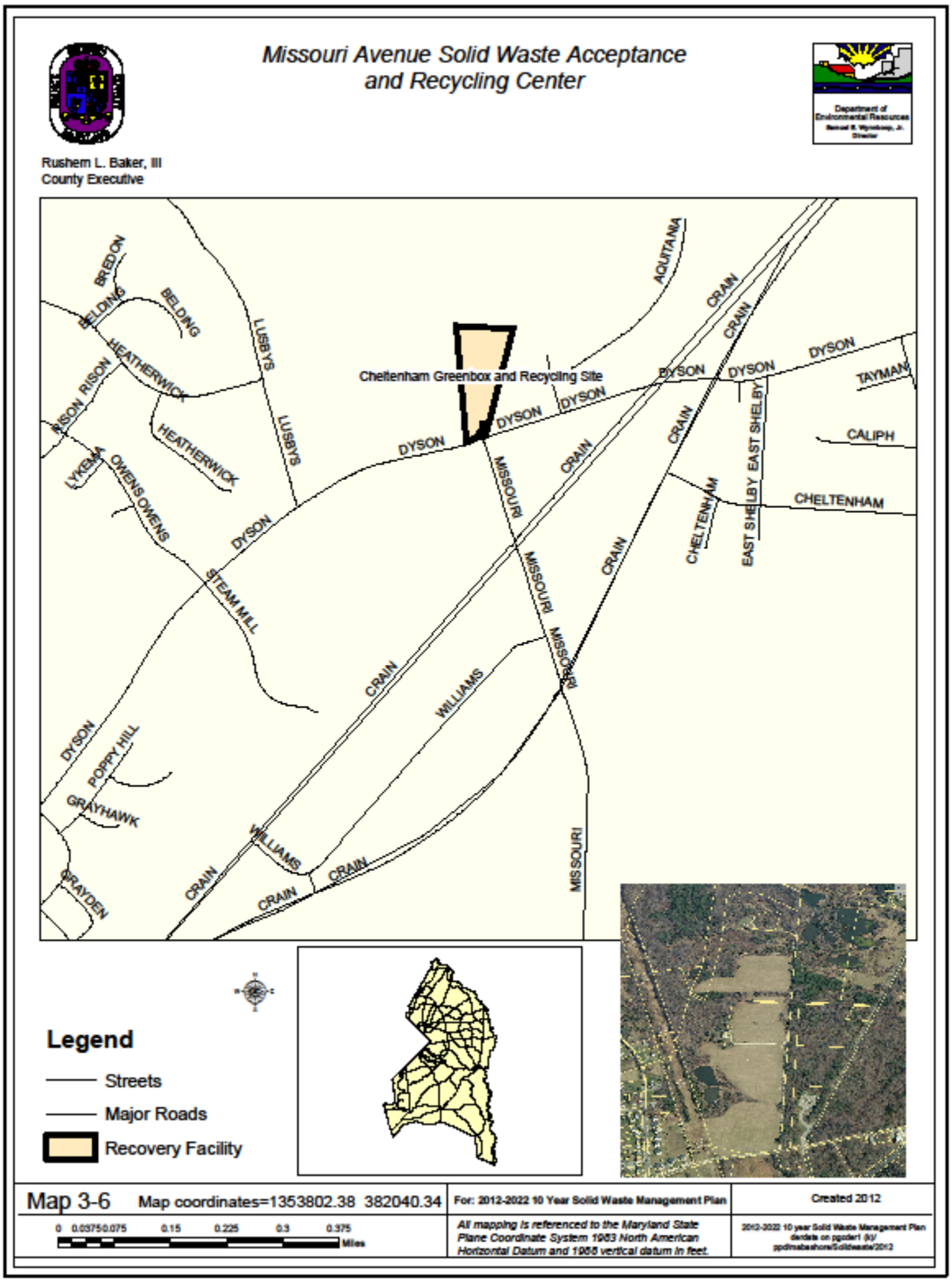
E. Ritchie Land Reclamation Limited Partnership Facility

Subtitle 21-126 of the Prince George's County Code and Section 9-210(b) and (3) of the Environment Article regulate the disposal of materials in a rubblefill. In Prince George's County, there is currently one operating rubblefill, the Ritchie Land Reclamation Limited Partnership Facility. The location is shown on Map 3-7. The Ritchie Land Reclamation Limited Partnership Facility has two active refuse disposal permits issued (2010-WRF-0126 and 2010-WRF-0590) by MDE to perform original landfill operations and the Phase II expansion, respectively, and County license (RF-001-86) and is currently in operation. An additional 30 acres was purchased at the site and is approved for use as part of the existing rubblefill operation. The projected capacity will be achieved in the year 2035.

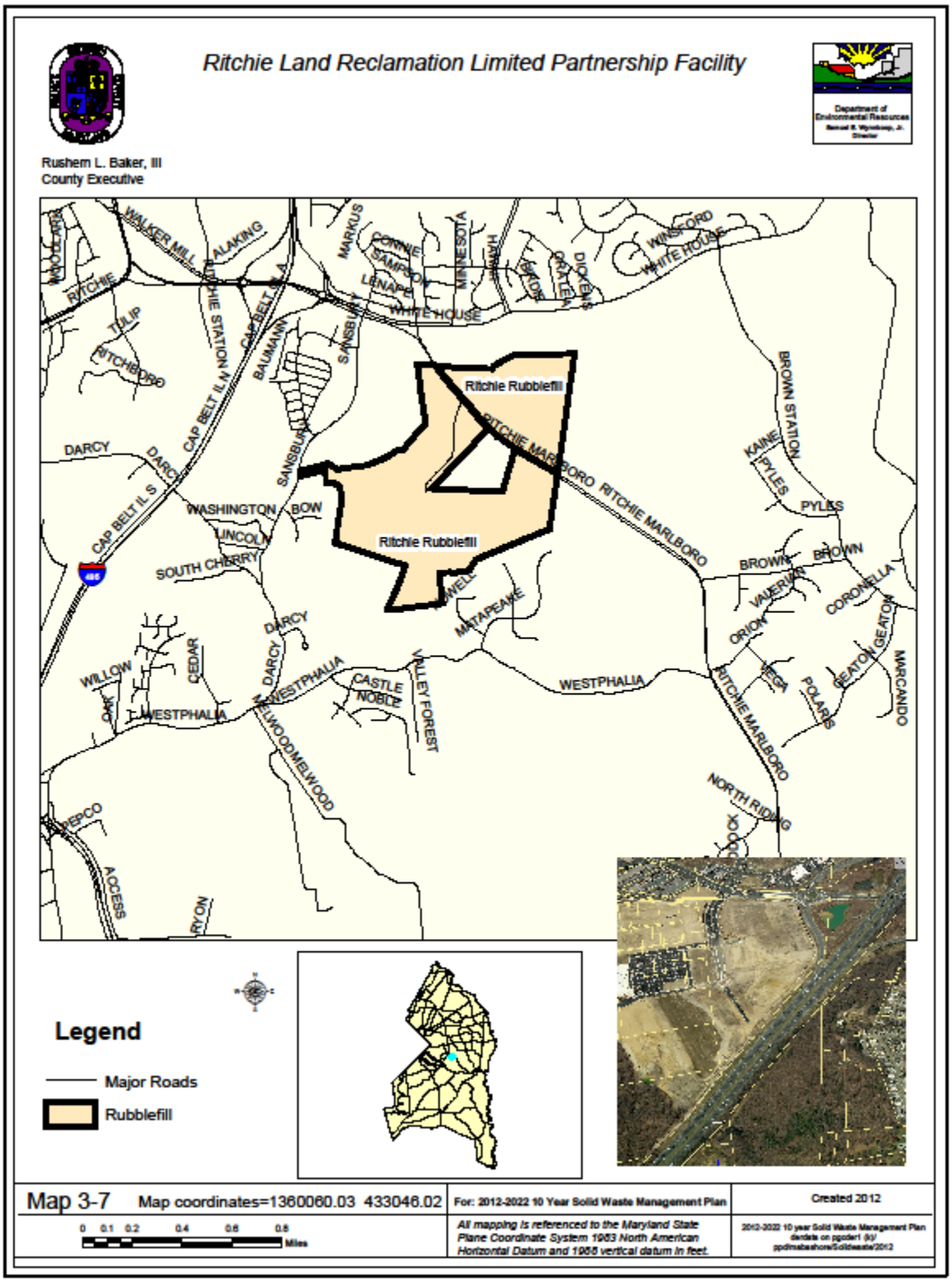
Map 3-5


Lawrence Street Construction and
Demolition Debris Processing Facility
Department of Environmental Resources
Rushern L. Baker, III
County Executive
43RD
54TH
52ND
50TH
49TH
NEWTON
MONROE
KENILWORTH
LLOYD
LAWRENCE
KILMER
JACKSON
INWOOD
BALTIMORE WASHINGTON
PEPSI
UYDELL
Legend
Streets
Recovery Sites
Map 3-5 Map coordinates=1330636.91 460745.33
0 0.0375 0.075 0.15 0.225 0.3
Miles
For: 2012-2022 10 Year Solid Waste Management Plan
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in meters.
Created 2012

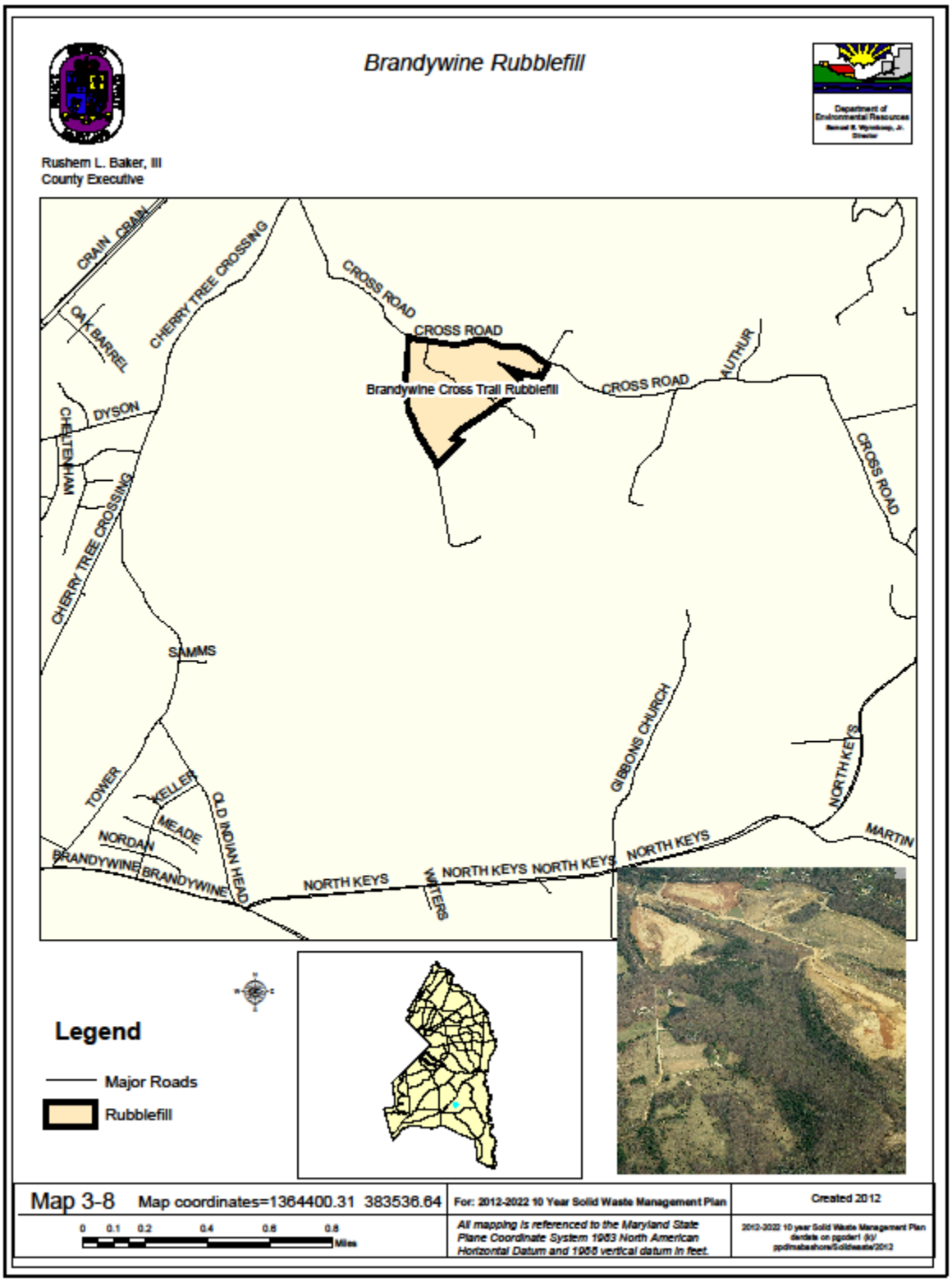
Map 3-6


Missouri Avenue Solid Waste Acceptance and Recycling Center
Department of Environmental Resources
Rushern L. Baker, III
County Executive
Cheltenham Greenbox and Recycling Site
BREDON
BELDING
HEATHERWICK
RISON
LUSBYS
LYKENS
OWENS
STEAM MILL
DYSON
POPPY HILL
GRAYHAWK
CRAYDEN
AQUITANIA
CRAIN
MISSOURI
WILLIAMS
TAYMAN
CALIPH
CHELTENHAM
EAST SHELBY
Legend
Streets
Major Roads
Recovery Facility
Map 3-6
Map coordinates=1353802.38 382040.34
0 0.0375 0.075 0.15 0.225 0.3 0.375
Miles
For: 2012-2022 10 Year Solid Waste Management Plan
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.
Created 2012

Map 3-7


Ritchie Land Reclamation Limited Partnership Facility
Department of Environmental Resources
Rushern L. Baker, III
County Executive
Ritchie Rubblefill
Ritchie Rubblefill
RITCHIE MARLBORO
WALKER MILL
ALAKING
RITCHIE STATION
CAP BELT IL N
CAP BELT IL S
BAUMANN
SANSBURY
MARKUS
CONNIE
SAMPSON
LENAPE
WHITE HOUSE
MINNESOTA
HAINES
TAYLOR
ORA LEA
DICKENS
WINSFORD
WHITE HOUSE
TULIP
RITCHBORO
DARCY
WASHINGTON
BOW
LINCOLN
SOUTH CHERRY
BROWN STATION
KAINE
PYLES
PYLES
BROWN
BROWN
VAUERWIN
CORONELLA
GEATON
GEATON
MARCANDO
ORION
VEGA
POLARIS
MATAPEAKE
WILLOW
OAK
CEDAR
WESTPHALIA
WESTPHALIA
WESTPHALIA
CASTLE
NOBLE
VALLEY FOREST
WELWOOD
WELWOOD
RITCHIE MARLBORO
NORTH RIDING
PEPCO
ACCESS
RYON
Legend
Major Roads
Rubblefill
Map 3-7
Map coordinates=1360060.03 433046.02
0 0.1 0.2 0.4 0.6 0.8 Miles
For: 2012-2022 10 Year Solid Waste Management Plan
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.
Created 2012

Map 3-8

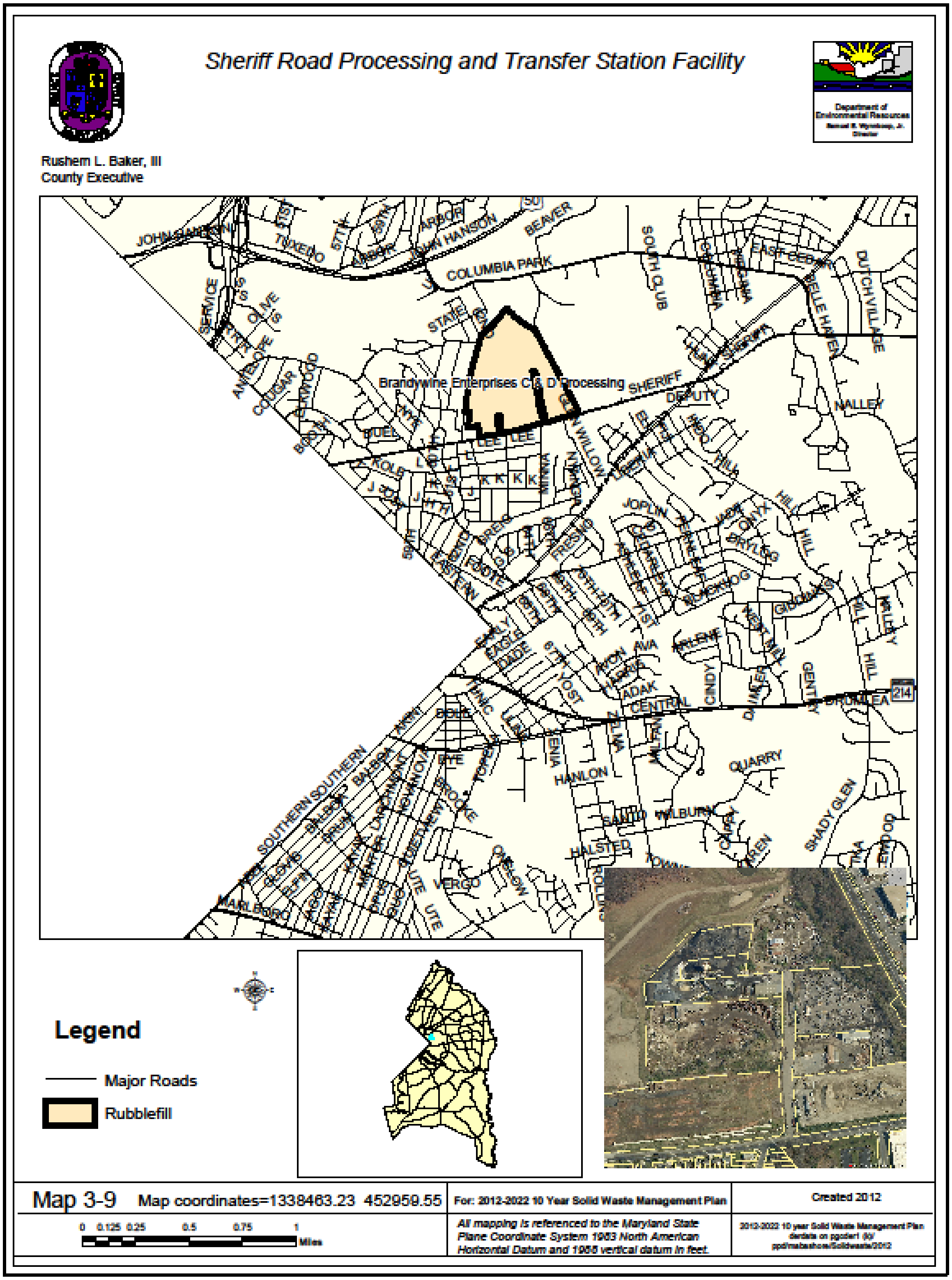

Brandywine Rubblefill
Department of Environmental Resources
Rushern L. Baker, III
County Executive
CRAIN
CRAIN
CHERRY TREE CROSSING
CROSS ROAD
CROSS ROAD
OAK BARREL
Brandywine Cross Trail Rubblefill
CROSS ROAD
AUTHUR
DYSON
CHELTENHAM
CROSS ROAD
CHERRY TREE CROSSING
SAMMS
GIBBONS CHURCH
NORTH KEYS
TOWER
KELLER
MEADE
NORDAN
OLD INDIAN HEAD
BRANDYWINE
BRANDYWINE
NORTH KEYS
WATERS
NORTH KEYS NORTH KEYS
NORTH KEYS
MARTIN
Legend
Major Roads
Rubblefill
Map 3-8
Map coordinates=1364400.31 383536.64
0 0.1 0.2 0.4 0.6 0.8 Miles
For: 2012-2022 10 Year Solid Waste Management Plan
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.
Created 2012

F. Construction and Demolition (C&D) Processing Facilities

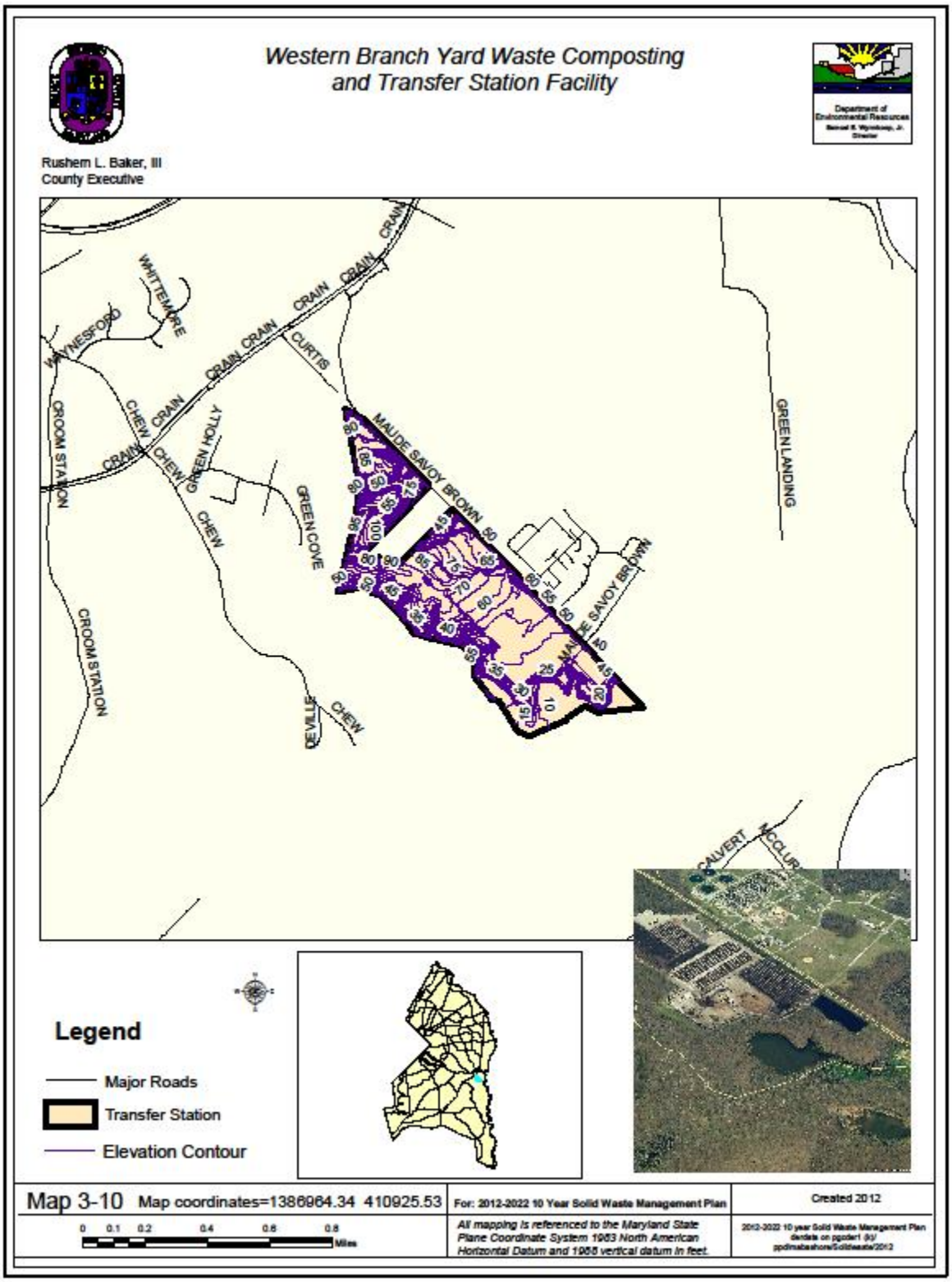
A privately owned and operated C&D Processing Facility has been developed and a State permit issued for the Sheriff Road Processing and Transfer Station Facility, State Permit No. 2007-WPT-0218. The Processing Facility (Map 3-9) is located on approximately 10.5 acres of Sheriff Road and processes and recycles material resulting from construction and demolition activities. The processing of construction and demolition materials must take place within an enclosed building. This facility must meet a minimum goal of 20 percent recycling. It must keep a log, which lists the types of materials processed, the point of origin for materials received at the facility, the destination of materials leaving the facility as well as the driver's license number and license plate number for each truck entering the facility. An annual report shall be submitted to the Department of Environmental Resources that includes this information as well as statistics on the percentage of materials recycled at the facility. Each year, it is anticipated that 375,000 cubic yards of materials will be accepted at the facility. The anticipated life of the facility is 30 years.

