

Baltimore County, Maryland 2005-2006 Land Preservation, Parks and Recreation Plan Update



Adopted as a Baltimore County Master Plan Addendum by
the Baltimore County Council, February 18, 2015

Prepared by the Baltimore County Department of Recreation and Parks,
with assistance from the Baltimore County Dept. of Environmental Protection
and Sustainability, and the Baltimore County Dept. of Planning

TABLE OF CONTENTS

<i>TABLE OF CONTENTS</i>	<i>1</i>
<i>EXECUTIVE SUMMARY</i>	<i>3</i>
<i>CHAPTER ONE: INTRODUCTION AND PLAN FRAMEWORK</i>	<i>5</i>
PLAN PURPOSES AND OBJECTIVES.....	<i>6</i>
DEFINITIONS USED IN THE PLAN	<i>7</i>
COUNTY AND RECREATION & PARKS GEOGRAPHY	<i>8</i>
DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS.....	<i>11</i>
COMPREHENSIVE PLAN FRAMEWORK.....	<i>20</i>
<i>CHAPTER TWO: RECREATION, PARKS AND OPEN SPACE</i>	<i>23</i>
RECREATION, PARKS AND OPEN SPACE GOALS.....	<i>23</i>
PROGRAMS, PROCEDURES AND MECHANISMS.....	<i>56</i>
ASSESSING PARKLAND AND FACILITY NEEDS	<i>83</i>
COUNTY OBJECTIVES AND PRIORITIES FOR LAND ACQUISITION, FACILITY DEVELOPMENT, AND REHABILITATION.....	<i>120</i>
SUMMARY OF RECREATION, PARKS AND OPEN SPACE PRIORITIES.....	<i>120</i>
PUBLIC PARTICIPATION.....	<i>123</i>
<i>CHAPTER THREE: AGRICULTURAL LAND PRESERVATION AND OTHER LAND PRESERVATION PROGRAMS</i>	<i>125</i>
ACHIEVEMENT OF AGRICULTURAL LAND PRESERVATION GOALS	<i>126</i>
AGRICULTURAL LAND PRESERVATION IN MASTER PLAN 2020	<i>130</i>
<i>CHAPTER FOUR: NATURAL RESOURCE CONSERVATION</i>	<i>134</i>
COUNTY NATURAL RESOURCE CONSERVATION GOALS PROGRESS.....	<i>167</i>
PRIORITY PRESERVATION AND CONSERVATION AREAS.....	<i>172</i>
NATURAL RESOURCE CONSERVATION IN MASTER PLAN 2020	<i>174</i>
 <i>APPENDICES</i>	 <i>180</i>

KEY MAPS AND TABLES

Recreation Councils and Regions Map: **p.10**
Recreation Councils and Regions Population Data and Projections Table: **p.13**
Population Growth by Recreation Council: 2000-2010 Map: **p.15**
Projected Population Growth by Recreation Council: 2010-2030 Map: **p.17**
Recreation Councils, the URDL and Community Enhancement Areas Map: **p.19**
Parks and Recreation Land Acquisition: FY's 2006-2011 Map: **p.27**
Park Development and Improvement Projects: FY'2 2006-2011 Map: **p.30**
Local Acreage by Recreation Region Table: **p.84**
Recreation Facility Supply by Recreation Region Table: **p.91**
Top Fifty Recreational Activities Table: **p.93**
Parkland Acreage Needs Analysis Table: **p.95**
Primary Service Areas for Regional Parks w) Outdoor Rec. Facilities Map: **p.100**
Primary Service Areas for Regional Parks w) Indoor Rec. Facilities Map: **p.102**
Table B-1: Supply Report: **p.105**
Table B-2: Demand Report: **p.108**
Table B-3: Needs Report: **p.112**
Priority Funding Areas Map: **p.136**
Baltimore County Green Infrastructure Map: **p.139**
Baltimore County Forest Cover Map: **p.140**
Baltimore County Green Schools & Center Map: **p.149**
Baltimore County Conservation Areas Compared to MD Greenprint TEAs Map: **p.172**
Table C: Acquisition, Development & Capital Rehabilitation Priorities: **Appendix**

EXECUTIVE SUMMARY

The Baltimore County Land Preservation, Parks and Recreation Plan (LPPRP) is a planning document required by the State of Maryland for the County to remain eligible for Program Open Space (POS) funding. POS is the primary State of Maryland funding program for the acquisition, development and rehabilitation of parkland and recreation sites, and thus the main emphasis of the LPPRP is parks and recreation. The LPPRP serves as an advisory master plan for the Baltimore County Department of Recreation and Parks, and is formally adopted as an addendum to the County's comprehensive (master) plan.