Another privately owned and operated C&D processing facility was constructed in 2010. This facility is located on 2.8 acres (Map 3-5) and is owned and operated by Lawrence Street Industries, LLC Doing Business As (d/b/a) Recycle One and may only accept source separated materials from construction or demolition of structures: wood, concrete brick, paper used in packaging, cardboard, plastics, gypsum wall board, ceiling materials, nonferrous metal and asphalt. All incoming loads are weighed and inspected to insure that only acceptable materials are delivered. The materials are sorted, baled or bundled on site and sent to market. Wood is ground on site. This facility shall not accept municipal solid waste, putrescible wastes other than wood, mattresses, tires (unless licensed by the State as a tire recycling facility), liquids, paint, paint thinner, tar, creosote, adhesives, animal carcasses, septage, biosolids, yard waste, controlled hazardous materials, shock sensitive materials, and explosives. This facility is operating under State issued permit No.2006-WPF0626.

Map 3-9


Sheriff Road Processing and Transfer Station Facility
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Brandywine Enterprises C & D Processing
SHERIFF
COLUMBIA PARK
CENTRAL
Legend
Major Roads
Rubblefill
Map 3-9
Map coordinates=1338463.23 452959.55
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.
0 0.125 0.25 0.5 0.75 1
Miles

Map 3-10


Western Branch Yard Waste Composting
and Transfer Station Facility
Department of Environmental Resources
Rushern L. Baker, III
County Executive
WHITEMARE
WAYNESFORD
CRAIN
CURTIS
CROOM STATION
CHEW
GREEN HOLLY
GREEN COVE
MAUDE SAVOY BROWN
GREEN LANDING
CALVERT
Legend
Major Roads
Transfer Station
Elevation Contour
Map 3-10 Map coordinates=1386964.34 410925.53
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
0 0.1 0.2 0.4 0.6 0.8 Miles
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

G. Western Branch Yard Waste Composting Facility and Transfer Station

This County-owned facility is located in Upper Marlboro, Maryland and has been operated by the Maryland Environmental Services (MES) as a yard waste composting facility for over twenty years (Map 3-10). In 2009, this site was selected as the site for the proposed Prince George's County Solid Waste Transfer Station, which will be constructed during this planning period. Yard waste composting will continue during the construction phase and after the transfer station becomes operational.

Currently, approximately 60,000 tons of yard waste including Christmas trees, leaves, brush and grass clippings are mulched or composted at the facility each year. Materials collected curbside from County residents and delivered from private landscapers and contractors are accepted for processing. Some material is also received from other local municipalities and other counties in the State. These organics are processed and made into a composting material that is marketed to the public. During this planning period, the County will implement a food scraps composting pilot project at the Western Branch Yard Waste Composting and Transfer Station Facility. In the event that the County expands the food scrap composting program, material may be from residential curbside collection, and deliveries from institutional sources such as public schools and the University of Maryland, and the private sector such as grocery stores and restaurants.

H. Hazardous Substances Storage Facilities in Prince George's County

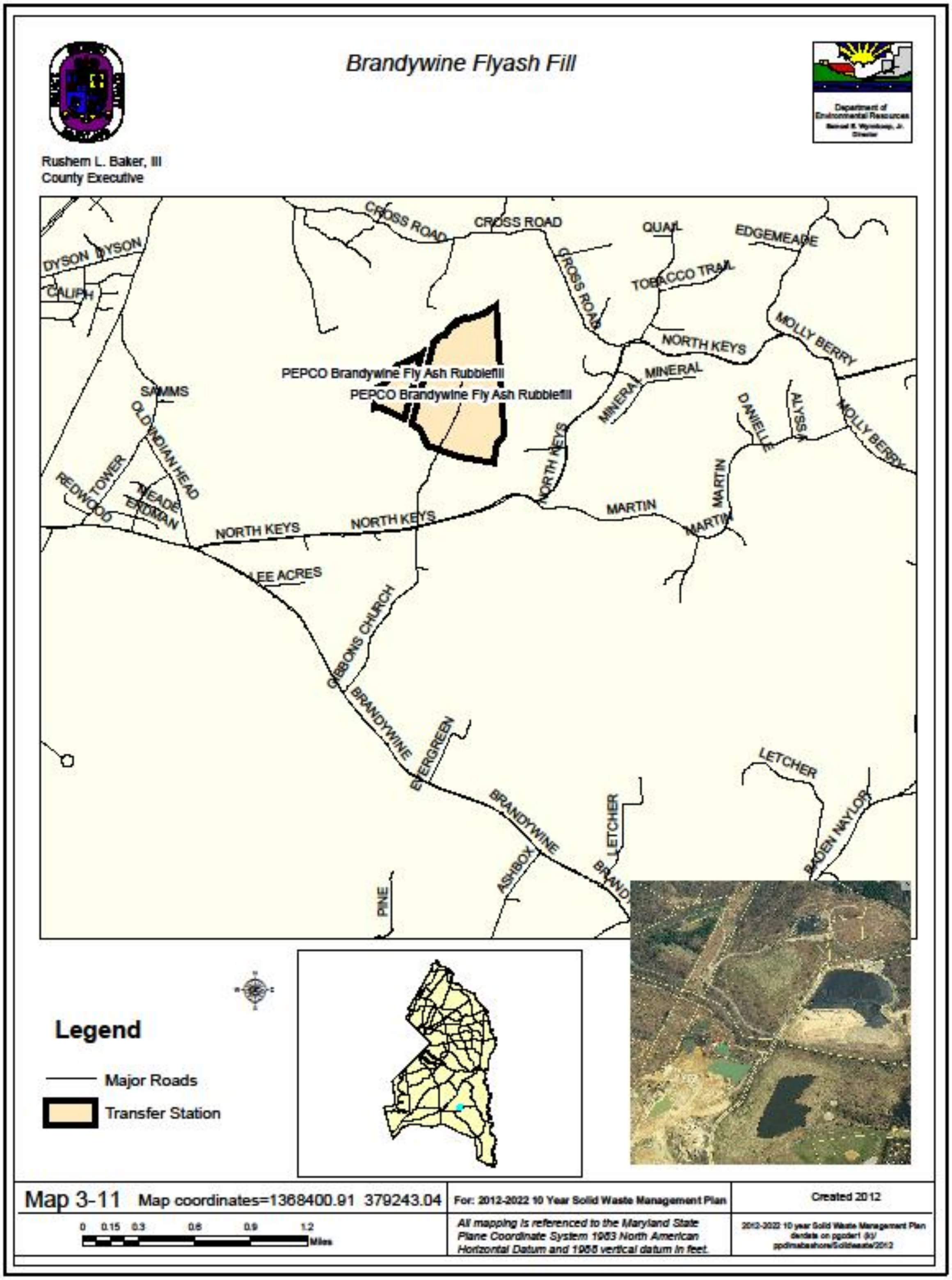
Two hazardous waste storage facilities are located in the County; one Federal facility, Adelphi Laboratories (Maryland Grid Coordinates 811/435), and a State facility at the University of Maryland (Maryland Grid Coordinates 817/424). These facilities only accept and store controlled hazardous substances generated by the institution. This material is then collected by State-permitted haulers for disposal and/or treatment outside of the County.

I. Disposal of Homogenous Waste

1. Fly Ash Fill

In Prince George's County, GenOn Engery, Inc., formally Mirant MD Ash Management, LLC, operates a fly ash fill in the Brandywine area to store this natural resource (Map 3-11). The ash cells have capacity beyond ten years. The disposal site is inspected jointly by the Maryland Department of the Environment, the County Department of Environmental Resources and the Health Department.

Map 3-11


Brandywine Flyash Fill
Rushern L. Baker, III
County Executive
Department of Environmental Resources
PEPCO Brandywine Fly Ash Rubblefill
PEPCO Brandywine Fly Ash Rubblefill
CROSS ROAD
CROSS ROAD
CROSS ROAD
QUAIL
EDGEMEADE
DYSON
DYSON
CALIPH
TOBACCO TRAIL
NORTH KEYS
MOLLY BERRY
MINERAL
MINERAL
SAMMS
OLD INDIAN HEAD
DANIELLE
ALYSSA
MOLLY BERRY
TOWER
REDWOOD
MEADE
ERDMAN
NORTH KEYS
NORTH KEYS
NORTH KEYS
MARTIN
MARTIN
MARTIN
LEE ACRES
GIBBONS CHURCH
BRANDYWINE
EVERGREEN
LETCHER
BRANDYWINE
LETCHER
BADEN NAYLOR
ASHBOX
PINE
Legend
Major Roads
Transfer Station
Map 3-11 Map coordinates=1368400.91 379243.04
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
0 0.15 0.3 0.6 0.9 1.2 Miles
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

J. Unauthorized Dumping

Unauthorized dumping, as with many jurisdictions, is a major problem. Based on the assumption that people will not dump illegally if a convenient place for disposal is made available, one alternative would be the use of regional disposal areas where citizens can deposit trash. Public containers have been provided to the citizens of the County at the Brown Station Road Sanitary Landfill and at the 12701 Missouri Avenue in Cheltenham. The amount of trash disposed at these containers has increased steadily in recent years. The County will continue to provide and increase these public areas and continue to increase the public's awareness of these public container sites.

In order to help decrease unauthorized dumping, the County instituted a program of free waste disposal at BSRSL every Sunday. In 2008, as a cost saving measure, the County decided to close the landfill on Sundays. In order to continue to support initiatives to decrease unauthorized dumping, the County instituted a program that provides residents with the opportunity to utilize the landfill and brush disposal areas five days a week, Mondays through Fridays free of charge.

A major program in the County's solid waste management efforts concerns the maintenance of clean lots and the abolition of unauthorized dumping practices in the County. At present, there are four methods by which unauthorized dumping complaints are received and acted upon in the County. These include complaints received from individual citizens, County police officers, Health Department Inspectors and Refuse Collection Inspectors. The County also supports the Strategic-Multi-Agency Response Team (SMART), which evolved out of the need to coordinate efforts of various agencies to resolve illegal dumping and littering issues within our communities in a quick and efficient manner. In addition, County agencies have enforcement authority and may issue notices of violation and fines for illegal littering and dumping. The group consists of members from the Department of Corrections, the Department of Environmental Resources, the Department of Health , the Department of Public Works & Transportation, the Maryland-National Capital Park and Planning Commission, the Department of Parks and Recreation, the Office of Community Relations, the Office of Information, Technology and Communications, the Prince George's County Police, the Prince George's County Sherriff's Office, the Revenue Authority, the States Attorney's Office, and the Washington Suburban Sanitary Commission. This working group continues to demonstrate their effectiveness responding to the needs of County residents.

The elimination of unauthorized dumping is being attempted through the enforcement of three County Ordinances. The first is the Solid Waste Ordinance that forbids dumping other than at an authorized landfill, defines the term "landfill" and provides for criminal penalties against offenders. The second is the Anti-Litter and Weed Ordinance that authorizes issuance of Notices of Violation for litter on both improved and unimproved property in unincorporated areas throughout the County. Used primarily to address residential property, the Code provides for notice to the property owner and then allows County or contractual forces to clean the debris if the owner is not

responsive. The property owner is billed for the cleanup effort and a tax lien may be used to collect outstanding debts if the bill is not paid. The County performs area-wide surveys to ensure compliance, in addition to responding to complaints. A similar measure applies to illegal dumping on commercial or industrial property but requires an order of the court before cleanup efforts can take place by the County. The third means is through the Rubblefill Ordinance, which provides for a legal citation and criminal penalties.

IV. Special Waste

Special waste materials include hazardous, medical, explosive, radioactive, agricultural waste, as well as used motor oils and cooking grease. Information regarding the special waste collected in Prince George's County is not substantial, either because data is not available or the volume of such waste is very small. Nevertheless, the management of these waste materials is of critical importance to the County from the standpoint of public health and safety. Disposal of these wastes presently requires special attention by the County Health Officer, who has the responsibility to provide advice on their proper disposal.

A. Hazardous Waste

State-permitted salvage, recovery and hauling companies provide hazardous waste collection and disposal services to the generators of hazardous waste in the County.

The State has primary responsibility for administering and enforcing hazardous waste regulatory programs, subject to the approval of the appropriate United States Environmental Protection Agency Regional Office. The Maryland Department of the Environment (MDE) has developed a plan required under Subtitle D of the Resource Conservation and Recovery Act (RCRA) for the management of solid and hazardous wastes with the State. In the event of a hazardous waste spill, the County Fire Department, with assistance from MDE, is responsible for ensuring the material is removed and disposed of properly. At the present time, the County Health Officer is responsible for providing advice on the proper disposal of household hazardous waste. In addition, the County's Department of Environmental Resources is providing educational services to hazardous waste generators about proper disposal alternatives.

The Department of Environmental Resources also operates a permanent household hazardous waste collection site at the Brown Station Road Landfill. County residents can bring household hazardous waste (e.g. pesticides, solvents, oil-based paints) to this site. The facility is operated by a licensed hazardous waste collector and transporter who packs and transports the acceptable household hazardous wastes and to a licensed disposal/treatment facility located outside of Prince George's County. This site is open on Thursdays, Fridays and Saturdays from 8:00 am until 3:30 pm and is free of charge to all County residents. It is anticipated the facility will remain open, subject to funding, during this planning period.

B. Medical Waste

As a result of the promulgation of regulations dealing with the handling of waste produced by the medical, dental and veterinary community, there are four ways by which special medical waste may be handled prior to disposal. Special medical waste, depending on the form it takes, can be chemically treated and disposed of with regular solid waste; chemically treated and mechanically destroyed prior to disposal in the sanitary sewer or with the regular solid waste; autoclaved (steam-sterilized) and disposed of with regular solid waste; or incinerated.

There are several regional special medical waste disposal facilities, serving a multi-state area, for use by the medical, dental and veterinary community. Due to the economics of scale of these facilities, waste disposal services can be provided at costs less than each of the respective waste generators can individually treat or dispose of their respective waste. Therefore, the majority of special medical waste generated in Prince George's County is handled by private, special medical waste haulers who transport the material to these approved disposal facilities. To date, the majority of the approved disposal facilities are located in Baltimore, Virginia, Pennsylvania and Ohio.

There are currently 11 crematories in service within Prince George's County. These facilities are for the sole use of their owner/operator. Ash produced from these units may be combined with other refuse and disposed of in a sanitary landfill. The majority of special medical waste generated by the County is taken out of the County by a special medical waste hauler to an approved facility for final disposal.

C. Explosive Waste

Potentially explosive materials are the responsibility of the County Fire/EMS Department's Office of the Fire Marshal's Bomb Squad. The Office of the Fire Marshal's Bomb Squad will coordinate any requests for assistance regarding potential military ordnance with the appropriate Military Explosive Ordnance Disposal Unit. Additional requests for assistance may be relayed to emergency facilities, including Chemtrec (representing manufacturing chemists), and several commercial handlers of dangerous materials based in Maryland, Delaware and Pennsylvania that dispatch emergency crews when a serious public health hazard exists. Generally, dangerous explosives are rendered safe on-site or detonated after removal to an appropriate and safe location. Explosive Waste is generally deactivated on site by emergency crews and disposed of properly under the purview of the County's Fire/EMS Department.

D. Radioactive Waste

Radiation control, including regulation of medical and dental X-ray facilities and monitoring usage of radioactive isotopes in Prince George's County, is supervised by MDE, Air and Radiation Management Administration and the Nuclear Regulatory Agency, and agency of the Department of Energy and the United States Environmental

Protection Agency. Radioactive waste may not be landfilled in Maryland because of the State's geological conditions.

Radioactive Waste may be removed by an approved radioactive waste hauler to a United States Environmental Protection Agency-approved facility for storage and disposal, none of which are located in the State of Maryland.

E. Agricultural Waste

Approximately 375 farms are presently active in Prince George's County (2007 Census of Agriculture). Agricultural activities conducted on these farms include raising crops, livestock, or a combination of both. Crop residuals, livestock and poultry manure by-products are usually returned to the soil on-site. Small surpluses are sold for fertilizer or compost. Cut wood materials may be sold as fuel or chipped for use as mulch. Dead livestock are usually buried on-site. In the event of disease where contamination hazards exist, dead livestock are incinerated in pathological incinerators by order of the United States Department of Agriculture and State Board or Agriculture. Agricultural wastes are usually returned to the soil.

F. Used Motor Oil

Waste oils from commercial service stations and garages in Prince George's County are collected on site in waste oil reservoir tanks. Most accumulated waste oils are recovered or scavenged from these reservoirs and taken out of the County for reprocessing and recycling. The oil can be cleaned and used again or it can be converted into fuel. Some waste oils are stored at local salvage companies for reuses as low grade industrial fuels. The County's Fleet Maintenance collects oil and antifreeze at two County garages. After the oil and antifreeze is placed in tanks a private contractor collects this material. The antifreeze is recycled and new antifreeze products are made. The oil that is recovered is either used to make an Industrial Fuel or recycled into a usable oil product.

Since the advent of the self-device gasoline stations, more people are changing their own car oil, thereby aggravating the dumping problem. The dumping of millions of gallons of waste oil into the metropolitan region's sewers, storm drains, backyard, trash cans and landfill areas, is posing a serious environmental hazard and is illegal in Washington area jurisdictions.

In 1978, Maryland became the first state in the Union to enact a law requiring that motorists who change their own automobile oil take it the designated recycling centers. Violations may result in fines up to $1,000 or 60 days in jail or both. Requirements included that the Maryland State Department of Natural Resources designate collection facilities and sites by January 1979. These facilities and sites are now designated by MDE and the Maryland Environmental Service (MES). Prince George's County accepts used oil at the three existing convenience centers and at the permanent house hold hazardous waste site, located at the BSRSL. Assistance with locating privately

owned service stations that will accept used motor oil for recycling is also available by calling MES toll free at (800) 473-2925. It is estimated that 95,000 gallons of used oil are collected annually in the County.

G. Cooking Grease

Cooking grease is known in the industry as waste grease. Waste grease is a term commonly used in sanitary engineering to identify semi-liquid fats, waxes and other components of waste foodstuff. They are among the more stable organic compounds and are not, therefore, easily decomposed by bacteria. For the most part, these compounds float on the surface of wastewater and may be removed by gravity separation. A portion of waste grease is carried into biosolids as settled solids.

Waste grease is generally characterized by its tendency to form layers on the surface of the water, to coat particle surfaces, and to exert high biochemical oxygen demand during decomposition. When allowed to discharge freely to sewers, these compounds increase the incidence of sewer blockages. At the treatment plant, waste grease inhibits natural regeneration in biological treatment units. The commonly approved method of preventing grease discharges from commercial food service facilities into the sanitary sewer system is gravity separation.

It has been estimated that over 1,480,000 gallons of used grease and oil are annually collected for recycling in Prince George's County. In a survey of collectors and generators of waste grease, it has been estimated that a least an additional 200,000 gallons of grease a year could be skimmed from grease traps in food handling establishments and an additional 850,000 gallons of greasy waste water could be collected and added to the total collectible volume.

In accordance with its Plumbing Regulations, the Washington Suburban Sanitary Commission (WSSC):

* Prohibits the discharge of waste grease to the sewer system;
* Requires the installation of indoor grease traps and outside grease interceptors, depending on whichever is more practical for a particular application; and
* Limits the discharge of wastewater containing more than 100 mg/1 of grease or a character not substantially different from domestic sewage.

Although WSSC has established Plumbing Regulations over the control and disposal of grease, existing methods for handling of waste grease by the substantial number of food haulers in Prince George's and Montgomery Counties permit as much as 2.5 million gallons of waste grease to enter WSSC's sewer system annually.

Currently Prince George's County provides County residents the opportunity to dispose of and recycle their cooking grease. A cooking oil collection area is located at the BSRSL permanent Household Hazardous Waste site. Valley Proteins, a commercial cooking oil collection vendor collects and recycles the oil. Commercial establishments

are also encouraged to recycle their cooking oil. During 2010, 2,366.82 tons of grease and cooking oil were recycled in Prince George's County.

H. Asbestos

Effective on January 31, 1983, friable asbestos was no longer listed as a Controlled Hazardous Substance (CHS) as defined in COMAR 26.13. As a result the material could be disposed in a municipal solid waste landfill. However, friable asbestos is classified as a Toxic Air Pollutant and is regulated under the National Emission Standards for Hazardous Air Pollutants, Title 40, Part B. Section 61.20 and COMAR 26.11.15 and 26.11.23. The Maryland Department of the Environment, Air and Radiation Management Administration enforces these regulations. Groundwater contamination from friable asbestos disposal at a sanitary landfill is highly unlikely and is the technical reason for its delisting as a CHS. Hence, due to the changed regulations and the extremely low risk groundwater contamination, the MDE allows friable asbestos to be accepted at any landfill permitted for nonhazardous Industrial Waste, which includes the County's sanitary landfill.

Because friable asbestos presented no health threat if properly landfilled and since it had to be removed from many of the County's schools and other facilities, the material was accepted at BSRSL until 1996. The landfill ceased accepting the material because new, burdensome Federal regulations required excessive bookkeeping and operational accommodations. Currently, all friable asbestos must now be collected by licensed asbestos contractors, who provide for proper disposal in approved hazardous waste acceptance facilities located outside of the County. Non-friable asbestos, such as that found in certain building shingles and floor tiles are accepted at the Brown Station Landfill.

I. Regional Recycling Activities

Prince George's County is a member of the Washington Council of Governments (COG). COG serves as a regional council for Maryland, Virginia and Washington, D.C. DER's WMD managers attend quarterly Waste Management and Recycling Managers meetings coordinated by COG. These meetings are designed to educate, review and study the feasibility of numerous regional and or national recycling, source reduction, and waste diversion activities. WMD staff is also involved in special committees that are formed to study specific regional needs. Examples of regional recycling efforts include reduction, recycling or elimination of plastic bags to reduce litter in the rivers, regional composting to meet need for food waste, efforts for statewide support for Recyclebank or similar recycling rewards program to increase recycling participation and recycling rate, regional Recycle Right Contest to promote America Recycles Day, and an annual regional Recycling and Source Reduction Radio Ad Campaign to promote recycling at the workplace and at home. The WMD also attends regularly scheduled County Waste and Recycling Manager quarterly meetings coordinated by the MDE. These meetings are designed to keep County managers informed of regulations, laws, opportunities, program information sharing, networking, and special committees are formed to serve as an

advisory board to MDE, all in an effort to increase recycling and to reduce waste before it starts. Prince George's County, WMD managers and/or individuals, also maintains membership and involvement with the Maryland Recyclers Network (MRN) and SWANA. Additionally, Keep Prince George's County Beautiful, Recycling Section, maintains involvement in regional and national recycling activities such as the Great American Clean Up, Litter Free Initiatives, cell phone recycling, and recycling contests to promote recycling and source reduction. Finally, Prince George's County, WMD, is included and incorporated within the MDE's regional recycling on-line resource and the COG's on-line resource for recycling information and listing of recycling vendors/businesses.

CHAPTER IV
ASSESSMENT

I. Introduction

An assessment of County needs with respect to extending, altering, or modifying existing solid waste disposal systems beyond the planning period must take into account the County's physical characteristics, water quality and areas or critical concern. Considerations must also be made for County growth patterns, land availability and use, and Federal, State and local laws, which have been addressed previously in Chapters I and II. Based on population and waste generation projections, the systems and facilities described in this plan are adequate for this planning period.

The following information is provided as an inventory of existing conditions and programs in the County that play a role in the assessment and may pose constraints on the establishment of a solid waste disposal/acceptance system.

II. Physical Characteristics of Prince George's County

A. Introduction

The County's physical characteristics play a significant role in the siting of solid waste management facilities. The predominant physical features of the County affecting the siting process include geology, topography, aquifers, surface waters and soils.

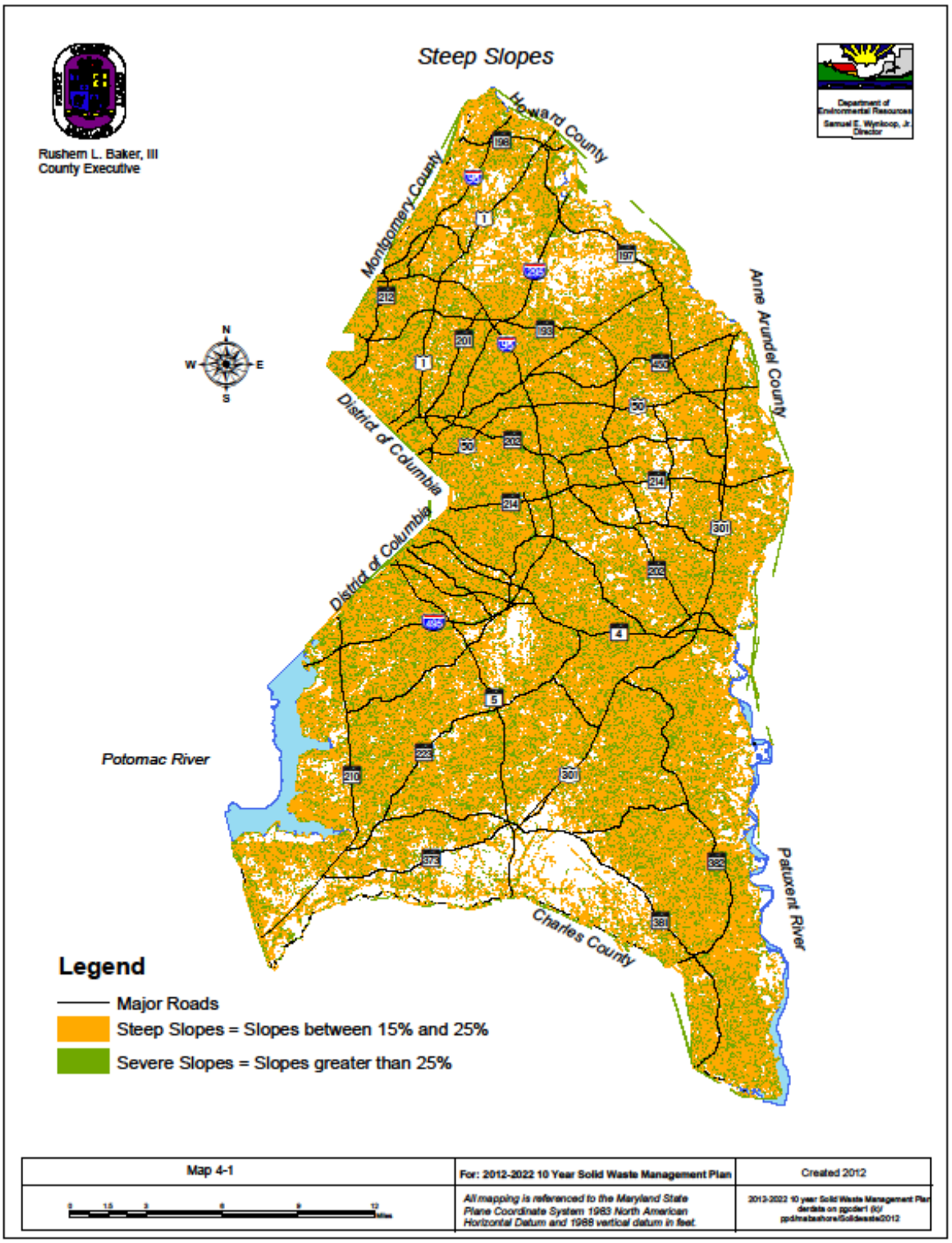
B. Topography

The northern part of the Coastal Plain in Prince George's County is gently rolling and has broad valleys, and the rest is a partly low plateau that extends into Charles County. In the central part of the County, this plateau is nearly level to gently sloping, but near the Patuxent and Potomac Rivers, it is cut by V-shaped valleys that have short, steep slopes. Old alluvial terraces border the Patuxent and Potomac Rivers. Elevations range from sea level along the lower reaches of the major rivers to 365 feet in the northern part of the County. Slopes of 15 percent or greater comprise almost 43,000 acres or 14 percent of the total area in the County (Map 4-1). Due to the instability and amount of earthwork that would be needed to stabilize these slopes, these areas pose severe constraints for developing a solid waste management system.

C. Soils

A soil association is a landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils and at least one minor soil, and it is named for the major soil. The soils in one association may occur in another, but in a different pattern. The soils of Prince George's County are:

Map 4-1


Steep Slopes
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Samuel E. Wynkoop, Jr.
Director
Howard County
Montgomery County
Anne Arundel County
District of Columbia
District of Columbia
Potomac River
Patuxent River
Charles County
N
W
E
S
Legend
Major Roads
Steep Slopes = Slopes between 15% and 25%
Severe Slopes = Slopes greater than 25%
Map 4-1
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

1. Manor-Glenelg Association - Deep, well-drained and somewhat excessively drained, nearly level to very steep soils of the Piedmont province.

2. Beltsville-Leonardtown-Chillum Association – Moderately deep, well-drained, dominantly gently sloping soils that have a compact subsoil or substratum.

3. Christiana-Sunnyside-Beltsville Association – Deep, level to steep, well-drained sandy and clay soils and level to sloping, moderately deep, moderately well-drained soils that have compact subsoil.

4. Collington-Adelphi-Monmouth Association – Deep, nearly level to strongly sloping, well-drained and moderately well-drained soils of the uplands that developed in sediments containing glauconite.

5. Bibb-Tidal Marsh Association – Poorly drained soils of the floodplains and soils in marshes that are subject to tidal flooding.

6. Sassafras-Keyport-Elkton Association – Nearly level to strongly sloping, well-drained to poorly drained soils on terraces along the Potomac River.

7. Sassafras-Croom Association – Gently sloping to steep, well-drained, dominantly gravelly soils, some of them with a compact subsoil and substratum.

8. Collington-Matapeake-Galestown Association – Deep, well-drained to excessively drained, nearly level to strongly sloping soils on terrace along the Patuxent River.

9. Westphalia-Marr-Howell Association – Deep, well-drained, nearly level to strongly sloping soils of the uplands.

10. Westphalia-Evesboro-Sassafras Association – Deep, well-drained to excessively drained soils of uplands that are mostly moderately sloping to steep.

Important soil factors influencing the location and eventual construction of solid waste acceptance facilities include permeability, drainage characteristics, erodibility, presence of high water tables, and texture. Specifically, these factors will influence potential leachate problems, foundation stability and suitability for earthmoving, landfill cover and road construction.

D. Geology

Prince George's County is generally situated in the physiographic province called the Atlantic Coastal Plain, but a small area along the Montgomery County line is in the Piedmont province. The Piedmont is underlain by crystalline rocks of pre-Cambrian age. The piedmont is gently rolling to hilly and moderately dissected by broad, shallow valleys. The Atlantic Coastal Plain is underlain by unconsolidated deposits of gravel, sand, silt and clay that range in age from Cretaceous in the northern part of the County to Recent in the floodplains.

The major geologic information in the County includes the Patuxent, Patapsco, Magothy, Aquia, Calvert and Nanjemoy, and Arundel Clay formation. The following information provides a brief description of each formation.

1. Patuxent Formation – Consists of beds of unconsolidated or slightly cemented sand gravel, and large cobbles, and locally, thin lenses or clay cemented with iron oxides.

2. Patapsco Formation – Chiefly clay, but contains thin beds and lenses of sand and gravel. The clay beds are plastic, so that ingress of water along the sand and gravel lenses will promote slippage and instability along the interfaces on moderately steep slopes.

3. Magothy Formation – Mostly medium and fine sand, subordinately sand clay and clay; beds of sand commonly contain lenses and thin beds of gravel; locally lignite and pyrite are present; iron crusts (limonite) in many places.

4. Aquia Formation – A fine to medium textured sand, maximum thickness of 100 to 120 feet. The formation contains a prominent amount of glauconite ("greensand"), which is some thin beds is the predominant material. The formation contains no gravel but in the lower beds just above the Monmouth formation, nodules of calcium phosphate are found. Some beds of the Aquia contain abundant shell fragments and may therefore be slightly cemented by calcium carbonate; in these beds clay minerals are also abundant.

5. Arundel Clay Formation – Chiefly clay with very minor amounts of sand. The formation characteristically contains organic matter of lignitic character. Locally contains iron concentrations as nodules and irregular discontinuous lenses.

6. Calvert and Nanjemoy Formations – Predominately fine sand and clay sand, including thin beds of diatomaceous earth and medium textured sand, in places cemented to sand stone.

Geologic conditions of the County directly influence land use planning and specifically the siting of new landfills and resources recovery sites. The information obtained from the County's geology aids in determining the ability of a particular soil type of support a proposed building site, and the potential for seepage of ground water pollutants.

E. Aquifers

The major ground water resources of Prince George's County are the aquifers of the Patuxent, Patapsco, Magothy, and the Aquia Formations and the deposits of Pliocene and Pleistocene age. These formations are shown in Map 4-2.

1. The Patuxent Formation constitutes an important source of ground water for the northern, northwestern and the western part of the County, serving such prominent localities as the City of Bowie, Beltsville Agricultural Research Center, and the Patuxent Wildlife Research Center. Yields as high as 1,200 gallons per minute (gpm) are not uncommon with this aquifer. Water quality of the Patuxent aquifer is generally soft, low in total dissolved solids, low in chlorides, and of moderate pH. High iron content is, however, often a problem that can result in extensive treatment for removal.

2. The Patapsco Formation is also an extremely important aquifer, which underlies the entire County. However, since it dips down dramatically in the southern portion of the County and is economically unfeasible for residential and small commercial users, it primarily services the north and north central portions of the County. It serves the City of Bowie and the Chalk Point Electrical Power Plant as one of their primary water supply sources and can provide yields as high as 1,200 gpm. The chemical quality of the water from this aquifer is generally good, but local treatment for iron removal and deacidification is normally required.

3. The Magothy Formation is one of the predominantly used aquifers within Prince George's County for individual water supplies. It has the potential to yield moderate to large quantities of ground water, especially in the southeastern part of the County. Yields as high as 1,200 gpm can be developed from this formation. Besides serving individual water supplies, this formation also serves the City of Bowie, Marlboro Meadows Subdivision, the Western Branch Sewage Treatment Plant and the Chalk Point Electrical Power Plant, each of which appropriates over 100,000 gallons per day. However, because of the extensive use of this aquifer in the southern portion of this County and in nearby Charles County, the resulting cone of depression has caused a significant lowering of the water level within this area. In order to guard against further overproduction, the Maryland Department of the Environment has limited future withdrawals to residential and small commercial users in the south and southeastern

portion of the County. For larger appropriations in these areas, applicants will be required to seek withdrawal from other aquifers. The natural quality of the Magothy Formation's water is generally acceptable for most uses; however, localized acidity and undesirable concentrations of iron periodically present a problem.

4. The Aquia Formation yields small to moderate supplies of water to shallow dug wells in the east-central part of the County and potentially as much as 100 gpm for drilled wells in the southeastern part of the County. However, because the aquifer is not as productive as the Magothy Formation, it is often overlooked or bypassed as a water supply even though its water quality is often superior. In many locations of the County, where the Aquia is a confined source, it generally can be used with little or no treatment. However, as an unconfined source, especially in the recharge area, treatment for iron may still be required.

5. The Pliocene and Pleistocene Age deposits, forming irregularly bedded sands, gravel silts and clay, yield small to moderate amounts of water for shallow domestic and farm wells. Because the yield and bacteriological quality of the water are often very unpredictable, the Health Department does not condone the use of this water source as a potable water supply.

F. Wetland Banking

In 1995, Prince George's County received joint Federal/State approval for its wetland banking project. The project allows the establishment of wetland banks in 11 watersheds of the County. Wetland banks are wetlands designed and constructed by the County and used to compensate for wetlands lost as a result of projects constructed by County agencies; such as the Department of Public Works and Transportation, the Maryland-National Capital Park and Planning Commission and the Department of Environmental Resources. Wetland banks are beneficial because they establish large managed wetland sites rather than numerous random sites, and because the wetlands are in place and functioning prior to the occurrence of wetland impacts. The wetlands banks are to be used only when wetland impacts are unavoidable. The primary goal of the County continues to be avoidance and minimization of disturbance to existing wetlands.

G. Surface Waters of Prince George's County

All surface waters within the County are divided into either the Potomac or Patuxent watersheds. Within these watersheds, the surface waters are further classified by the State Department of the Environment, under Code of Maryland Regulations 26.08.02, according to expected water quality standards and permissible water usage. The four water use classes established by these Regulations are as follows:

1. Class 1 – Water contact recreation, aquatic life, and water supply;

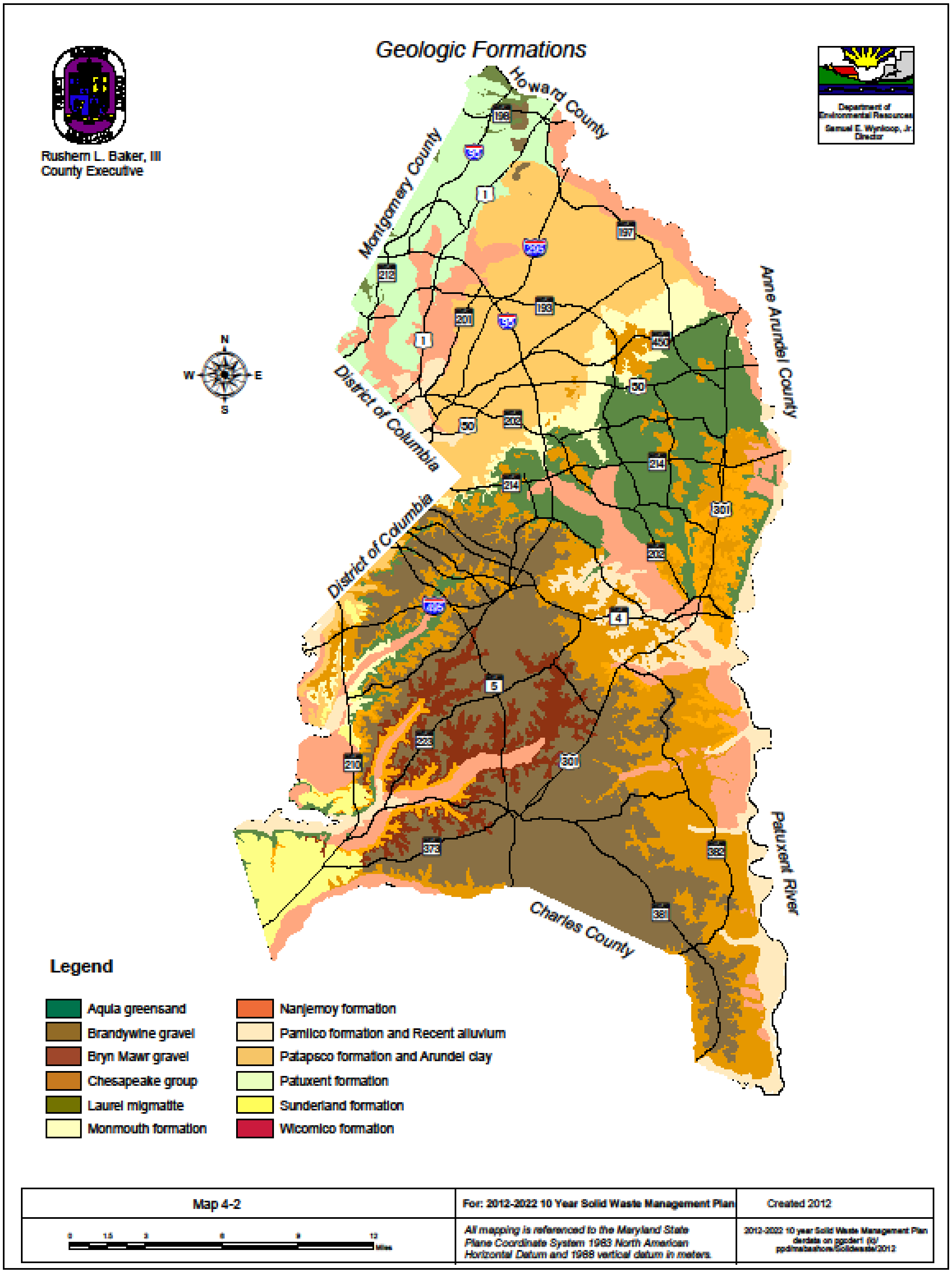
2. Class 2 – Shellfish harvesting waters;