This LPPRP serves as an update to the 2005-2006 Baltimore County LPPRP, which was required to include expanded content on natural resource conservation and agricultural land preservation, in addition to traditional information on parks and recreation. The State utilized the '05-'06 LPPRP and other local LPPRP's from across the state to help analyze the effectiveness of federal, state and local land preservation and growth management programs and practices within its 2009 Maryland Land Preservation, Parks and Recreation Plan.

This iteration of the County LPPRP updates the progress that has been made towards achieving the goals, objectives and priorities identified in the '05-'06 LPPRP. Progress has been stalled somewhat as a result of challenging economic conditions, which have significantly impacted the amount of capital funding available to the State, counties and municipalities. Further, this plan revises that plan's goals, objectives and priorities, which were themselves modified as part of the effort to formulate the Baltimore County Master Plan 2020, adopted in November of 2010 as the County's latest comprehensive plan.

The agriculture land preservation and natural resource conservation portions of the plan are largely presented in "reference and summary" format, outlining the existing policies, practices, accomplishments and goals for these components of the plan. Applicable content from *Baltimore County Master Plan 2020* and other existing documents is identified and presented. This reflects the fact that comprehensive efforts in the areas of natural resource conservation and agricultural land preservation, which are spearheaded by the County's Department of Environmental Protection and Sustainability (EPS) and Department of Planning, are more thoroughly documented in other plans, reports, etc. Conversely, this plan's content dedicated to parks and recreation is more extensive since the LPPRP is, at its core, the parks and recreation master plan.

This plan describes the broad range of tools Baltimore County utilizes to effectively preserve land for a variety of purposes—to provide parks, to "green" urbanized areas through the dedication of open space and greenways, to preserve farmlands and rural landscapes, and to protect natural resources and important habitats. These tools range from capital funding programs to environmental and development regulations. The County faces many challenges within its land preservation efforts. Continued population growth and a greater awareness of the importance of a healthy lifestyle amplify recreational demands that tax the ability of the County's existing recreational infrastructure to accommodate those demands. In certain communities, where additional park sites may be required for the construction of needed facilities, there may be a lack of suitable undeveloped or under-developed lands. Funding

diversions and reduced fiscal resources likewise challenge the County's ability to preserve sufficient parklands and agricultural and natural resources, to construct new recreational facilities, and to adequately maintain and rehabilitate the existing extensive inventory of parks and facilities. These factors have made it all the more essential that the County prioritize the use of its capital resources and make the most of alternative means of land acquisition/preservation, park development, resource conservation, and site and facility management and maintenance. A number of these alternative methods are outlined within this document.

The agricultural land preservation and natural resource conservation chapters of this document summarize Baltimore County's vision and efforts within these two essential areas of land preservation. The County's agricultural preservation program and growth management mechanisms have combined to protect the rural landscapes that are a defining characteristic of the County's heritage. Agricultural land preservation programs alone have preserved nearly 60,000 acres of farmlands. Zoning tools, development regulations, and capital programs protect natural resources such as the Chesapeake Bay, streams, wetlands, forests, and wildlife habitats. All of these efforts have collectively led to Baltimore County being recognized as a national leader in the realm of land preservation.

Baltimore County also enjoys a rich history as an innovator within the field of parks and recreation. Programs and practices such as the volunteer recreation councils, the joint-use agreement for school recreation centers, and the mandatory dedication of local open spaces and greenways within the development process have served as models for other jurisdictions for decades. The Recreation, Parks and Open Space chapter of this document presents the County's existing parks and recreation policies, programs, goals and objectives. A number of key elements of the LPPRP are provided within the chapter, including an analysis of recreational supply and demand, an estimation of parkland and recreational facility needs, a list of current parks and recreation objectives, and a summary of the project priorities and recommendations that are listed in greater details within Appendix C of this plan.

The County must continue to emphasize and invest in land preservation, parks and recreation if it wishes to remain an attractive place in which to live, do business and visit, and to remain a national leader.

CHAPTER ONE: INTRODUCTION AND PLAN FRAMEWORK

Maryland Program Open Space (POS) Law, as presented within Title 5, Subtitle 9 of the Natural Resources Article of the Maryland Annotated Code, requires each county to prepare a Land Preservation, Parks and Recreation Plan (LPPRP) every six years to maintain eligibility for funding through POS. This plan has been prepared to achieve that mandate, and to serve as a planning guide for the Baltimore County Department of Recreation and Parks, particularly relating to the planning of capital projects including park acquisition, development and rehabilitation.