3. Class 3 – Natural trout waters; and

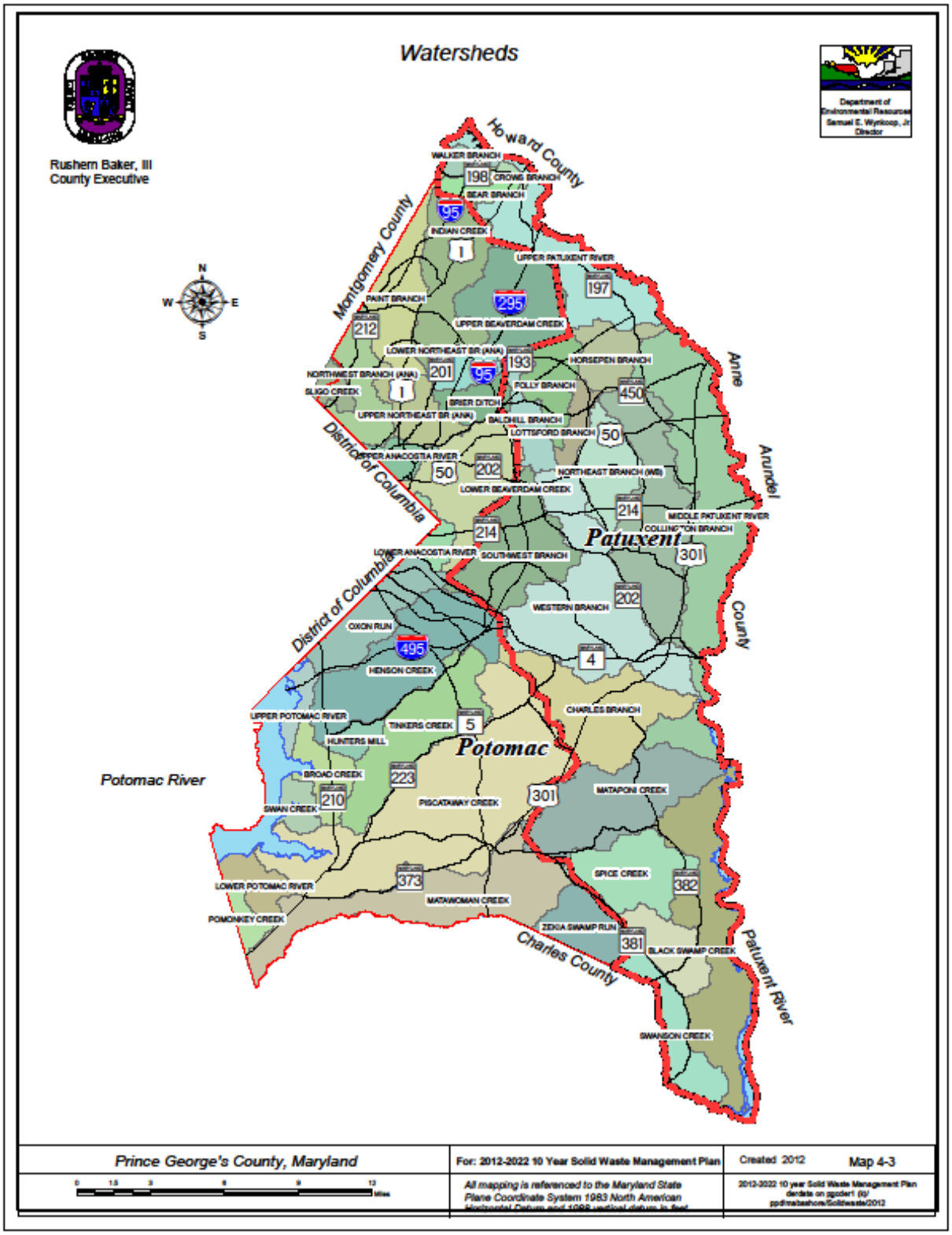
4. Class 4 – Recreational trout waters.

Nearly all surface waters of the County are classified as Class 1 waters. The exceptions are a small portion of the Paint Branch above the Capital Beltway, which is classified as Class 3, and the Northeast Branch above the East-West Highway, which is classified as Class 4. Although the State has declared the Patuxent River below Ferry's Point as Class 2 waters, that portion of the river within Prince George's County does not currently, and probably never will, support large scale commercial shellfish harvesting. Prince George's County's watershed delineation and generalized floodplains are depicted in Maps 4-3 and 4-4.

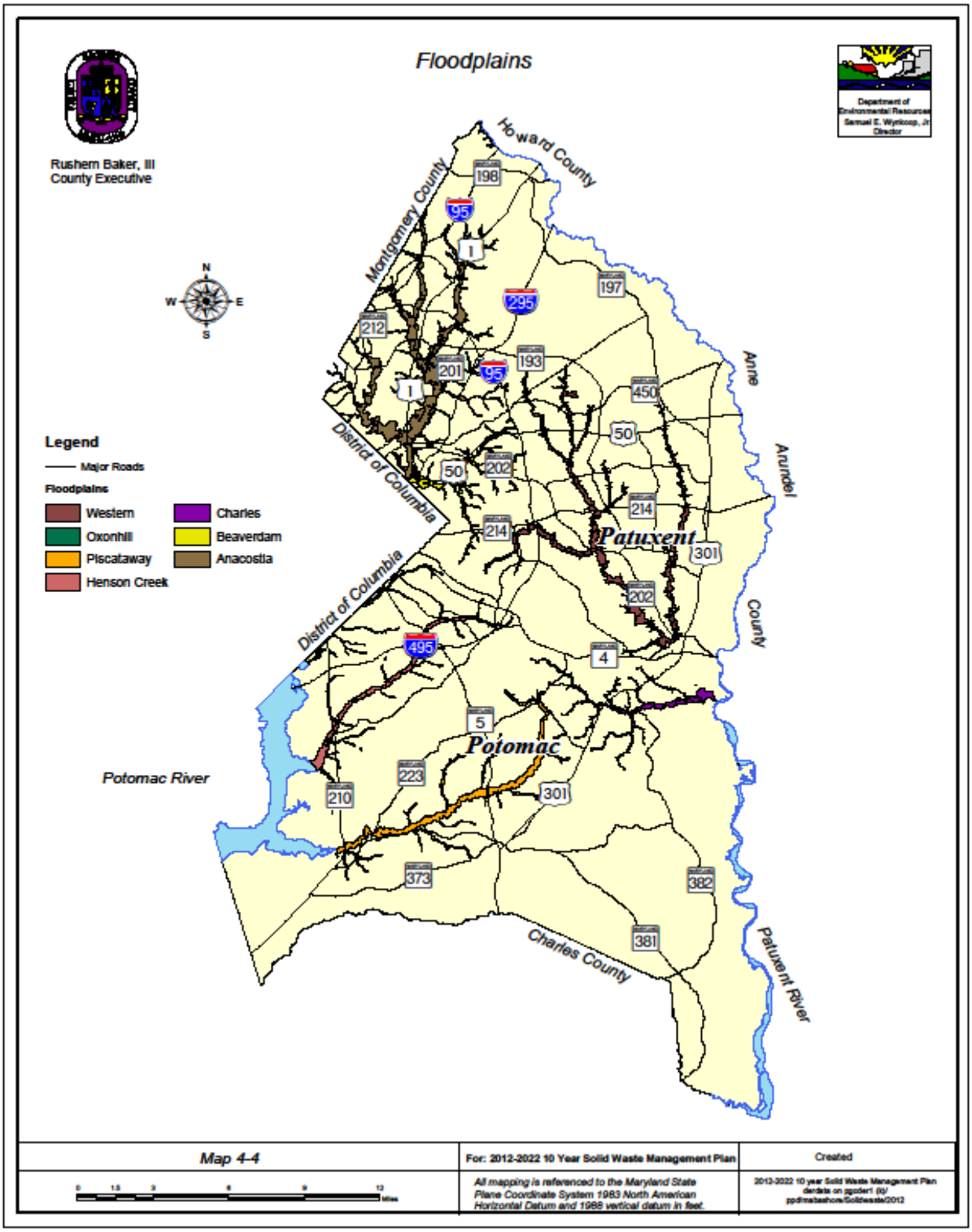
Map 4-2


Geologic Formations
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Samuel E. Wynkoop, Jr.
Director
Howard County
Montgomery County
Anne Arundel County
District of Columbia
District of Columbia
Patuxent River
Charles County
N
S
E
W
Legend
Aquia greensand
Brandywine gravel
Bryn Mawr gravel
Chesapeake group
Laurel migmatite
Monmouth formation
Nanjemoy formation
Pamlico formation and Recent alluvium
Patapsco formation and Arundel clay
Patuxent formation
Sunderland formation
Wicomico formation
Map 4-2
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in meters.
2012-2022 10 year Solid Waste Management Plan

Map 4-3


Watersheds
Rushern Baker, III
County Executive
Department of Environmental Resources
Samuel E. Wynkoop, Jr
Director
Howard County
Montgomery County
District of Columbia
Anne Arundel County
Patuxent
Potomac
Potomac River
Charles County
Patuxent River
WALKER BRANCH
CROWS BRANCH
BEAR BRANCH
INDIAN CREEK
UPPER PATUXENT RIVER
PAINT BRANCH
UPPER BEAVERDAM CREEK
LOWER NORTHEAST BR (ANA)
HORSEPEN BRANCH
NORTHWEST BRANCH (ANA)
SLIGO CREEK
FOLLY BRANCH
BRIER DITCH
UPPER NORTHEAST BR (ANA)
BALDHILL BRANCH
LOTTSFORD BRANCH
UPPER ANACOSTIA RIVER
NORTHEAST BRANCH (WB)
LOWER BEAVERDAM CREEK
MIDDLE PATUXENT RIVER
COLLINGTON BRANCH
LOWER ANACOSTIA RIVER
SOUTHWEST BRANCH
WESTERN BRANCH
OXON RUN
HENSON CREEK
CHARLES BRANCH
UPPER POTOMAC RIVER
TINKERS CREEK
HUNTERS MILL
BROAD CREEK
SWAN CREEK
PISCATAWAY CREEK
MATAPONI CREEK
SPICE CREEK
LOWER POTOMAC RIVER
MATTAWOMAN CREEK
POMONKEY CREEK
ZEKIA SWAMP RUN
BLACK SWAMP CREEK
SWANSON CREEK
Prince George's County, Maryland
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
Map 4-3
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American

Map 4-4


Floodplains
Rushern Baker, III
County Executive
Department of Environmental Resources
Samuel E. Wynkoop, Jr.
Director
Howard County
Montgomery County
District of Columbia
District of Columbia
Anne Arundel County
Patuxent
Patuxent River
Potomac
Potomac River
Charles County
Legend
Major Roads
Floodplains
Western
Oxonhill
Piscataway
Henson Creek
Charles
Beaverdam
Anacostia
N
S
E
W
198
95
1
197
295
212
201
193
450
50
202
214
301
495
4
5
223
210
373
382
381
Map 4-4
For: 2012-2022 10 Year Solid Waste Management Plan
Created
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

III. Water Quality

A. Introduction

Major concerns for water pollution from solid waste management activities include ground and surface pollution from leachate, runoff, and wastewaters discharges. These concerns are leading to more stringent leachate attenuation and water quality monitoring requirements. The ability to conform to these requirements will influence the establishments of any new acceptance facility.

Existing water quality monitoring programs for the Brown Station Road and Sandy Hill landfills are described below. Water quality monitoring of these landfills will continue to provide data on existing landfill impact on ground and surface water quality.

B. Brown Station Road Landfill

Groundwater and surface water monitoring began in 1985 for Area A and began in 1989 for Area B. As presented in the April 2012 Groundwater and Surface Water Monitoring Plan, the groundwater and surface water monitoring network is structured as follows. The Area A detection monitoring network includes four background monitoring wells and seven compliance monitoring wells. The Area B detection monitoring network includes four background monitoring wells and five compliance monitoring wells. In addition to the aforementioned permitted monitoring wells, 18 additional wells are utilized to help describe groundwater flow. Overall, there are 38 groundwater wells at the site.

The surface waters of Turkey Branch Creek and Western Branch Creek are also sampled as a component of the facility's monitoring program. Three locations are along Western Branch Creek and one location is along Turkey Branch Creek.

The monitoring wells and streams are sampled on a semi-annual basis (January-March and July-September) and the samples are analyzed as specified in the April 2012 Monitoring Plan, which meets the requirements of RCRA, COMAR, and the facility's refuse disposal permit. Reports are submitted to MDE on a semi-annual basis.

C. Sandy Hill Landfill

The water sampling program at the Sandy Hill landfill includes 18 ground water monitoring wells along the perimeter of the fill site and four surface water ponds on-site. Waste Management, Inc. (WMI), operated Sandy Hill Landfill from early 1978 until March of 2007. During this period, WMI was responsible for obtaining daily and quarterly surface water samples and semiannual ground water samples and reporting results to the Maryland Department of the Environment (MDE). During the second quarter of 2007, the County took over the sampling and reporting. The ground water monitoring program at Sandy Hill is in accordance with the Subtitle D program as adopted by the State of Maryland.

In 1992, routine ground water monitoring at Sandy Hill identified volatile organic compounds (VOCs) in ground water samples from certain wells. An evaluation conducted in 1992 by WMI indicated the VOCs present in ground water were most likely caused by landfill gas migration. VOCs have been present in the highest concentrations in ground water samples from wells located in the eastern portion of the landfill. To better remove gas potentially impacting ground water, WMI began operation of an eastern expansion of the facility's planned landfill gas extraction and collection system. On December 30, 1992, MDE ratified a Consent Order (CO), which included requirements for investigating the source of VOCs in ground water samples and evaluating whether remediation is necessary.

The Sandy Hill Ground Water Investigation Report, developed by RUST Environment & Infrastructure, was developed in response to the CO. The report summarizes findings from implementing the MDE-approved Sandy Hill Creative Disposal Project Ground Water Investigation Plan dated April 1993, (revised June 1993). The objectives of this investigation were to determine the source of VOCs in ground water samples and to determine whether remediation is necessary.

The report concluded that landfill gas migration was the most likely dominant source of VOCs in ground water. It recommended acceleration of the scheduled installation of the remaining 42 gas extraction wells of the facility's gas extraction system. This brought the total to 86 active wells, along with 47 out-of-refuse wells.

In 2002, at the request of MDE, the Groundwater Characterization Sampling Event was initiated by WMI to delineate VOCs in groundwater surrounding the facility. Results of that study indicated that VOCs were present in groundwater on-site but did not migrate beyond the property boundary with one exception north of the northwest boundary. Tetrachloroethene was detected at a concentration of approximately 3ug/L, less than its respective Groundwater Protection Standard of 5ug/L. The report concluded no impact to human health and the environment due to VOCs in groundwater is occurring.

In 2006, the County commissioned an Independent Groundwater Sampling Event and results indicated that VOCs were present in groundwater at the facility and that it was possible that groundwater containing low concentrations of VOCs had migrated off-site along the south and west facility property boundaries.

Interim results of the on-going Nature and Extent Study surrounding the facility were presented to MDE in May 2008. Specific recommendations of the report included:

1. Continued regular scheduled semi-annual sampling and analysis in accordance with the facility Permit requirement.

2. Continued performance of the Nature and Extend Study, including off-site delineation as necessary followed subsequently by an Assessment of Corrective Measures and Groundwater Corrective Action Plan in accordance with MDE requirements.

On June 24, 2011, a second CO was ratified between WMI, MDE, and the County. The action items outlined in this CO focus on final closure requirements at the facility and the completion of a groundwater investigation. The specific CO action items related to the potential degradation of groundwater include:

1. Identify the nature and extent of any off-site groundwater quality impacts;

2. Determine whether any off-site impacts present any potential risk to human health and/or the environment; and

3. Determine the appropriate remedial measures necessary to address risks to human health and/or the environment (if necessary).

The County and WMI have been working collaboratively since June 2011 to address each of the CO obligations as required by MDE. A Conceptual Site Model and Nature and Extent Study were submitted to MDE in December 2011 by WMI. These reports concluded that the facility has had minimal off-site impacts on groundwater and that adverse impacts to human health and the environment are unlikely. MDE is currently reviewing these documents to determine if additional investigations and/or remedial action may be required.

Upon completion of the landfill closure process and any additional groundwater corrective action required by MDE, the facility will enter into a post closure care monitoring period. Monitoring of the groundwater, surface water, and soil gas will be performed on a regular basis to monitor the effectiveness of the closure system. The details of the post closure care monitoring, including duration, will be provided in a Post Closure Care Plan reviewed and approved by MDE.

IV. Areas of Critical Concern

A. Introduction

Areas of critical concern are designated as such for the benefit and protection of the public and natural habitats. These areas may pose constraints on the development of a solid waste management facility, as well as any other type of general development, due to their physical characteristics, susceptibility to pollution, and/or social significance. Hence, these areas must be fully considered during the selection of a site for a solid waste management facility.

B. Chesapeake Bay Critical Areas

The Annotated Code of Maryland, Natural Resources Article, Title 8, Subtitle 18 establishes the Chesapeake Bay Critical Area, which includes the Bay and all of its tributaries to the head of tide and all land and water within 1,000 feet of the head of tide. For Prince George's County, this area is delineated on Map 4-5. In 1986, the Chesapeake Bay Critical Area Commission promulgated Criteria to guide local governments in the development of programs to protect the Critical Areas.

The following is the Critical Area Criterion applicable to the management of solid or hazardous waste:

Certain new development activities or facilities, or the expansion of certain existing facilities, because of their intrinsic nature, or because of their potential for adversely affecting habitat and water quality, may not be permitted in the Critical Area unless no environmentally acceptable alternative exists outside the Critical Area, and these development activities or facilities are needed in order to correct an existing water quality or wastewater management problem. These include:

1. Solid or hazardous waste collection or disposal facilities; or

2. Sanitary landfills

Existing, permitted facilities of the type noted in G (1) and (2) above shall be subject to the standards and requirements of the Maryland Department of the Environment under COMAR Title 10. (Source: COMAR Title 14, Subtitle 15.02 Development in the Critical Area)."

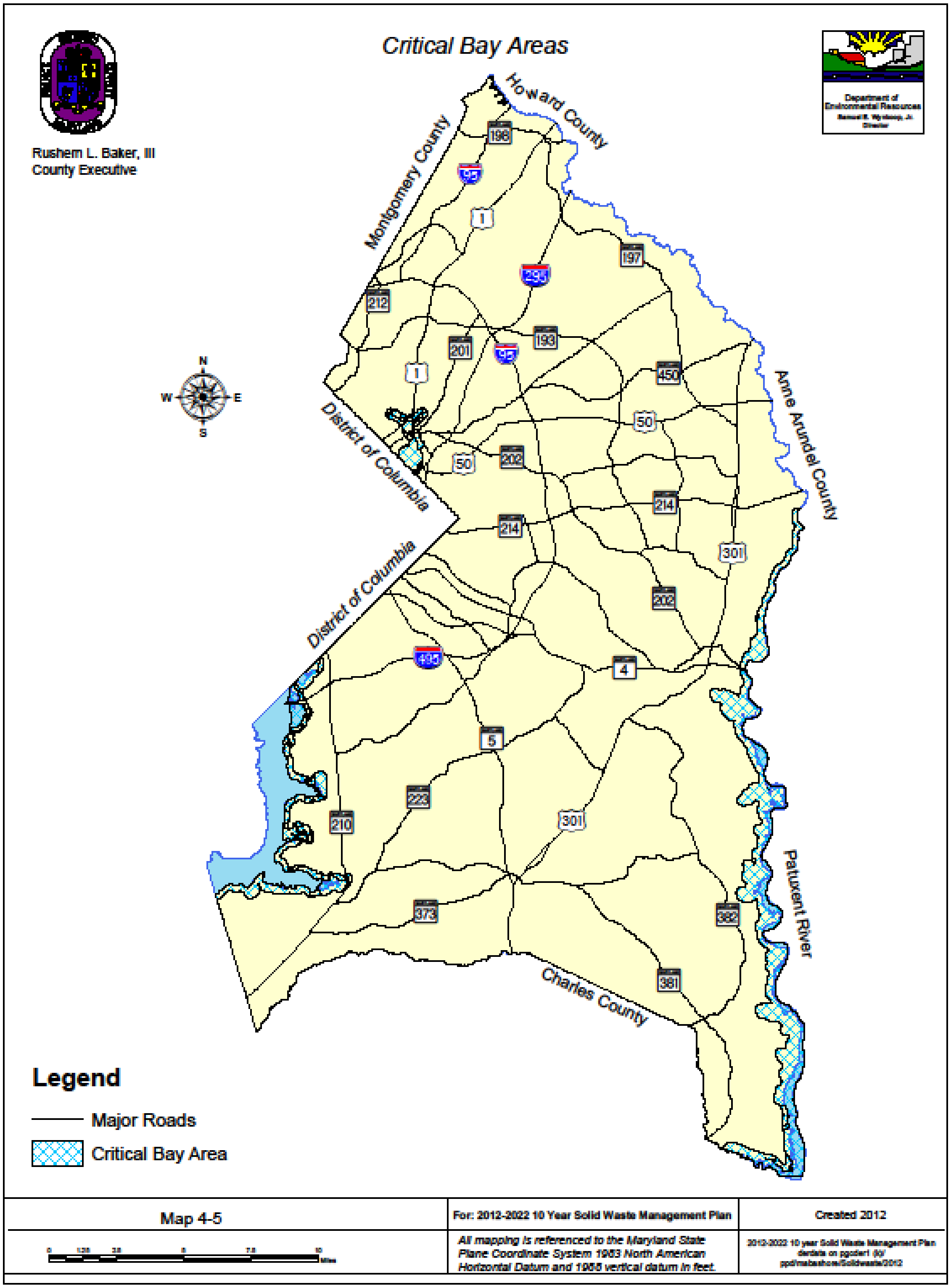
The County has no plans to locate solid or hazardous waste collection or disposal facilities or sanitary landfills in the Critical Area.