PROGRAM OPEN SPACE (POS): The State of Maryland's pre-eminent funding program for parklands and recreational facilities, established in 1969 through the enactment of the real estate transfer tax (a half-a-percent tax on most property transfer transactions). POS is utilized for state, local and municipal parks and recreation projects ranging from the acquisition of park sites, to construction of indoor and outdoor recreation facilities, to capital renovations of existing parks and facilities. Baltimore County has been allocated more than \$113 million since the inception of local POS funding in 1970, an average of more than \$2.5 million per year. The County's average allocation between FY's 2000-2011 grew to over \$5.3 million a year, peaking at nearly \$18.2 million in FY'07 and just under \$13 million in FY'08.

The prior Baltimore County LPPRP was adopted by the Baltimore County Council on July 3, 2006. In addition to its traditional recreation and parks-focused content, that plan featured extensive sections on agricultural land preservation and natural resource conservation in order to achieve the State of Maryland's objective that the plan should comprehensively outline the wide range of land preservation tools employed by each county. The present LPPRP shall serve primarily as an update to the prior County LPPRP, repeating certain content from that plan and providing information on the progress that has been achieved towards the '05-'06 LPPRP's goals, objectives and capital project priorities. Additionally, this LPPRP shall frequently reference the recently adopted (November, 2010) Baltimore County Master Plan 2020, reflecting the LPPRP's role as a master plan addendum. These references will include the updated recreation and parks related policies and actions of the Master Plan.

It is important to understand the role of the LPPRP within Baltimore County's overall planning process. The LPPRP is just one of many planning tools and documents that help guide the County in its efforts to provide the citizens of the County every opportunity to have a high quality of life, all the while maintaining the delicate balance between preservation and development for which Baltimore County has long been recognized as a national leader. Other notable planning tools are the Baltimore County Master Plan (including its water resource element), the dozens of adopted community plans from throughout the County, initiative-based planning documents such as the recent Baltimore County bicycle and pedestrian access plans, the County's development and growth management policies and regulations, and numerous environment-focused plans including those related to the County's Watershed Implementation

Plan (WIP) and water and sewer services. All of these plans, including the LPPRP, support state and federal plans and initiatives, including the State of Maryland's LPPRP.

PLAN PURPOSES AND OBJECTIVES

The universal purposes and objectives for the prior county and State LPPRP's, which largely carry over to and apply to this plan, are as follows:

- Review goals and objectives of State and local programs for three principal elements: parks and recreation, agricultural, and natural resources;
- Identify where these goals and objectives are essentially the same, where they are complementary or mutually supportive, and where they are simply different;
- Evaluate the ability of implementation programs and funding sources for each element to achieve related goals and objectives;
- Identify desirable improvements to policies, plans, and funding strategies, to better achieve goals and improve return on public investment;
- Recommend to State and local legislatures, governing bodies and agencies changes needed to overcome shortcomings, achieve goals, and ultimately ensure good return on public investment;
- Identify the needs and priorities of current and future State and local population for outdoor recreation;
- Achieve legislative goals of State and local land preservation programs; and
- Ensure that public investment in land preservation and recreation supports, and is supported by, local comprehensive plans, associated implementation programs, State Planning policy, and State and local programs that influence land use and development.

This plan will not only address the above objectives, but will also outline Baltimore County's applicable parks and recreation priorities and programs while providing a framework for future County investments in parks and recreation. Finally, the plan will identify foreseeable capital projects that are proposed to help meet the existing and future recreation and parks needs of the County citizenry. These projects are presented in detail within "Appendix C," and are based largely upon the analysis presented in this plan, as well as public and staff input provided as part of the plan formulation and other processes.

As indicated previously, this LPPRP is closely tied to Master Plan 2020 (MP2020). Throughout this document there are excerpts and references to MP2020, whose plan vision carries over to this LPPRP:

Create and maintain safe and sustainable communities, to achieve a sensible balance of economy, equity, and environment for people to reside, work, pursue careers, raise families, and enjoy the amenities in Baltimore County, Maryland.

Baltimore County's land preservation, parks and recreation efforts play essential roles in supporting this vision. Parklands, open spaces and diverse recreational facilities are key components of safe and sustainable communities, promoting economic and public health and offering access and opportunity to all. The availability of such lands and facilities can contribute

to the decisions of individuals, families and businesses to reside and stay in a given community or area. Parklands, greenways, open spaces and other forms of preserved lands likewise contribute to the County's environmental wellbeing, as such lands typically feature a substantially larger amount of woodlands and lower proportion of impervious surfaces than most other types of land use.