C. Areas of Critical State Concern

Pursuant to the Annotated Code of Maryland, State Finance and Procurement Article, Section 5-611, the State has also designated a number of specific geographic areas in the County as being or critical State concern. The following areas have been so designated.

1. Suitland Bog: Suitland Bog is a small remnant of Magnolia Virginia Bog, which at one time was considerably more extensive in the region. The Bog provides a habitat for a number of unique species of vegetation. The Bog has a high value for scientific and educational uses because of its proximity to a large urban area and the lack of similar areas nearby.

Map 4-5


Critical Bay Areas
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Howard County
Montgomery County
District of Columbia
District of Columbia
Anne Arundel County
Patuxent River
Charles County
N
S
E
W
Legend
Major Roads
Critical Bay Area
Map 4-5
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

2. Zekiah Swamp Drainage Basin: This includes the upper portions of the drainage basin for Zekiah Swamp. Zekiah Swamp itself, which is entirely within Charles County, is the largest natural hardwood swamp in Maryland. It is a valuable habitat for a large variety of plants and animals, including rare species such as the southern bald eagle and the redheaded woodpecker. It also serves as nesting and over-wintering habitat for many species of birds. Although the portion of the drainage basin in Prince George's County does not include any of the swamp itself, some protection is needed. Impacts have already occurred through the discharge or poorly treated sewage in the basin.

3. Mattawoman Creek: This area includes the 100-year floodplain of Mattawoman Creek and its major tributaries. Mattawoman Creek is part of the boundary between Prince George's and Charles Counties. For this reason, development, which impacts the Creek, is of inter-jurisdictional concern. The Mattawoman Creek floodplain, with its extensive wooded swamps, has been recognized by the scientific community as an important natural area.

4. Piscataway Creek: This area consists of the 100-year floodplain of Piscataway Creek and its major tributaries. The stream itself has been noted as a significant herring run. In addition, the fresh water marshes and wooded swamps contained within the floodplain provide a habitat for numerous plant and animal species. Future development in the basin could increase erosion, runoff, flooding and sedimentation in Piscataway Creek.

5. Broad/Henson Creek Wetlands: The wetlands at the mouth of Broad Creek have been noted by the Smithsonian Institution as a prime wildlife habitat worthy of protection. These wetlands provide a significant habitat for muskrat, opossum, fox, rabbit, and deer.

6. Jug Bay: This site embraces several distinctive ecological communities and includes tidal wetlands, non-tidal wetlands, and an impact or buffer area equivalent to the 100-year floodplain. Most notable of the communities are the freshwater marshes, some of the largest in the State. This variety of ecological communities supports abundant and varied animal and plant life. Since the area lies within the Atlantic flyway, Jug Bay is a haven for bird life and is important for waterfowl reproduction and feeding.

   Additionally, 1990 marked a milestone in recognition of the national significance of the Patuxent River, with the designation of Jug Bay as a component of the National Estuarine Research System. This program of the National Oceanic and Atmospheric Administration (NOAA) seeks to

identify and designate model estuarine sites around the nation for long term protection and research.

The Jug Bay site is one of the three in the Chesapeake Bay watershed that is manage cooperatively by the Maryland-National Capital Park and Planning Commission (M-NCPPC) and Anne Arundel County Parks and Recreation, and administered by the Maryland Department of Natural Resources.

7. National Heritage Areas have been designated by COMAR 08.03.08.

8. Wetlands of Special State Concern were delineated in the 1989 Non-tidal Wetlands Guidance May by the State of Maryland, Department of Natural Resources, Water Resources Administration.

D. Areas of Critical County Concern

The following Areas of Critical County Concern were designated by and can be found in the Master Plans.

1. Patuxent River: This area includes the main stem of the Patuxent River and its adjacent 100-year floodplain, wetlands, and it is a significant wildlife habitat.

2. Belt Woods: This area is a portion of the Seton Belt "Home Farm" and was designated a Registered Natural Landmark by the National Park Services in 1974.

3. Potomac River Shoreline: The Potomac River shoreline is a valuable asset to both Prince George's County and the State of Maryland for its natural areas, scenic vistas and historical background. Tidal wetlands located at Fox Ferry Point, Broad Creek, and Piscataway Creek are prime wildlife habitats for mink, opossum, otter, and muskrat, nesting areas for wood duck and osprey, and spawning areas for anadromous fish.

4. Patuxent River Reservoirs: The Washington Suburban Sanitary Commission (WSSC) operates tow water supply reservoirs on the Patuxent River: Tridelphia Lake (Brighton Dam) and Rocky Gorge Reservoir (T. Howard Duckett Dam). Each covers approximately 800 acres of water surface. The WSSC also owns approximately 6,000 acres of the surrounding watershed as a protective buffer. Storage behind the two dams at normal levels amounts to approximately 12.5 billion gallons, allowing a daily maximum withdrawal of 67 million gallons. The reservoirs are a vital source of raw water for the WSSC service area, which includes Montgomery and Prince George's Counties.

5. Beltsville Agriculture Research Center/Patuxent Wildlife Research Center: The Beltsville Agriculture Research Center (BARC) is a 9,800 acre Federal Reserve located in northern Prince George's County. The Patuxent Wildlife Research Center (also Federal) comprises and additional 2,800 acres.

6. Beaverdam Creek: This area consists of the 100-year floodplain of Beaverdam Creek, which flows through the Agricultural Research Center and its major tributaries.

E. General Area Recommendation

In addition to the specific areas designated, Prince George's County has determined that there are a number of general classes or categories of areas which, because of their inherent characteristics, ownership, or control, are of importance to the health, safety, and welfare of the citizens of the County.

In addition, the types of areas identified in Prince George's County as being a general importance are as follows:

1. 100-year floodplain of all major streams
2. Wetlands;
3. Noise hazard areas;
4. Significant aquifer recharge areas;
5. Prime agricultural lands;
6. Sites of historical significance
7. Major Federal and District of Columbia installations;
8. Major State installations;
9. Federal and State parkway; and
10. Sites of scientific or archeological merit, or scenic vistas.

V. Source Reduction and Recycling

Over the past twenty years, the management of solid waste has been a subject of national concern. Rates of solid waste generation, ecological and potential health damages from improper disposal, increasing shortages of basic materials and fuels, and other concerns have continued to focus public attention on better ways of conserving raw resources by recovering, reprocessing, recycling, and reusing materials from the waste stream.

A. Source Reduction Efforts and Recyclables Procurement

Prince George's County's recycling programs incorporate and encourage source reduction and reuse. Source reduction has proven economic benefits for consumers and has positive environmental impacts. Source reduction, also known as waste reduction, waste prevention or pollution prevention, is eliminating waste before it is created. It involves the design, manufacture, purchase, or use of materials and products to reduce the

amount of toxicity that is thrown away. Reducing waste is a rational step in preventing waste before it enters into the solid waste stream. It is quite evident that if there is a reduction in the waste generated, then solid waste management would become less of a burden. There are many benefits of source reduction and these include: conservation of our natural resources, pollution reduction, conservation of landfill capacity and other solid waste management systems, and a significant reduction in waste handling and disposal costs. Source reduction includes practices such using mesh or cloth reusable shopping bags, double-sided copying, purchasing products with minimal packaging or buying in bulk, using latex paint instead of oil based paint, walking instead of driving when possible, donating unwanted clothing, equipment and furniture to non-profit or charitable organizations or reuse centers, leaving grass clippings on the lawn, purchasing non-toxic items whenever possible, repairing and reusing items. Waste reduction initiatives are money saving, environmentally friendly, and have both short term and long term effects that can benefit the entire County.

The Waste Management Division's Recycling Section is committed to reducing and eliminating waste before it is ever started. Source Reduction can result in substantial savings through reduced purchasing and disposal costs. Waste prevention also has environmental benefits including reduced energy consumption and pollution, conservation of natural resources, and less dependency on landfilling. The Recycling Section includes source reduction educational information on displays and in all of its public outreach materials including the Division's webpage and Facebook page, advertisements, and brochures. Additionally, staff offers source reduction presentations. The business sector is also provided assessment, technical assistance, and recommendations on how to reduce waste. The Recycling Section coordinates and partners with the County's Procurement Office and Reuse centers to notify County contractors, residents and businesses where they can donate unwanted building materials for reuse. Partnerships are also formed with non-profit organizations for the donation of excess latex paint and old electronics and televisions. The Recycling Section is committed to working County-wide in incorporating source reduction education and implementing source reduction. The Recycling Section reports annually to the Maryland Department of the Environment (MDE) on the Annual Recycling Report its Source Reduction Credit Checklist.

Reducing waste is a rational step in preventing waste before it enters into the solid waste stream. It is quite evident that if there is a reduction in the waste generated, then solid waste management would become less of a burden. Other benefits of source reduction include: conservation of landfill capacity and other solid waste management systems, and a significant reduction in waste handling and disposal costs.

With informed purchasing and office practices throughout the County, a significant impact can be made on reducing waste destined for the landfill. In 2007, Prince George's County introduced a Going Green initiative entitled "Prince George's County Goes Green." Through this program the County established criteria and goals for Green Buildings throughout the County and encourages developers to embrace these initiatives in all new development being planned throughout the County. Through this

initiative, the County is striving to have all new County buildings and public schools designed and constructed in accordance with LEED Silver rating (Leadership in Energy and Environmental Design), and is encouraging the use of environmentally friendly materials, many of which are made from recycled materials. Procurement of products made from recycled materials closes the recycling loop. Unless there is a demand for the recycled product, the whole effort of collection and processing is wasted.

Another Source Reduction effect was initiated in 2008. The County developed energy strategies and took the first significant step with the development of the County Government Energy Policy. The policy focuses on energy reduction in all County-maintained facilities and adopts several energy reduction goals with identifying both mandatory and voluntary energy reduction measures for County departments and agencies to achieve energy savings of 20% by 2015 as compared to fiscal year 2007 baseline, reduction of generation of greenhouse gas emissions, and an increase of the County Government's use of renewable energy by 2% annually and reach 10% goal by 2013. And in 2009, the County reduced paper usage by implementing electronic timesheets. During 2012, the Department of Environmental Resources established a Sustainability Work Group committee to identify and implement opportunities for a sustainable work place. Such initiatives include energy saving policies, methods for paper reduction, encouragement of reusable bottles, reduction of trash and increase of recycling, and carpooling incentives.

B. Prince George's County Recycling Plan

The Maryland Recycling Act, (Annotated Code of Maryland, Environment Article, Section 9-505) requires the preparation of specific plans to reduce the solid waste stream through recycling. In 2012, the Maryland General Assembly passed House Bill (HB) 929: Environment – Recycling Rates and Waste Diversion – Statewide Goals, Chapter 692, Acts of 2012 (the "law"). The effective date of October 31, 2012 the law requires the County to revise its recycling plan by July 1, 2014. The plan must include a provision that provides for a reduction through recycling of at least 35% for a county with a population greater than 150,000. With a population greater than 150,000, Prince George's County must demonstrate a 35 percent reduction in the waste stream by 2014. The County surpassed this rate in Fiscal Year 2001 with a 35.12 percent recycling rate. Subsequent reporting periods demonstrate that the County has continued to surpass the State's mandated rate (Table 4-1). The County's Recycling Plan 2011, as required by the State, adopted by County Council Resolution CR-58-1990 Report, is hereby incorporated by reference into the Ten-Year Solid Waste Management Plan.

TABLE 4-1	
PRINCE GEORGE'S COUNTY RECYCLING RATES	
Calendar Year	**Waste Diversion**
2001	35.12%
2002	39.00%
2003	38.20%
2004	39.30%
2005	43.95%
2006	46.03%
2007	43.21%
2008	43.67%
2009	42.57%
2010	45.35%
2011	49.11%

In 1989, the Prince George's County's Recycling Section, formally the Office of Recycling and also formally known as the Recycling Team, was established and charged with the responsibility for preparing, maintaining and carrying out the County's Recycling Plan.

The County's Solid Waste Recycling Act (County Code, Section 21-142 et seq.) was adopted concurrently with the formation of the Office of Recycling. Furthermore, the legislation established the concept that recycling would remain voluntary, with the exception of mandatory recycling for multifamily properties, as long as the County was able to achieve a series of progressively higher waste reduction goals. If the goals were not achieved, a mandatory program could be implemented. Ultimately, the County's goal was to achieve 35 percent waste reduction from the landfills through recycling by 1999. This goal has been surpassed, but it remains the County's intention to minimally maintain this level of recycling, while striving to continue to increase recycling initiatives during this planning period. Through recycling and source reduction efforts, as detailed in the yearly Maryland Recycling Tonnage Act Report, the County has surpassed the State's voluntary recycling goal of 35 percent enacted in 2000, through a joint resolution creating a voluntary statewide waste diversion goal of 40 percent by 2005. This goal consisted of a 35 percent recycling goal and up to 5 percent credit for source reduction activities. The Recycling Section has worked diligently and through a planned and organized outreach program has been able to obtain and maintain the full 5 percent credit. This was accomplished through developing educational programs directed towards the residential and business communities. The County continues to maintain source reduction information on its Website and thousands of brochures, flyers, promotional items and source reduction tips are disseminated each year. Electronic dissemination of information is also being vastly utilized in an effort to reduce paper sources of information. Twitter, Facebook, and website links are just some of the technologies currently being used. The development and launching of a Recycling App will be explored during this planning period as an additional method to engage and inform the public.

In 2012, the State passed HB 929 which includes a voluntary statewide recycling goal of 55% by the year 2020, and a voluntary statewide waste division goal of 60% by the year 2020. During the 2012 Legislative Session, the Prince George's County Council passed Council Bill (CB) 87-2012. This Bill includes the most significant updates to the County's Recycling goals since 1990. The Act concerning the County Recycling Program amends the recycling program provisions in Prince George's County to establish updated recycling goals, setting forth the time for compliance; amends the residential recycling program for multifamily facilities, establishes a commercial and industrial recycling program and a pilot food composting program. The goals of the Countywide voluntary recycling program established in Subtitle 21, Division 4 of the County Code are to achieve a recycling rate in the County waste stream of at least 45% by July 1, 2015; at least 55% by July 1, 2018; and at least 60% by July 1, 2020. If the goals of the Countywide voluntary recycling program as set forth in Division 4, as stated above, have not been met, the Director shall develop a Countywide mandatory recycling program, including mandatory source separation, or propose additional policy changes for consideration by the County Council and the Solid Waste, Resource Management and Recycling Advisory Commission. The addition of food scraps in its Recycling Program compliment, and emphasis on multifamily and commercial sector recycling education and enforcement, are planned by the Recycling Section to meet the goals set forth in CB-87-2012 and HB 929. The Recycling Section will also have dedicated specifically for multifamily and business recycling to ensure compliance with recycling requirements.

In summary, the Recycling Plan includes the following information:

1. Description of the components of the recycling program including residential curbside collection and processing; multifamily and commercial recycling initiatives; County Office Recycling Program, Source Reduction, Convenience Centers, Household Hazardous Waste Collection, Electronics Recycling; yard waste material collection and composting; white goods (appliance) and scrap metal recovery; scrap tire recovery; Special Event Recycling, education/public information, and Keep Prince George's County Beautiful.

2. Identification of the materials selected for recycling in each of the programs listed above. For example, in the curbside program, all paper products, wide mouth and narrow neck food and beverage containers made from plastic, glass, aluminum, tin, bimetal, empty aerosol cans, aseptic or gable-top containers such as milk and juice cartons, frozen food packaging including the plastic trays, aluminum pie plate and small rigid plastic items such as small broken toys and small nursery flower pots have been targeted for collection and processing.

3. Description of the collection, processing and marketing for each component identified above;

4. Public information and education efforts for each recycling program;

5. Incentive opportunities to increase recycling participation; and

6. Details on financial planning for the entire recycling program can be found in Chapter 5 of this plan.

The Recycling Section periodically updates the Recycling Plan with reports to the County Executive and County Council, as well as the State, on activities of the programs and the rate of source reduction occurring through the recycling efforts. Calendar Year 2011 Recycling Report is presented in Appendix E.

For the most part, recycling activities in Prince George's County have been established based upon the requirements of the 1988 Maryland Recycling Act, and updates as pertaining to HB 929 and CB-87-2012. The most commonly recycled materials have been collected in the County for over two decades. Other recycling options have been reviewed and assessed to determine the feasibility of implementing new programs to maximize the County's recycling efforts. Some of the options explored or being explored include the following:

Once Per Week Residential Trash Collection and Pay as Pay as You Throw (PAYT)

Studies indicate that once a week trash collection has the potential to reduce truck traffic and emissions and to increase the recycling rate by 13%. During this planning period, the Waste Management Division (WMD) plans to pilot an area of the County for once per week residential trash collection. Nationally, the solid waste management industry has generally moved to a once-a-week collection, which is now considered to be a best practice. The WMD expects results from the pilot area will be positive and, therefore, advantageous to expand once-a-week trash collection County-wide. Nationally, studies of jurisdictions with Pay As You Throw (PAYT) waste programs have shown a positive impact on the reduction of waste. PAYT will be considered as a compliment to Once Per Week Trash Collection with the proven expectation that behaviors will change resulting in a reduction of trash and an increased recycling rate.

Textile Recycling

The County held several special events in the past several years where residents could drop off old clothes, shoes and handbags for reuse and /or recycling. The Recycling Section maintains a Vendors List (Appendix C) that includes places where residents and the commercial sector can drop-off textiles. Additionally, there are textile drop-off boxes located in many grocery and retail shopping areas throughout the County which are provided by private vendor(s). The County explored the feasibility of accepting textiles at the County's Material Recycling Facility. Findings revealed textiles would jam and ruin the processing equipment and it would be labor intensive and non-economically feasible to attempt to pre-sort out textiles from recyclables. Additionally, with numerous textile drop-off collection boxes throughout the County, there has not been a demand on County government to provide textile recycling.

Single-Stream Collection

In 2007, Prince George's County converted the County owned Materials Recycling Facility (MRF) to a single-stream processing facility and the curbside recycling program was significantly changed. The Recycling Section embarked upon a program of obtaining new recycling collection contracts, and began to phase in 64-gallon wheeled recycling carts for the collection of recyclables. By the end of 2010, over 165,000 new carts were in use. The new MRF sorting equipment, easier method (single-stream collection) of preparing the recyclables and the ability to collect the recyclables with packer trucks all coupled with the new containers, enabled the County to greatly expand the types of materials now accepted in the curbside program. In addition to what has been collected in the past, County residents may now recycle corrugated containers, paper board, wrapping paper, junk mail, hard and soft bound books, wide mouth plastic containers, to include yogurt and butter containers, rigid plastic such as flower pots, pill bottles, broken plastic toys, plastic cups, plastic shrink wrap, plastic grocery bags, aseptic/gable top food and beverage containers, frozen food containers as well as aluminum foil and food trays. All of these changes have had a very positive effect on the residential curbside recycling program. Since November of 2010, when the changes were fully implemented, there has been an 11% increase in the residential curbside recycling participation rate and a 41% increase in the amount of residential materials collected and recycled. During this planning period, the County will continue to explore other materials that may lend themselves to being collected curbside, to include food waste. The commercial sector also has the ability to tailor their recycling programs to include single-stream collection, making it much more convenient and adding many of the newly accepted materials to their programs.

Food Waste Composting

The County has been successfully composting yard waste for over two decades. Nationally, food waste composting programs are sometimes accomplished in conjunction with successful yard waste composting activities in order to increase overall compost production volumes, and to incorporate additional nutrients to the compost. During the past several years, the Recycling Section has explored options for collecting and composting food waste. Several private food waste composting facilities in the State of Maryland did emerge over the past several years, but regulatory issues forced the facilities to close. The newly updated 2012 State regulatory requirements have made it more difficult for facilities to open. After much work and time, application was made to the Department of the Environment (MDE) for the Prince George's County's Composting Facility. With the successful receipt of MDE permit, a food scrap composting program will now be implemented during this planning period. Composting food scraps will further reduce waste sent to the Brown Station Road Sanitary Landfill and to significantly increase the County's recycling rate. The Waste Management Division, Recycling Section, will implement a pilot demonstration food scrap composting project during this planning period, for future County-wide expansion. Composting this portion of the waste stream will have a significant impact on the potential to increase County's recycling rate by 14.5%.

Electronics Recycling

In July of 2000, the County established a residential Electronics Recycling Program. A collection site was added to the household hazardous waste collection facility at the Brown Station Road Landfill. A computer recycling contractor accepts the material and virtually all of items collected are either recycled or given to non-profits for reuse. This program has enabled the County to provide a means for the residents to recycle their CPU's, cell phones, fax machines, printers, monitors, televisions, copiers, pagers, telephone systems, and other related electronic equipment. Increasingly changing technology has created a concern as to what impact all of the obsolete electronic devices will have on the MSW stream. With the conversion from analog to digital broadcasting, the County continues to experience a surge of televisions being delivered to the electronics site. The County urges its residents to recycle these materials. During this planning period, the County's Waste Management Division will be exploring the possibility of a bulky collection day specifically for televisions to ensure the unwanted televisions are diverted to the HHW/Electronics Recycling facility. While the United States Environmental Protection Agency has not yet declared that these items should be banned from the landfill, the County continues to promote the recycling and reuse of these materials. In an effort to control escalating costs of recycling these items, the County has also initiated an informational effort to urge citizens and residents to take advantage of manufacturer buy back and return policies. Additionally, an electronics locator link has been added to the WMD webpage to assist residents and businesses find the nearest location to take their old electronics to be recycled for free. The County will continue to promote recycling and reuse of as much of this waste as is economically feasible.

C. Rubble and Construction & Demolition Material Recycling

There are several privately operated facilities in the County that recycle rubble and construction/demolition debris. These facilities process source separated materials, which would otherwise become solid waste. They collect, separate, and process them and return them to the economic mainstream in the form of valuable raw materials or products. Asphalt, concrete and wood are the primary items recycled, although some operations also recycle paper, plastics and metals. These operations are most frequently located at existing rubblefills or at scrap yards; although some waste haulers are establishing operations of their own. All such operations are subject to proper zoning. Two additional privately owned C & D facilities were constructed and added to the County's Ten Year Solid Waste Plan between 2005 and 2010, Sheriff Road Processing and Transfer Station and Lawrence Street Industries, LLC Doing Business As (d/b/a) Recycle One, respectively. As of 2010, both facilities are operational and are planned to continue to operate through this planning period.

The quantities of materials recycled at these facilities are included in the County recycling reports under Non MRA recycling tonnages. The County will continue to gather as much information as possible as these operations provide a valuable service by

conserving space in County rubblefills and reducing consumption of natural resources.

D. Asbestos

Up until 1996 the County accepted asbestos at the BSRSL because at that time it was considered that friable asbestos presented no health threat if properly landfilled. Because it had to be removed from many of the County's schools and other facilities, the material was accepted at BSRSL until 1996. The landfill ceased accepting the material because new burdensome Federal regulations required excessive bookkeeping and operational accommodations. Currently, all friable asbestos must now be collected by licensed asbestos contractors, who provide for proper disposal in approved hazardous waste acceptance facilities located outside of the County. Non-friable asbestos, such as that found in certain building shingles and floor tiles are accepted at the Brown Station Landfill.

VI. Brown Station Road Landfill – Gas Recovery Project

In November 1982, the Johns Hopkins Applied Physics Laboratory completed an assessment on landfill gas recovery at Brown Station Road Landfill. Landfill gas is a decomposition product of decaying organic waste in the landfill. Their study evaluated quantities of recoverable gas at the landfill and the economics of recovery. The results of this study were favorable, and at the County Correction Center, the County installed two projects for landfill gas utilization: a 2.55-MW electricity generating facility and two dual fuel fired boilers (rated @ 14.645 million Btu per hour each).

The landfill consists of a closed area (Area A) and an open area (Area B). Both Area A and B have a landfill gas collection systems comprising of vertical extraction wells, horizontal collectors, condensate traps and sumps, and gas collection piping. In accordance with regulatory requirements, the County expands the landfill gas collection system in Phases. In Area B, Phase I through IV gas collection system expansions have been constructed and Phase V expansion is at design stages. Area A was closed in the mid 90's and has a comprehensive landfill collection system.

The County expanded its landfill gas utilization by adding a 4.2-MW electricity generating facility at the landfill and by fueling two boilers (rated @ 1.01 million Btu per hour each) at the landfill garage and two additional boilers (rated @ 2.4 million Btu per hour each) at the County Correctional facility. With the addition of a new generator facility at the landfill, the County's electricity generation capacity increased to 6.75 MW. The new generating facility started service in April 2003. Additionally, the County has plans to reconfigure their onsite power distribution system to power the Brown Station Road administrative campus from the landfill gas generation plant.

Surplus electricity is sold to PEPCO generating a revenue stream of approximately $ 800, 0000 per year. Additionally, the County saves more than $1,000,000 by supplying about 5,700

MWh of electricity to the Correctional facility and about 45.8 million cubic feet of landfill gas to boilers at the Corrections and landfill facilities. .

VII. Sandy Hill Landfill – Gas Recovery Project

The Sandy Hill Landfill gas collection system consists of 130 extraction wells, 83 of which are in-refuse, and 47 of which are out-of-refuse, and 5 horizontal collectors. In March 2001, Waste Management, Inc. (WMI) and Toro Energy, LLC (Toro) entered into a landfill gas purchase agreement. Under this agreement, which presently has a delivery and purchase term of twenty years (commencing February 2002) with optional successive terms of one year each, Toro is supplied with landfill gas which is delivered through a pipeline to the National Aeronautics and Space Administration's (NASA) Goddard Space Flight Center located in Greenbelt Maryland. The pipeline and all ancillary improvements were completed in January 2003. When WMI left the landfill site in March of 2007, its' involvement in the project was terminated and the County took over responsibility for the gas supply. The landfill gas, a renewable energy source, significantly reduces the amount of natural gas, a fossil fuel, utilized at NASA's Goddard Space Flight campus. Any excess gas not purchased by NASA is destroyed using an MDE permitted flare. This has been a successful collaborative effort and the County expects the project to be viable through the next decade.

VIII. Public Involvement Programs

Public involvement programs are essential components of County solid waste management activities. Public information programs assist in improving community awareness of the County's solid waste, litter, recycling programs, and encourage citizen participation in community cleanup programs. Community involvement contributes to achieving the goal of an environmentally cleaner County.

A. Solid Waste Resource Management and Recycling Advisory Commission

Public involvement committees were active during both the permitting and operation of the County facilities. These committees eventually became inactive. The Adopted FY 2002-2011 County Comprehensive Ten Year Solid Waste Plan recommended the formation of a Solid Waste Advisory Commission. In November of 2004, CB-84-2004 was enacted and Subtitle 21. Division 1. Refuse Collection and Disposal of the Prince George's County Code was amended to add Subdivision 2. Section 21-125.01 which established the Prince George's County Solid Waste Advisory Commission. This body was tasked with providing community input, guidance and advice to the County Executive and County Council on matters relating to solid waste management within the County. In 2012, Council Bill CB-87-2012 changed Subtitle 21. Division 1, Subdivision 2, to rename the Solid Waste Advisory Commission to the Solid Waste Resource Management and Recycling Advisory Commission and Section 21-125.03 added the requirement that at least one member shall be appointed from the communities surrounding the Brown Station Road landfill.

B. Citizens Concerned for a Cleaner County (CCCC), Inc. Currently T/A Keep Prince George's County Beautiful (KPGCB)

CCCC, since its inception, has been involved with educating and informing the public on solid waste management activities and in encouraging recycling, litter control, and waste reduction programs.

The adopted FY 1977-1986 County Solid Waste Management Plan recommended the establishment of a task force to formulate and carry out a continuous litter reduction program and to promote "selective recycling" efforts such as the Reynolds Aluminum container collection program, waste oil reclamation, and community newspaper recycling programs. Based on that recommendation, the Prince George's County Council established by resolution in 1976 a task force, which later became known as The Citizens Concerned for a Cleaner County. In 1980, CCCC incorporated as a 501(c)(3) enterprise. To date, 27 municipalities, numerous civic organizations, citizens, County and bi-county agencies, businesses and industry, as well as the Prince George's County Public Schools have participated in KPGCB activities.

The goal of KPGCB is to provide continuous educational programs on litter reduction and the promotion of selective recycling and good solid waste management. KPGCB also offers on programs to create community awareness and implementation of various methods of proper litter disposal and the eventual elimination of litter. The organization encourages and provides networking and technical assistance to community-based litter reduction and recycling.

CCCC was accepted in l995 as an affiliate of Keep America Beautiful (KAB), the first in Maryland. In 2005, the organization began doing business as Keep Prince George's County Beautiful. Since that time, the organization has been recognized nationally and has received the KAB President's Award for Excellence annually from 2005 – 2012. In addition to maintaining all of the programs under CCCC, KPGCB has initiated additional litter prevention programs such as, Litter Free Schools which promotes school recycling and educates Prince George's County students about the harmful effects of littering and a more comprehensive School Green Team Program. In addition, KPGCB continues to promote KAB programs such as the Annual Great American Cleanup.

IX. Emergency Response Plans

Hazardous Waste emergency response plans within the County are detailed in the County's Emergency Management Plan. The Plan was prepared under Executive Order No. 1-1984 (and subsequent updates, see Appendix F) and delineates the roles and responsibilities of County and non-County supporting agencies for the mitigation, preparedness, response, and recovery phases of emergency activities.

The County Fire Department is usually the first agency to respond to a hazardous materials incident. The roles and tasks of the Department in response to an incident are outlined

under General Order 82.01, Hazardous Materials Incident Response Plans. Additionally, the County's Fire Chief (see Appendix F) describes the procedures for reporting and responding to spills.

The Maryland Department of the Environment, Technical and Regulatory Services Administration has prepared a Maryland Hazardous Substance Response Plan which also identifies the roles of the Federal, State and County governments in responding to hazardous substance incidents. Among other information, this plan establishes procedures and roles for five phases of the total cleanup process including notification of the incident, evaluation and initiation of action, containment and mitigation, cleanup and disposal measures, and documentation and cost recovery. The State has also developed a manifest control system which tracks hazardous waste from its point of origin to its disposal site.

X. Landfill Siting Criteria

County Council Bill CB-10-1993 requires siting criteria to be included in the Ten Year Solid Waste Plan. While no known new landfill is being considered, future landfill siting may be required beyond this planning period. As the County becomes more urbanized and populated, fewer suitable tracts of land will be available for solid waste disposal facilities. For future landfill siting, and in accordance with Subtitle 21-117 of the Prince George's County Code, siting criteria shall be established. At a minimum, every landfill shall be located in an area at least 500 acres in size and have a maintained buffer of at least 500 feet between neighboring property lines and the outermost perimeter of the landfill cells. The buffer must contain appropriate screening, vegetation, berms and fencing sufficient to substantially shield the landfill from view by surrounding residents. The Department of Environmental Resources shall develop landfill site selection and screening criteria for the Council's adoption in the County's Comprehensive Ten Year Solid Waste Management Plan. These criteria may provide for variances from the strict application of the buffer and acreage requirements when site conditions warrant. Furthermore, the following methodology may be followed to objectively select a landfill site:

A. Primary Screening

Primary screening is applied to eliminate areas that are unsuitable for hosting a landfill site, including:

1. Existing housing: Established subdivision can be identified and eliminated using the most recent Maryland-National Capital Park & Planning (M-NCPPC) Census Population and Housing Distribution.

2. Floodplain and wetland areas: Large areas of the 100-year floodplain and wetlands can be eliminated by utilizing the Maryland Non-Tidal Wetland Inventory Maps and FEMA Floodplain Maps.

3. Restricted airport zones: Airport zones include airport property and property within the Federal Aviation Administration's restricted zones.

For landfills, FAA Order Number 5200, the restricted zones are within 10,000 feet of turbojet aircraft runways and within 5,000 feet of piston type aircraft runways.

4. Parklands: Parklands owned and operated by the M-NCPPC, State and Federal Government (see Figure 2-3) are identified by the most recent M-NCPPC "Park and Recreation Inventory – Prince George's County" and the "Prince George's County Street Locator" prepared by the ADC of Alexandria, Inc.

5. Chesapeake Bay Critical Areas: The Critical Area included the Bay and all of its tributaries to the head of tide, and all land and water within 1,000 feet of heads of tide or within 1,000 feet of wetlands designated under Title 9 of the Natural Resources Article, Annotated Code of Maryland. According to the 1986 criterion, promulgated by the Chesapeake Critical Area Commission, solid or hazardous waste collection or disposal facilities are not permitted in the Critical Area, unless no environmentally acceptable alternative exists outside the Area and are needed to correct an existing water quality or wastewater management problem. Prince George's County has no requirements or plans to site a facility in the Critical Areas.

6. Drinking water reservoir watersheds: There is one drinking water reservoir located in Prince George's County in Laurel.

7. Historic sites, Historic Resources, Historic Districts: These properties are identified in the Prince George's County Historic Sites and Districts Plan and in Map 4-6.

8. Sensitive use areas: These areas include schools, churches, cemeteries, nursing homes and hospital and can be identified by a street locator map and United States Geological Survey topographic maps.

9. Unique plant or animal habitats/Areas of Critical State or County Concern: This criterion includes botanical, zoological, and ornithological habitat areas noted on County Master Plans or State Department of Natural Resources Sensitive Species Project Review Areas. Also, the criterion includes County and State designated Areas of Critical Concern as identified in this Plan.

B. Secondary Screening

Secondary Screening allows sites to be compared with respect to the relative costs and impacts associated with developing each. Ten secondary screening criteria apply to landfill sites:

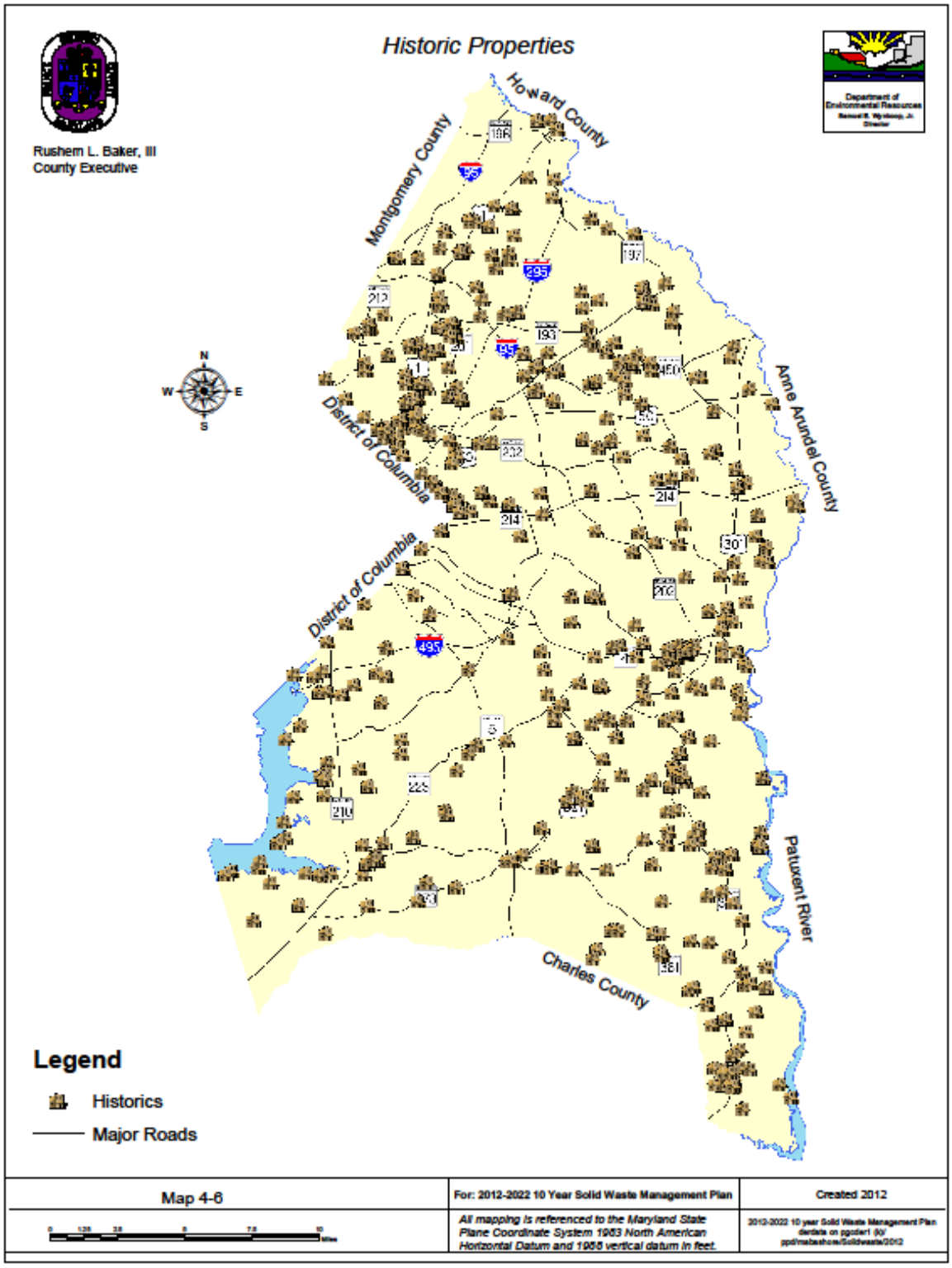
1. Existing/Future Site Land Use – Vacant, undeveloped parcels are considered most favorable for landfill sites, while farmlands are considered acceptable. Areas currently being used for other purposes, such as commercial, industrial and residential use areas are not considered favorable.

2. Existing/Future Adjacent Land Use – The existing land uses within a one mile radius of each site should be considered to establish potential future conflicts.

3. Proximity to Protected Areas or Sensitive Uses – Determine if the site is close enough to these areas of uses to affect them.

4. Ground Water Quality Impacts – Large areas of Prince George's County have been identified by the Maryland Geological Survey as outcrop areas for major ground water aquifers, which provide drinking water to some residents. These outcrop areas are regions where aquifer recharge might

Map 4-6


Historic Properties
Rushern L. Baker, III
County Executive
Department of Environmental Resources
Howard County
Montgomery County
District of Columbia
Anne Arundel County
District of Columbia
Patuxent River
Charles County
N
W
E
S
Legend
Historics
Major Roads
Map 4-6
For: 2012-2022 10 Year Solid Waste Management Plan
Created 2012
All mapping is referenced to the Maryland State Plane Coordinate System 1983 North American Horizontal Datum and 1988 vertical datum in feet.

occur. Because aquifers might be used to meet future drinking water demands, sites located outside the outcrop areas are more favorable for landfilling.

In addition to proximity to aquifer recharge zones, sites may be evaluated for proximity to high water table, as defined by the Maryland Geological Survey. Landfill construction within a water table can be complex and costly.

5. Site Access/Traffic – Landfill development may cause significant changes in traffic patterns. Collection vehicle travel distances and routes will be modified. Traffic volume of some street will change as old routes are abandoned and new routes developed. These changes may result in problems when increased traffic volumes exceed street capacity or changes in solid waste transportation routes cause collection trucks to travel on primarily residential streets. Landfill sites can be evaluated to determine their effects on existing traffic patterns. Sites that are accessible using existing roadways without requiring significant upgrading and without causing unacceptable traffic impacts are considered most favorable as a landfill site.

6. Site Acquisition – Depending on the current ownership of a site, acquisition may involve no cost or delay as with County-owned property. Conversely, substantial cost or delay is possible if there are numerous private owners, or if parcels have high property values. If a site cannot be acquired without unreasonable cost or delay, it is considered an unfavorable candidate under this criterion.

7. Site Development Costs – Site development costs are dependent on the presence of structures that must be removed prior to construction, as well as site topography and the availability of on-site access to the disposal area.

   Topography determines the amount of regarding necessary for landfill construction. Highly variable topography with steep slopes would require extensive regarding. Virtually any parcel of land can be developed. Therefore, the degree of complication caused by on-site conditions rather than development of feasibility is evaluated. Areas requiring extensive regarding are considered unfavorable under this criterion.
   Several geologic formations in the County consist of clay or silts and clay. While these formations may not be close enough to the surface to serve as an insitu liner, they may be located shallow enough to be economically recovered for use as liner material. Two of the more notable formations are the Nanjemoy and Marlboro Clays. Sites, which contain any of these units, were considered favorable for landfilling. Conversely, there are large areas of near surface sand and gravel consisting predominantly of

Pliocene and Pleistocene deposits. Any site, which is located over these deposits, was considered unfavorable for landfilling because of the potential for leachate migration and subsequent ground water degradation.

8. Proximity to Utilities – Landfill sites require water, sewer and electrical availability. Specifically, landfill scales use electricity and maintenance buildings require sewer, electrical and water service. Sewers may also be the most economical and feasible method of leachate disposal with or without on-site treatment. Each site can be evaluated for utility connections. Sites with readily available utilities are considered favorable.

9. Waste Transport – As the total distances traveled by waste transport vehicles increase, the associated transport costs also rise. Under this criterion, sites are rated favorably if they are close to the waste generation centroid.

When a siting study is initiated the County will assign relative weights to these criteria or others, which may be identified, and the sites will be ranked on the numerical score derived from the weighted criteria.

CHAPTER V
PLAN OF ACTION

I. Introduction

In recognition of the wide range of environmental, economic, and social conditions in Prince George's County, this Plan recommends a multifaceted solid waste management program. Under this program, immediate problems related to solid waste management will be resolved while steps will be taken to comprehensively address the County's future solid waste management needs.

The plan of action to fulfill the County's solid waste management needs include a role for the private sector. The private sector will be involved in providing collection services; operation of rubblefills and recycling centers; and recyclables marketing services. Beyond these services, the private sector, which generates roughly one-half of the waste in the County, must increase their recycling and source reduction efforts. They will also contribute, through the Non-Residential System Benefit Charge, to the costs of maintaining the County's solid waste infrastructure. Finally, the County looks forward to innovative approaches to solid waste management as a result of the entrepreneurial accomplishments of the private sector.

II. Solid Waste Acceptance Systems

All major waste and recyclables acceptance facilities in the County will remain in operation throughout the planning period. BSRSL will remain open beyond the planning period.