DEFINITIONS USED IN THE PLAN

Community Conservation Areas: One of the designated land management areas within Master Plan 2020, community conservation areas (CCA's) are established communities and commercial centers in urbanized areas of the County, generally adjacent to or in close proximity to Baltimore City. Targeted revitalization efforts seek to retain or enhance the areas' attractiveness and functionality.

Community Enhancement Areas (CEA's, as described in MP2020): Areas suitable for sustainable redevelopments that are compact, mixed-use, and walkable. An area with mixed-use buildings containing retail and/or office use on the lower floors and residential units above attracts new investment, provides a vibrant atmosphere, and offers diversity of housing. Environmental Site Design and conversion of existing impervious surfaces to green spaces such as parks, greenways and public squares enhances the social and cultural life of the neighborhood and improves quality of stormwater runoff. These compact, mixed use walkable communities have excellent, sustainable design, using the latest technologies in energy savings and environmental protection, and will focus on walkability and pedestrian access. See "Community Enhancement Areas" section starting on page 32 of Master Plan 2020 for further information.

Greenways: Networks of open space and parklands, typically linear in form, which are utilized for preservation, recreation or both. Most greenways in Baltimore County are associated with stream valleys. Some greenways include trails, including: the Cooper Branch, along which runs the Number Nine Trolley Line Trail; Red Run, along which the County's newest greenway trails were developed to serve the Owings Mills Growth Area; and Little Falls and Beetree Run, the streams along which the State's Torrey C. Brown (formerly North-Central) Rail Trail is situated. Greenways also serve as valuable wildlife corridors.

Local Open Space (LOS): Land that is dedicated as open space through Baltimore County's development process, which requires that open space be provided within residential developments. LOS is broken into two different types: active and passive. Active open space must be relatively flat and open, and suitable for interactive play or small gatherings, while passive open space may be open or sparsely wooded. LOS may be owned by the County, homeowner/condo owner associations, or land developer or management company, and may be improved with recreational facilities.

Recreation and Parks Regions: Major jurisdictional areas into which Baltimore County is split for the oversight of recreation services by the Department of Recreation and Parks. As of the prior LPPRP the County was divided into six distinct geographic recreation areas. However, the agency reorganized this structure in early 2011 and again in February of 2012, reducing from six

areas to four regions. Each of these regions is administered by a “Regional Coordinator” who oversees Community Recreation Supervisors assigned to the communities and recreation and parks councils of the region. See page ten for a map of the recreation regions and associated recreation and parks councils.

Recreation and Parks Councils: A cornerstone of recreation in Baltimore County, these are citizen-based, non-profit volunteer groups that are responsible for the vast majority of organized recreation programs that take place at County recreational facilities. Each of the forty-seven recreation and parks councils (up from 44 as of the '05-'06 LPPRP) has a formal charter, leadership structure and bylaw. DRP relies upon council volunteers to provide the recreation programs that serve the public, to raise funds to support those programs, and to provide input regarding local recreational facilities needs. Forty-one of the recreation councils have distinct boundaries that incorporate one or more communities and/or neighborhoods, while six of the councils are dedicated to specific parks or facilities. In all cases, the volunteers of the councils work hand-in-hand with DRP’s field operations staff to provide organized recreational opportunities to the public.

School Recreation Center (SRC): A site that is designed to function as both educational and recreational facility. In the case of Baltimore County, a “Joint Use Agreement” between DRP and the Board of Education ensures that all public schools are available for recreation program use in addition to serving their traditional role as educational facilities. The costs associated with the acquisition and development of SRC’s are typically shared between Baltimore County Public Schools and DRP. In some cases outdoor recreation facilities may be developed prior to school construction, allowing the sites to be used entirely as parks on an interim basis or until a site is deemed no longer needed or suitable for a school recreation center.