Because the Sandy Hill Landfill reached capacity and closed, waste which was previously being delivered there is now coming to the BSRSL. This influx of waste has reduced the lifespan of the facility.

Current estimates project landfill capacity to be available through the end of this planning period and beyond as the new Waste Transfer Station (WTS) will become operational. To conserve landfill space and help satisfy increasing environmental concerns surrounding solid waste management, the County implemented a recycling program twenty years ago which has averaged a 45% diversion rate over the past five years, and for 2011 was calculated at a 49% rate of diversion. This impact will continue to preserve the remaining capacity at BSRSL. The County has modified its operational techniques at BSRSL to further conserve airspace through increased levels of waste compaction and the State-approved side slope modification, which increases airspace without increasing the footprint of the BSRSL.

The County will continue to progress from reliance on sanitary landfill as a primary means of managing waste through the planning, design, construction and operation of a technologically advanced WTS. Fiscal Year 2016 is the County's anticipated commencement period of the required design and permitting of the planned WTS. Current volumetric calculations of available airspace within the active area of BSRSL indicate the planning period

through commissioning of a proposed WTS is sufficiently programmed for waste disposal via operations at the BSRSL.

Preliminary design concepts for the County's next generation of managing waste includes a WTS scheme utilizing a full tunnel design whereby waste is pushed from the tipping floor into transporting vehicles which may range from 18-wheeled trucks up to and including intermodal rail cars. Each waste loading position will include a designated stationary electric material handler that will distribute and compact the waste within the containers, and also allows for segregating non-conforming wastes such as white goods, tires, metals, etc. The County is committed to obtaining a minimum LEEDS Certification rating of 'Silver' and may include creative 'green' concepts such as site optimization, solar power, surface water controls and efficiencies, and aesthetically pleasing architecture.

Recycling is a realistic approach to the problem of waste disposal. It manages the County's solid waste and uses it as a resource. It will reduce, but not eliminate the need other solid waste disposal facilities. Disposal of non-recyclables and residual materials will continue to require alternative disposal options including landfilling and transferring to other locations. Increasing the amounts of recycling will reduce the cost for these disposal options and allow the County to reserve valuable landfill space for emergency situations such as weather related natural disasters.

A comprehensive strategy for managing solid waste in the County will include:

* Taking measures to preserve the County's existing landfill capacity;

* Implementing a comprehensive recycling program which includes waste reduction, reuse, recycling, composting, and recyclables procurement;

* Investigating alternative management practices and/or markets for hard-to-recycle materials such as Styrofoam and scrap tires; and,

* Providing a solid waste transfer station to provide for future solid waste management, and increase the life expectancy of the BSRSL to beyond the planning period.

The Ritchie-Marlboro Rubblefill will continue to operate throughout the planning period. The Ritchie-Marlboro facility will be supplemented by facilities such as Brandywine Enterprises C&D Processing Facility and the Lawrence Avenue C&D processing and recycling facility that was added to the Plan in 2005. Because rubblefills are necessary as part of the overall disposal program for the County, additional rubblefills and C&D processing facilities may be needed to process rubble and other C&D materials generated in the County. The County expects this material will be managed by the private sector. The locations of new or expanded fills will be established on a case-by-case basis through the zoning process. The establishment of fills in previously disturbed areas such as abandoned sand and gravel mines may be appropriate.

The facilities for accepting and processing recyclables generated in the County are also expected to be sufficient for the planning period. The County's Materials Recycling Facility (MRF) was upgraded in 2007 with new state-of-the-art single-stream sorting equipment, and the capacity to process materials has increased significantly. This facility, along with the private facilities operating in and around the County, will be more than adequate to process recycling through this planning period and beyond.

The operation of the fly ash fill at Brandywine will continue during the planning period. The County will also support efforts by PEPCO to utilize fly ash in positive manner in future years.

The County, through this plan, strongly supports State (Maryland Department of the Environment and the Department of Health and Mental Hygiene) and County Health Department efforts to assure proper disposal of special waste in a most effective and safe manner.

III. Solid Waste Collection Systems

The present systems of solid waste collection (i.e., County, Municipal, and private) will be continued into the foreseeable future without basic change. Current methods of combined public and private collection allow for maximum flexibility within a controlled and regulated environment, and permit the continuation of a basic competitive structure that has the added advantage of keeping cost to the individual resident comparatively low. Commercial waste collection historically has been quite competitive. County contracted collection provides residential customers with the benefits of competition, which might otherwise be unavailable. Municipal collection provides efficient service because it allows municipalities to efficiently use existing staff.

Recyclables collection for single family homes (including townhouses) will be provided through County contracts, except in those municipalities that choose to provide this service directly. Recyclables from business and apartment multifamily dwellings will be collected through private contracts. These systems are expected to remain unchanged for the planning period. Condominium multifamily properties will be included in the County contracted service.

County solid waste collection contract services will also be offered to areas that experience urban development during the subsequent ten year planning period. County recyclables collection services will be provided as new homes are constructed within the established recyclables collection districts.

Separate collection of recyclables and yard waste has substantially reduced the amount of solid waste collected each week. In addition, under the current collection system, as many as four trucks might collect from a home in a single week. There are two trash collections, one recycling collection, and one yard waste collection. Additionally, a homeowner could also arrange for a bulky waste, appliance or tire collection. Waste collection is more expensive than disposal and with the advent of single-stream collections for recycling and the distribution of larger recycling containers, the County will be in a better position to examine ways to reduce collection expense including switching to once-a-week trash collection. In addition to providing

economical service, the examination will take into account the feasibility of containing escalating collection fees if services are reduced, the need for uniformity of collection services, the need for competitive procurement of collection services and the County Charter requirement that multiyear contracts must be approved by the County Council.

IV. Public Schools Recycling

In 2004, the County's Recycling Section and Keep Prince George's County Beautiful (KPGCB) worked with a paper recycling company and the Prince George's County Public Schools (PGCPS) and interested private schools to initiate and implement free paper recycling, including collection services, which is still on-going today. Additionally, KPGCB through its' Green Team School Program (formally known as Litter Free Schools), has been instrumental in coordinating recycling efforts within the public schools.

In compliance with House Bill 1290 which was enacted in July of 2009, the County submitted and received approval by the Maryland Department of the Environment (MDE) its Public School Recycling Plan (Appendix H). The Plan includes the strategy for collecting, processing, and marketing, and disposition of recyclable materials from County public schools.

In 2011, the County's Recycling Section spearheaded and chaired a committee to introduce The Dream Machine Recycling Pilot Program to the Public Schools. The committee comprises of representatives from the Recycling Section, Prince George's County Public Schools (PGCPS), Prince George's Economic Development Corporation, Pepsi Cola (PepsiCo), and Waste Management, Inc. (WM). The Dream Machine is program providing the schools with an opportunity to join in a free recycling program. It is primarily a bottle and can recycling program; however, paper may also be collected. Coordinators have been identified at the participating schools, and the schools were outfitted with exterior and interior recycling collection boxes, and are being provided with free collection services. The option remains open for the PGCPS to expand the program County-wide.

Another facet to the Dream Machine is The Dream Machine Recycle *Rally.* The *Rally* is a multi-year program that aims to raise awareness of the importance of recycling among students, grades K-12, and gives schools a chance to earn rewards and compete for prizes. The Dream Machine Recycle Rally is one pillar of the Dream Machine recycling program – a multi-year collaboration between PepsiCo, WM, and Keep America Beautiful (KAB). Participating schools will be able to capture plastic bottles and aluminum cans and earn rewards through recycling. For all the bottles and cans recycled through the Dream Machine Recycle *Rally*, PepsiCo will make a donation to the Entrepreneurship Boot camp for Veterans with Disabilities, a national program that offers free education in entrepreneurship and small business management to post-9/11 veterans with disabilities.

The County has always been involved with school recycling and will continue to provide technical assistance through the existing programs provided by KPGCB and the Recycling Section. The schools will continue to be provided information on how to set up recycling programs and if needed, will be given assistance in locating suitable contractors capable of collecting their materials. Additionally, the PGCPS will be permitted to deliver their materials to

the County's Materials Recycling Facility (MRF) for processing and marketing. The Recycling Section will continue to provide educational materials concerning the importance of recycling and will continue to offer tours of the County's MRF that will enhance the classroom experience and provide environmental curriculum. Additionally, should the recycling markets fall and vendors begin to charge a fee for collection, the public schools will be permitted and encouraged to participate in any procurement opportunities that may provide better pricing opportunities, such as participation in the County's existing County Office Recycling Program. County recycling programs are paid through user fees that are assessed through the County's property tax bills. As a result, there is no funding source currently available for public school recycling by the County. However, House Bill 805 passed in 2012 requiring the Prince George's County Board of Education to develop and implement a recycling program for all facilities under the jurisdiction of the county board; requiring the county board to address specified issues while developing a recycling program; and requiring the county board to submit a report including specified information to the Prince George's County Delegation to the General Assembly on or before September 1, 2012, regar ding the recycling program.

V. Public Involvement Program

Information programs are intended to improve community awareness of County solid waste, litter, and recycling programs and maximize citizen participation and involvement.

The ongoing efforts of Citizens Concerned for a Cleaner County (CCCC) Doing Business As (d/b/a) Keep Prince George's County Beautiful (KPGCB) provide for audits of public educational efforts, recommendations for environmental education curriculums in public schools, and reviews of ordinances and regulations aimed at curbing indiscriminate and illegal dumping. In addition, KPGCB will publish and disseminate information on solid waste management and recycling activities, including waste minimization, source reduction, and "buy recycled" programs. KPGCB continues to provide speakers to community groups to describe recycling programs and to emphasize the importance of solid waste management and will continue the comprehensive community cleanup program to coordinate existing cleanup programs on targeted areas.

VI. Recycling and Source Separation

Recycling, source reduction and source separation programs provide a means of extending landfill capacity, and conserving natural and nonrenewable resources. The County has implemented its Recycling Program which:

- Provides County-wide residential curbside collection and rural drop-off convenience centers for recyclables;
- Provides household hazardous waste and electronics recycling drop-off collection site;
- Provides residential curbside collection of yard waste for composting;
- Implements food scrap composting;
- Educates the public on how to reduce waste before it starts and encourages reuse;
- Provides for scrap metal, white goods and scrap tire recycling;

- Provides for County office recycling;
- Offers Municipalities the option to participate in the County recycling curbside collection program;
- Requires approved recycling plans for apartments with 100 units or more;
- Requires all multifamily properties to recycle;
- Requires all commercial and industrial properties to recycle;
- Requires all collectors or haulers licensed by the Department of Environmental Resources and all solid waste or recycling contracts executed by the County to provide for the opportunity for recycling or show evidence to the Director of an agreement or contract for providing recycling services through another entity;
- Prohibits unauthorized pickup (scavenging) of recyclables;
- Provides technical recycling program assistance to the commercial sector; and
- Makes recycling voluntary as long as the following goals are achieved:

  > 45% recycled by July 1, 2015
  > 55% recycled by July 1, 2018
  > 60% recycled by July 1, 2020

VII. Financing

A. Revenue Sources

Operation, maintenance and development of solid waste management systems are financed by the Solid Waste Enterprise Fund. The fund receives no County General Fund revenues. All of its revenue is derived from landfill tipping fees and services fees.

1. Background

In July 1989, the County's decision to use land filling and recycling to manage all of the County's waste caused an expansion of the infrastructure needed to handle all municipal solid waste generated within the borders of Prince George's County. Revenue bonds were sold to pay for the capital costs of building and expanding these facilities. The costs of the revenue bonds, as well as the costs of other environmental programs in the County, historically were funded from the tipping fees charged to users of the two landfills owned by the County. The County was able to fund the programs from the tipping fee because of a County law ("Flow Control Ordinance") requiring waste haulers in the County to dispose of all waste collected within County borders at the two County-owned landfills.

In 1994, a Supreme Court ruling, in the case of C.A. Carbone vs. the Town of Clarkstown, N.Y., invalidated the County's Flow Control Ordinance. The County was no longer able to direct waste generated within its border to County-owned facilities. The result of this decision was an immediate sharp decline in the tonnage delivered to County landfills and a commensurate decline in revenues from tipping fees.

Since the County could no longer fund the cost associated with its Solid Waste Programs solely from tipping fee revenues, the County was faced with one of two options; discontinue the programs funded from the tipping fee or find alternative ways to fund the programs. Since many of the programs are mandated by law, discontinuing the programs was not an option. Therefore, several service charges were implemented to help fund the system. These charges, which appear as the "Solid Waste Service Charge" on County tax bills, provide a more stable revenue source and decrease the fluctuations in revenues available for solid waste programs. This helps to ensure that the County maintains its excellent bond rating, which results in significant long-term savings to County taxpayers. The solid waste charges are assessed to all single family and multifamily dwellings in the County, without exception, depending on the level of service provided. Since the curbside recycling program and bulky trash program are voluntary in nature, the cost of providing these services is distributed among all eligible properties. In Fiscal Year 2002, the County instituted a Solid Waste System Benefit Charge on all non-residential properties in the County in order to allocate the costs of funding the solid waste system among all of the users.

B. Definition of Charges

1. Base Benefit Charge: This covers the cost of capital improvements to the solid waste system infrastructure, which the County must maintain to handle solid waste in the County. Main components are the construction and expansion of the Brown Station Road and Sandy Hill Sanitary Landfills and the environmental controls required at both facilities; such as the leachate conveyance system, the leachate pretreatment plant, the wetland mitigation area, the gas recovery and flaring system, and landfill closure and post closure costs. It also includes items such as the two Public Container Pads, garage facilities, scale house facilities and administrative offices at the landfill. This fee is charged annually.

2. Bulky Trash Charge: This covers the cost of providing bulky trash collection to all single family residences throughout the County, excluding those located within incorporated municipalities.

3. Recycling Charge: Covers the cost of providing curbside collection of recyclables from single family residences throughout the County including nine of the incorporated municipalities. Also covers the cost of the two Public Recycling Facilities at Missouri Avenue and Brown Station Road as well as costs for other programs such as separate yard material processing, household hazardous waste and electronic collection programs and public education.

4. Refuse Collection Charge: Cost of providing contracted curbside refuse collection to single family residences in designated areas of the County.

C. Service Charge Summary (FY 2011):

Sanitary Landfill Municipal solid Waste Disposal

Standard Rates

Land Reclamation Tipping Fee	$ 43.00 per ton
Environmental Surcharge	$ 16.00 per ton
Total Tipping Fee/Surcharges	$ 59.00 per ton

Other Rates

Pickup Trucks Disposing Solid Waste Materials
(Prorated at $59.00 per ton, minimum charge $10.00)

Tires in Bulk	$175.00 per ton
Tires Shredded	$175.00 per ton
Wood Wastes (recyclable)	$ 45.00 per ton
Metal Wastes (recyclable)	$ 25.00 per ton

Western Branch Composting Facility

County Contracts	$ 15.00 per ton
Municipalities	$ 25.00 per ton
Non-County Contractors	$ 45.00 per ton

Residential System/Service Charge ($ per Dwelling Unit)

System Benefit Charge

Unincorporated Areas SF/TH**	$ 33.52 per unit
Municipalities SF/TH**	$ 33.52 per unit
Apartments	$ 33.52 per unit
Condominiums	$ 33.52 per unit
Mobile Homes	$ 33.52 per unit

Recycling Charge

Unincorporated Areas SF/TH**	$ 58.16 per unit
Municipalities SF/TH**	$ 46.53 per unit
Condominiums	$ 31.41 per unit
Southeast Exempt Areas	$ 34.89 per unit

Bulky Trash Charge

Unincorporated Areas SF/TH**	$ 20.94 per unit

Non-Residential System Benefit Charge ($ per Square Foot)

Waste Generation Rate	
Low = 0 – 3.99 lbs./Sq.Ft.	$ 4.79 per Sq.Ft.
Medium = 4.0 – 5.99 lbs./Sq.Ft.	$ 11.98 per Sq.Ft.
High = 6.0 – lbs./Sq.Ft.	$ 16.77 per Sq.Ft.

Refuse Collection	
Trash & Garbage Charge for County Refuse Collection Service	$ 230.33 per unit
Administrative Overhead Charge	$ 4.00 per unit
Total Refuse Collection Charge	$ 234.33 per unit

Typical Total Solid Waste Service Charge For SF/TH**	$ 346.96 per unit

** Single Family/ Town Homes

In FY 2001, the County implemented the Non-Residential Fee, which was applied to all commercial and non-residential properties in the County, beginning in FY 2002. The fee was instituted to more fairly distribute the burden of providing for solid waste management facilities, which were previously supported solely by residential property owners through the Base Benefit Charge detailed above. As part of the implementation of this program, the Base Benefit Charge for residential properties was lowered from $50.00 per home to $30.00 per home.

The Non-Residential Fee is based upon waste generation rates for individual types of commercial or non-residential use. These rates were developed from studies conducted by Malcolm Pirnie, Inc. in Fiscal Year 2009 of waste generated by individual establishments. Waste generation is categorized in three level, high, medium, and low, with corresponding charges, which are based upon square footage or improved areas. These rates, charges, and generator categories are:

Generation Rate	Fee ($/100 SF)	Generator Category*
High	$16.77/100 SF	Restaurant, Auto Dealership, Convenience Store, Fast Food Restaurant, Retail Store
Medium	$11.98/100 SF	Bank Branch, Day Care Center, Industrial, Shopping Center, Department Store, Cinema

Low	$4.79/100 SF	Post Office, Group Home, Church, Hotel, Warehouse, Home for the Elderly, Skating Rink

*Generator Categories shown are partial listing only

The service charges are necessary to provide services that are an essential part of the Prince George's County Government's commitment to maintain a clean and environmentally responsible community for its citizens.

D. Expenditures

1. Disposal Systems: Operating costs of solid waste disposal and acceptance facilities have increased yearly following inflationary trends. In addition, improvements to facilities have required the issuance of bonds, which have caused annual increases in debt service expenses. Competitive market pressures prevented the County from increasing the tipping fee to fund these increases. As a result, the service fees outlined above were established.

   Prince George's County solid waste disposal system total operating expenditures approved for Fiscal Year 2009 were $20,411,100. This figure includes operational costs, debt service, closure, cost reserves and the municipal rebates. The municipal rebate was established in order to ensure that residents or incorporated areas pay for only those services which are provided to them by the County. The municipal rebate provides a direct payment to these areas for tipping fee-funded services, including bulky trash pickup and recycling programs, which the County does not provide in municipalities. Each of the County's 27 municipalities receives a rebate based on the County's cost for bulky trash services.

2. Solid Waste Collection: In general, solid waste collection costs account for 70 to 85 percent of total solid waste management costs, with labor representing 50 to 75 percent of collection cost. Solid Waste collection system operating expenditures approved for Fiscal Year 2009 were $29,000,000.

3. Recycling: During Fiscal Year 2012, approximately 53 percent of the recycling costs are attributable to collection of recyclables from County residences. Yard waste composting operations including the cost to process the yard waste is approximately 22 percent of the budget. Another 11 percent is attributed to recycling electronics and managing the proper disposal of household hazardous waste and recycling of scrap tires. Additionally, 10 percent of the costs are for staff, 2 percent is related to the production of public information material, and 2 percent is spent on recycling bin and cart replacement. In FY 2008, the recycling expenditures

increased significantly to cover the cost of providing new recycling carts to all of the County residents and citizens. An average of 1.8 million was added to phase in the new 65- gallon wheeled recycling cart program. This amount decreased significantly in Fiscal Year 2012 upon the completion of distributing new recycling carts to residents.

E. Planned Capital Improvement Projects (CIP)

Planned capital projects for the County are depicted in Figures 5-1 to 5-5. These projects include:

1. Brown Station Road Landfill Construction, Road Resurface, Flag Pole and Flare Renovation and New Disposal Administration Building Projects (Figure 5-1);
2. Rural Convenience Centers (Figure 5-2)
3. Sandy Hill Sanitary Landfill Closure and Post Closure Care Projects (Figure 5-3);
4. Waste Composting Facility Hoop (Figure 5-4);
5. Waste Transfer Station (Figure 5-5).

VIII. Facilities added to the 2012 – 2022 Prince George's County Ten Year Solid Waste Management Plan

A. Western Branch Yard Waste Composting and Transfer Station Facility

The Prince George's County Western Branch Transfer Station Facility is a government owned Solid Waste Transfer Station being developed on the 216 acre site located on SE Crain Highway in Upper Marlboro. This facility will share the site with the Western Branch Yard Waste Composting Facility. The proposed transfer station will accept Municipal Solid Waste generated in Prince George's County. All incoming loads will be weighed and inspected to insure that only acceptable materials are delivered. The materials will be loaded onto transfer vehicles and sent to approved municipal waste sanitary landfills. The waste transfer facility shall not accept liquids, paint, paint thinner, tar, creosote, adhesives, animal carcasses, septage, biosolids, yard waste, controlled hazardous substances, compressed gas cylinders, drums or tanks that have held hazardous materials, shock sensitive materials or explosives.

B. Sun Services, LLC Recycling Facility

The Sun Services, LLC Recycling Facility is a privately owned facility being developed on the 4.3024 acre site located at Somerset Avenue and Old Baltimore Pike in Beltsville (see Figure 3.13). The facility will be privately financed and is expected to be in operation during the 2013 calendar year. A Maryland Department of the Environment (MDE) Permit Number 2009-WPF-0639 has been issued. The 20,000 square foot building will be constructed on the site and shall meet Leadership in Energy and Environmental Design (LEED) certification requirements. Truck traffic to and from the

facility shall be routed through Powder Mill Road during hours of operation. The facility shall only accept source separated materials from construction or demolition of structures, including wood, metal, cardboard, shingles, masonry, and drywall. All incoming debris will be weighed, inspected to insure that only acceptable materials are delivered and deposited inside of the wholly enclosed building for sorting. Recyclable materials will be separated and shipped off-site for reuse. Up to 85% of the materials are expected to be recycled. A dust suppression system shall be utilized inside the 20,000 s.f. building. The proposed site impacts to Indian Creek shall be reduced as the site will be paved, sufficient streams buffers created and stormwater management techniques shall be utilized. The site will include stormwater management water quality controls for 100% of the site impervious area. Stormwater management techniques will include porous pavement within the parking stall areas and landscaped bio-retention swales within the buffer areas. Sun Services, LLC Recycling Facility, in addition to any County requirements, shall coordinate landscaping with local watershed protection groups, including the Anacostia Watershed Society. The facility shall not accept municipal solid waste, putrescible wastes (other than wood), mattresses, tires (unless licensed by the State as a tire recycling facility), liquids, paint, paint thinner, tar creosote, adhesives, animal carcasses, septiage, biosolids, yard waste, controlled hazardous substances, compressed gas cylinder, drums or tanks that have held hazardous materials, shock sensitive materials or explosives.

C. Recycle One Processing and Transfer Station

The Recycle One Processing and Transfer Station is a privately owned facility and currently operates as the Lawrence Street C & D processing facility on 2.8 acres located at 4700 Lawrence Street, Hyattsville. The proposed processing and transfer station, which requires a Maryland Department of the Environment (MDE) permit, will accept Municipal Solid Waste generated in Prince George's County. All incoming loads will be weighed and inspected to insure that only acceptable materials are delivered. The materials will be loaded onto transfer vehicles and sent to approved municipal waste sanitary landfills. The waste transfer facility shall not accept liquids, paint, paint thinner, tar, creosote, adhesives, animal carcasses, septage, biosolids, yard waste, controlled hazardous substances, compressed gas cylinders, drums or tanks that have held hazardous materials, shock sensitive materials or explosives. Council Bill CB-76-2012, a Zoning Bill for an Ordinance concerning Industrial Zones – Transfer Stations for the purpose of providing for a transfer station as a permitted use in the I-2 Zone under certain circumstances, allows Recycle One Processing and Transfer Station to be a permitted use without the requirement of a Special Exception because it meets the requirements set forth in CB-76-2012 that, (A) the site on which the use is located is operating as a an existing construction and demolition processing and recycling facility within five miles of access to a State Highway of arterial classification or higher; and (B) the facility is approved for acceptance of Municipal Solid Waste generated in Prince George's County pursuant to the Prince George's County FY 2002-2011 Ten Year Solid Waste Management Plan.

D. Dower House Processing and Recycling Center

The Dower House Road Recycling Plant is a privately-owned, construction and demolition material recycling facility to be developed on a ten-acre parcel located on Dower House Road, south of Pennsylvania Avenue. The facility may only accept source-separated materials, such as wood, concrete, brick, paper used in packaging, cardboard, plastics, and gypsum wallboard, ceiling tiles, nonferrous metal and asphalt, from construction or demolition of structures. The facility shall not accept municipal solid waste, putrescible wastes other than wood, mattresses, tires (unless licensed by the State as a tire recycling facility), liquids, paint, paint thinner, tar, creosote, adhesives, animal carcasses, septage, biosolids, yard waste, medical waste, asbestos, radioactive material, hazardous waste, controlled hazardous substances, compressed gas cylinders, drums or tanks that have held hazardous materials, shock sensitive materials and explosives. This facility is permitted by MDE under State Refuse Disposal Number 2010-WPF-0563 as a "Processing Facility."

E. Cedarville Organic Recycling Center

Cedarville Organic Recycling Center (CORC), a proposed state-of-the-art organics composting facility, will be developed by The Peninsula Compost Group (TPCG) on Brevard Road in Brandywine, MD. TPCG will lease a 40-acre of the site, which is a former sand and gravel pit operation, owned by the Brevard family. The organic feedstock will include food waste, yard waste, and wood wastes from a proposed 75 ton per day LEED construction and demolition (C&D) waste processing facility. The CORC will receive and process approximately 400 tons per day, or about 124,800 tons per year. The facility plans to operate six days per week, Monday-Saturday. The Peninsula Compost Group will produce multiple blended organic products from the final compost to market to end-users in the region. The facility will be designed and permitted under the new Composting Regulations proposed by Maryland Department of the Environment. TPCG will enter into a mutually agreeable long-term contract with Prince George's County, and for the CORC to become a County recycling facility, as defined in the County Code, Section 21-112(a).

IX. Proposed Expansion of Brandywine Fly Ash Fill

GenOn Energy, Inc., Brandywine and Gibbons Road properties Parcels 4 and 6 are in the current Ten Year Solid Waste Plan as the Brandywine Fly Ash Fill. GenOn Energy, Inc. is in the process of requesting that the Gibbons Road parcel (Parcel 181) consisting of 329.74 acres be included in the Prince George's County Ten Year Solid Waste Plan as a Class III fill. Parcel 181, owned by GenOn Gibbons Road, LLC, operated as a sand and gravel mine under SW-3561 and was formerly the C. W. Strittmatter property, now being reclaimed with fly ash as approved by the Maryland Department of the Environment under MDE Permit No. 09-SP-1067-1. GenOn Engery, Inc., requests that all three (3), commonly owned and operated parcels be designated in the County's Ten Year Solid Waste Plan for the purpose of recognizing the use of these parcels for fly ash disposal and reclamation of these formally minded sand and gravel sites. Required zoning approval for Parcel 181 through the Prince George's County Park and Planning Commission is required prior to County Council action for approval and subsequent inclusion to the County's Ten Year Solid Waste Management Plan.

Figure 5-1

THE PRINCE GEORGE'S COUNTY FY 2013-2018 PROPOSED CAPITAL IMPROVEMENT PROGRAM

CIP ID NO.	PROJECT NAME	AGENCY
NX541113	BROWN STATION LANDFILL CONSTRUCTION	ENVIRONMENTAL RESOURCES

LOCATION AND CLASSIFICATION

COUNCIL DIST	Six	STATUS	Continued
PLANNING AREA	Upper Marlboro & Vicinity	CLASS	Addition
ADDRESS	Brown Station Road	FUNCTION	Solid Waste Management

EXPENDITURE SCHEDULE (000,S)

	TOTAL	THRU FY 11	EST. FY 12	TOTAL 6 YRS	BUD YR FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	BEYOND 6 YRS
PLANS	44614	43054	575	985	735	150	25	25	25	25	0
LAND	357	287	0	70	70	0	0	0	0	0	0
CONST	89732	73252	825	15655	8805	4850	500	500	500	500	0
EQUIP	5303	5303	0	0	0	0	0	0	0	0	0
OTHER	35	35	0	0	0	0	0	0	0	0	0
TOTAL	140041	121931	1400	16710	9610	5000	525	525	525	525	0

FUNDING SCHEDULE (000,S)

REV BDS	109704	96562	0	13142	6042	5000	525	525	525	525	0
OTHER	30337	30337	0	0	0	0	0	0	0	0	0
TOTAL	140041	126899	0	13142	6042	5000	525	525	525	525	0

DESCRIPTION AND JUSTIFICATION

DESCRIPTION: This project provides for completion and closure of the second half of the 850-acre site including construction of cells and other waste handling facilities, paved access roads and the extension of water mains and sewer lines. Also included are improved storm drainage and rain caps, landfill liner, and leachate collection systems. Other project elements include the expansion and improvement of the landfill gas system.

This project also includes additional temporary office structures within the campus area of the Landfill facility. These additional temporary office structures will eliminate dependency on leased, remote, and costly office spaces. Funding for environmental assessments and mitigation efforts are also included here. "Other" funding comes from net operating cash balances from the Solid Waste Management Enterprise Fund.

JUSTIFICATION: Post closure of the landfill operations includes the obligation of ensuring site safety and security, which will be housed in a renovated building. This project implements the County's Ten-Year Solid Waste Management Plan.

392 ENABLED: CB-049-94

OPERATING IMPACT (000,S)

DEBT SERVICE	9873
MAINTENANCE COSTS	0
OPERATING COSTS	0
TOTAL	9873
COST SAVINGS	0

APPROPRIATION DATA (000,S)

YEAR FIRST IN CIP	FY 1978
YEAR FIRST IN CAPITAL BUDGET	FY 1978
CURRENT AUTH. THRU	FY 12 142645
CUMULATIVE APPROP. THRU	FY 12 133120
APPROPRIATION REQUESTED	0
BONDS SOLD	96562
OTHER FUNDS	30337
TOTAL FUNDS RECEIVED	126899
EXPENDITURES & ENCUMBRANCES	123331
UNENCUMBERED BALANCE	3568

PROJECT STATUS

LAND STATUS	Publicly Owned Land
PROJECT STATUS	Under Construction
PERCENT COMPLETED	94
ESTIMATED COMPLETION DATE	12/2018

MAP

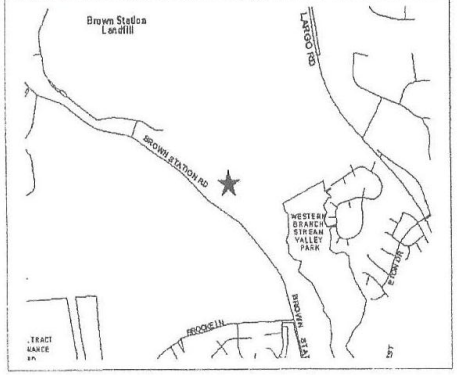


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Figure 5-2

THE PRINCE GEORGE'S COUNTY FY 2013-2018 PROPOSED CAPITAL IMPROVEMENT PROGRAM

CIP ID NO.	PROJECT NAME	AGENCY
NX541135	RURAL CONVENIENCE CENTERS	ENVIRONMENTAL RESOURCES

LOCATION AND CLASSIFICATION

COUNCIL DIST	Multi-District	STATUS	Revised
PLANNING AREA	Not Applicable	CLASS	New Construction
ADDRESS	Various Locations	FUNCTION	Solid Waste Management

EXPENDITURE SCHEDULE (000,S)

	TOTAL	THRU FY 11	EST. FY 12	TOTAL 6 YRS	BUD YR FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	BEYOND 6 YRS
PLANS	617	0	192	425	425	0	0	0	0	0	0
LAND	0	0	0	0	0	0	0	0	0	0	0
CONST	4039	139	0	3900	570	2780	550	0	0	0	0
EQUIP	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4656	139	192	4325	995	2780	550	0	0	0	0

FUNDING SCHEDULE (000,S)

REV BDS	4517	0	192	4325	995	2780	550	0	0	0	0
OTHER	139	139	0	0	0	0	0	0	0	0	0
TOTAL	4656	139	192	4325	995	2780	550	0	0	0	0

DESCRIPTION AND JUSTIFICATION

DESCRIPTION: This project provides funding for improving existing convenience centers, constructing a new convenience center in the southern part of the County, and planning for a new convenience center in the northern part of the County.

JUSTIFICATION: This project implements the County's Ten-Year Solid Waste Management Plan.

393

OPERATING IMPACT (000,S)

DEBT SERVICE	407
MAINTENANCE COSTS	0
OPERATING COSTS	0
TOTAL	407
COST SAVINGS	0

APPROPRIATION DATA (000,S)

YEAR FIRST IN CIP	FY 2007
YEAR FIRST IN CAPITAL BUDGET	FY 2007
CURRENT AUTH. THRU	FY 12 8814
CUMULATIVE APPROP. THRU	FY 12 6206
APPROPRIATION REQUESTED	0
BONDS SOLD	192
OTHER FUNDS	139
TOTAL FUNDS RECEIVED	331
EXPENDITURES & ENCUMBRANCES	331
UNENCUMBERED BALANCE	0

PROJECT STATUS

LAND STATUS	Publicly Owned Land
PROJECT STATUS	Design Not Begun
PERCENT COMPLETED	59
ESTIMATED COMPLETION DATE	06/2015

MAP

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Figure 5-3

THE PRINCE GEORGE'S COUNTY FY 2013-2018 PROPOSED CAPITAL IMPROVEMENT PROGRAM

CIP ID NO.	PROJECT NAME	AGENCY
NX548846	SANDY HILL SANITARY LANDFILL	ENVIRONMENTAL RESOURCES

LOCATION AND CLASSIFICATION

COUNCIL DIST	Four	STATUS	Continued
PLANNING AREA	Bowie Vicinity	CLASS	Addition
ADDRESS	Old Laurel Bowie Road	FUNCTION	Solid Waste Management

EXPENDITURE SCHEDULE (000,S)

	TOTAL	THRU FY 11	EST. FY 12	TOTAL 6 YRS	BUD YR FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	BEYOND 6 YRS
PLANS	3722	1400	561	1561	561	200	200	200	200	200	200
LAND	3951	3951	0	0	0	0	0	0	0	0	0
CONST	20586	17957	654	1675	175	300	300	300	300	300	300
EQUIP	0	0	0	0	0	0	0	0	0	0	0
OTHER	154	4	0	150	25	25	25	25	25	25	0
TOTAL	28413	23312	1215	3386	761	525	525	525	525	525	500

FUNDING SCHEDULE (000,S)

REV BDS	11452	7566	0	3386	761	525	525	525	525	525	500
OTHER	16961	15746	1215	0	0	0	0	0	0	0	0
TOTAL	28413	23312	1215	3386	761	525	525	525	525	525	500

DESCRIPTION AND JUSTIFICATION

DESCRIPTION: This project provides funding for the closure of the Sandy Hill Landfill, including reconstructing the cap and necessary facilities for post closure care. These facilities are: leachate storage tank and treatment facilities, ground and surface water controls, gas management and utilization facilities, water service lines, building renovation, and capping expenses including fill material. Prior year funding included payments for completed tasks associated with the design and permitting of the Sandy Hill Landfill Expansion project.

JUSTIFICATION: This project is included in the County's Ten-Year Solid Waste Management Plan, as proposed by the County Executive and approved by the County Council. Other funding will come from the landfill closure reserve and the Sandy Hill Environmental Trust Fund.

394 ENABLED: CB-049-94

OPERATING IMPACT (000,S)

DEBT SERVICE	1031
MAINTENANCE COSTS	0
OPERATING COSTS	0
TOTAL	1031
COST SAVINGS	0

APPROPRIATION DATA (000,S)

YEAR FIRST IN CIP	FY 1988
YEAR FIRST IN CAPITAL BUDGET	FY 1988
CURRENT AUTH. THRU	FY 12 37897
CUMULATIVE APPROP. THRU	FY 12 31947
APPROPRIATION REQUESTED	0
BONDS SOLD	7566
OTHER FUNDS	16961
TOTAL FUNDS RECEIVED	24527
EXPENDITURES & ENCUMBRANCES	24527
UNENCUMBERED BALANCE	0

PROJECT STATUS

LAND STATUS	Acquisition Complete
PROJECT STATUS	Under Construction
PERCENT COMPLETED	68
ESTIMATED COMPLETION DATE	06/2018

MAP

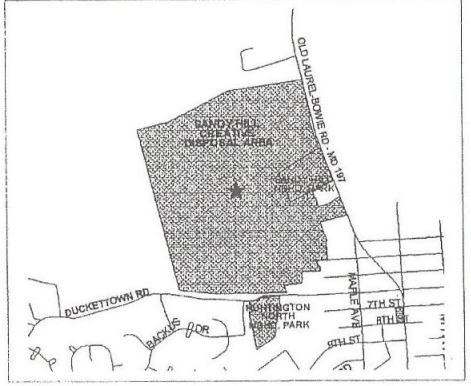

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Figure 5-4

THE PRINCE GEORGE'S COUNTY FY 2013-2018 PROPOSED CAPITAL IMPROVEMENT PROGRAM

CIP ID NO.	PROJECT NAME	AGENCY
NX548933	WASTE COMPOSTING FACILITY	ENVIRONMENTAL RESOURCES

LOCATION AND CLASSIFICATION

COUNCIL DIST	Six	STATUS	Original
PLANNING AREA	Upper Marlboro & Vicinity	CLASS	New Construction
ADDRESS	6601 Se Crain Highway	FUNCTION	Solid Waste Management

EXPENDITURE SCHEDULE (000,S)

	TOTAL	THRU FY 11	EST. FY 12	TOTAL 6 YRS	BUD YR FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	BEYOND 6 YRS
PLANS	0	0	0	0	0	0	0	0	0	0	0
LAND	0	0	0	0	0	0	0	0	0	0	0
CONST	5000	0	0	5000	2500	2500	0	0	0	0	0
EQUIP	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5000	0	0	5000	2500	2500	0	0	0	0	0

FUNDING SCHEDULE (000,S)

REV BDS	5000	0	0	5000	2500	2500	0	0	0	0	0
TOTAL	5000	0	0	5000	2500	2500	0	0	0	0	0

DESCRIPTION AND JUSTIFICATION

DESCRIPTION: Construction of a hoop building to improve and accelerate the composting process in a protected environment.

JUSTIFICATION: The construction of the hoop building will provide for composting year round.

395

OPERATING IMPACT (000,S)

DEBT SERVICE	450
MAINTENANCE COSTS	0
OPERATING COSTS	0
TOTAL	450
COST SAVINGS	0

APPROPRIATION DATA (000,S)

YEAR FIRST IN CIP	FY 2013
YEAR FIRST IN CAPITAL BUDGET	FY 2013
CURRENT AUTH. THRU	FY 12 0
CUMULATIVE APPROP. THRU	FY 12 0
APPROPRIATION REQUESTED	2500
BONDS SOLD	0
OTHER FUNDS	0
TOTAL FUNDS RECEIVED	0
EXPENDITURES & ENCUMBRANCES	0
UNENCUMBERED BALANCE	0

PROJECT STATUS

LAND STATUS	Publicly Owned Land
PROJECT STATUS	Design Stage
PERCENT COMPLETED	0
ESTIMATED COMPLETION DATE	06/2014

MAP

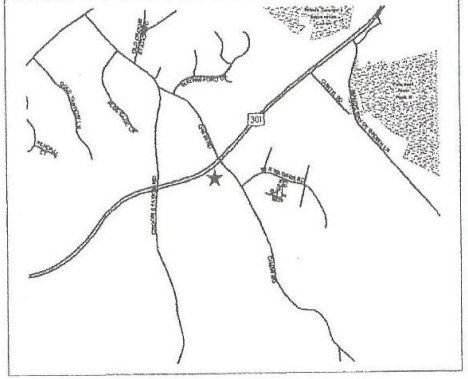

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Figure 5-5

THE PRINCE GEORGE'S COUNTY FY 2013-2018 PROPOSED CAPITAL IMPROVEMENT PROGRAM

CIP ID NO.	PROJECT NAME	AGENCY
NX548925	WASTE TRANSFER STATION	ENVIRONMENTAL RESOURCES

LOCATION AND CLASSIFICATION

COUNCIL DIST	Not Applicable	STATUS	Continued
PLANNING AREA	Upper Marlboro & Vicinity	CLASS	New Construction
ADDRESS	6601 Se Crain Highway	FUNCTION	Solid Waste Management

EXPENDITURE SCHEDULE (000,S)

	TOTAL	THRU FY 11	EST. FY 12	TOTAL 6 YRS	BUD YR FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	BEYOND 6 YRS
PLANS	3713	163	350	3200	2300	400	250	250	0	0	0
LAND	505	505	0	0	0	0	0	0	0	0	0
CONST	30707	7	0	30700	3100	4600	21200	1800	0	0	0
EQUIP	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
TOTAL	34925	675	350	33900	5400	5000	21450	2050	0	0	0

FUNDING SCHEDULE (000,S)

REV BDS	33775	0	0	33775	5275	5000	21450	2050	0	0	0
OTHER	1150	1150	0	0	0	0	0	0	0	0	0
TOTAL	34925	1150	0	33775	5275	5000	21450	2050	0	0	0

DESCRIPTION AND JUSTIFICATION

DESCRIPTION: This project includes the design and construction of a solid waste transfer station to serve the future solid waste disposal needs of the County. The facility will supplement and replace the Brown Station Road Sanitary Landfill. The facility will be constructed at the Western Branch Composting Facility site.

JUSTIFICATION: This project will provide waste disposal services to the County.

396 ENABLED: CB-043-96

OPERATING IMPACT (000,S)

DEBT SERVICE	0
MAINTENANCE COSTS	0
OPERATING COSTS	0
TOTAL	0
COST SAVINGS	0

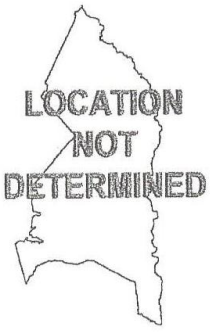
APPROPRIATION DATA (000,S)

YEAR FIRST IN CIP	FY 1997
YEAR FIRST IN CAPITAL BUDGET	FY 1997
CURRENT AUTH. THRU	FY 12 41575
CUMULATIVE APPROP. THRU	FY 12 24875
APPROPRIATION REQUESTED	0
BONDS SOLD	0
OTHER FUNDS	1150
TOTAL FUNDS RECEIVED	1150
EXPENDITURES & ENCUMBRANCES	1025
UNENCUMBERED BALANCE	125

PROJECT STATUS

LAND STATUS	Publicly Owned Land
PROJECT STATUS	Design Stage
PERCENT COMPLETED	7
ESTIMATED COMPLETION DATE	07/2016

MAP



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