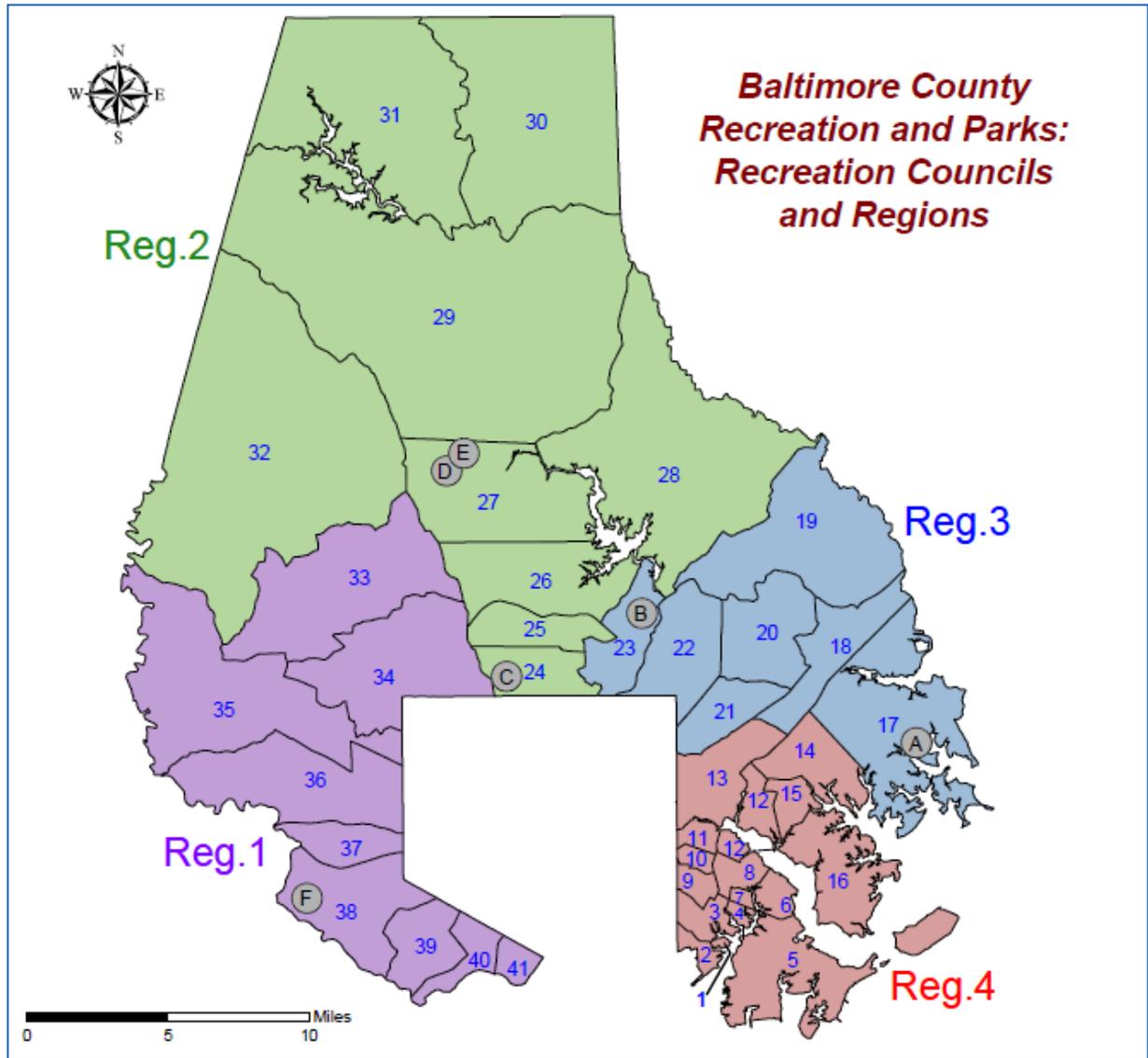
COUNTY AND RECREATION & PARKS GEOGRAPHY

See chapter two of the 2005-06 Baltimore County Land Preservation, Parks and Recreation plan, as well as Master Plan 2020’s Introduction and Sustainable Environment sections for information on the county’s physical characteristics

The Baltimore County Department of Recreation and Parks’ administrative geographic, jurisdictional and management structure has been modified on multiple occasions since the adoption of the prior LPPRP. There continue to be 41 individual traditional recreation and parks councils with boundaries that encompass the entire land area of the County. These boundaries represent the primary “service areas” of those councils. In early 2011 the number of larger geographic administrative areas under which the traditional recreation councils are grouped within DRP’s Recreation Services Section was reduced from six areas to four regions as part of the County’s greater restructuring efforts, with further reorganization following in early 2012.

The number of councils dedicated to a *specific* park site or facility has increased since the last LPPRP from three to six, and now includes councils for Oregon Ridge Nature Center, Marshy Point Nature Center, Benjamin Banneker Historical Park and Museum, Cromwell Valley Park, Robert E. Lee Park, and the Baltimore County Agricultural Resource Center. These councils are

independent entities, and not part of or answerable to the surrounding recreation and parks council in which the parks/sites are situated (e.g., the Marshy Point Nature Center Council is not a part of the Bengies-Chase Recreation Council). See the “Baltimore County Recreation and Parks: Recreation Councils and Regions” map on the following page.



- | | | | |
|--|---|--|---|
| <p>- REGION 4</p> <ol style="list-style-type: none"> 1. Watersedge 2. Turner Station 3. Dundalk-Eastfield 4. West Inverness 5. Edgemere-Sparrows Point 6. North Point Village 7. Bear Creek 8. Gray Charles 9. Patapsco Neck-Norwood 10. Berkshire-Eastwood 11. Colgate-Eastpoint 12. Essex 13. Rosedale 14. Middle River 15. Stembridge 16. Back River | <p>- REGION 3</p> <ol style="list-style-type: none"> 17. Bengies-Chase 18. White Marsh 19. Kingsville 20. Perry Hall 21. Overlea-Fullerton 22. Parkville 23. Greater Loch Raven | <p>- REGION 2</p> <ol style="list-style-type: none"> 24. Towson 25. Towson 26. Lutherville-Timonium 27. Cockeysville 28. Carroll Manor 29. Hereford Zone 30. Seventh District 31. Prettyboy 32. Reisterstown | <p>- REGION 1</p> <ol style="list-style-type: none"> 33. Owings Mills 34. Greater Pikesville 35. Liberty Road 36. Woodlawn 37. Edmondson-Westview 38. Catonsville 39. Arbutus 40. Lansdowne-Riverview 41. Baltimore Highlands |
|--|---|--|---|
-
- PARK BASED COUNCILS**
- | | |
|-------------------------------|---|
| A. Marshy Point Nature Center | D. Oregon Ridge Nature Center |
| B. Cromwell Valley Park | E. Baltimore Co. Agricultural Research Ctr. |
| C. Robert E. Lee Park | F. Banneker Historical Park & Museum |

DRP's administrative geography pertains primarily to the agency's mission of offering recreational services, primarily through the organized activities of the volunteer recreation and parks councils. Recreation Services field staff are stationed throughout the County, each working in a community office that works with one or more council and administers the parks and recreation sites within the bounds of their assigned councils. These offices and the associated councils operate cooperatively to try to meet local recreation needs.

The recreation and parks council boundaries and geography also offer convenient means for assessing such factors as demographic trends and the need for parklands and recreational facilities. It is important to note that any regional analysis that follows within this plan reflects the recent changes to the quantity and composition of the recreation regions, and that it is thus not possible to equally compare regional data from the prior LPPRP to this present plan.

DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS

A broad perspective on Baltimore County's demographic and socioeconomic trends is available in the *Baltimore County Master Plan 2020*, under the "Demographic Profile" of the plan's introduction. Population characteristics, including age and race structure and household and family data are discussed and estimated. Social and economic characteristics such as employment, income and housing information are likewise described in detail.

Demographic and socioeconomic factors play an important role in helping to anticipate existing and future needs for parks and for recreational facilities. Baltimore County has traditionally utilized the standardized State of Maryland goal of providing 30 acreage of local parklands for every 1,000 citizens. Thus, as Baltimore County's population continues to grow, so too does the need for parkland. The base formulas for estimating recreational facility needs also use population as a primary factor. The parkland and facility needs analyses are presented in Chapter Two of this document.

The table that follows displays updated population data deriving from the Baltimore County Department of Planning's Census 2010 Round 7C demographic data. The County's estimated 2010 population of 816,547 is about 3,000 less than what was projected as of the writing of the 2005-06 LPPRP, a difference of little more than a third of a percent and testament to the accuracy of the County's population projection for 2010. As indicated by the table, the County's population grew by 9.0% between 1990 and 2000, followed by an increase of 8.3% between 2000 and 2010. This translates to a population increase of 124,413, or 18.0%, over the twenty-year period starting in 1990. Much of that growth was concentrated within two designated growth areas of Owings Mills and Honeygo. The anticipated ten-year growth rates of 3.7% between 2010 and 2020, and 1.9% between 2020 and 2030, reflect the significant growth trend changes that the County is expected to experience over the next twenty years. This slower amount of growth, rather than being concentrated in large growth areas, is expected to occur within planned, mixed-use redevelopment areas scattered throughout the urbanized portion of the County.

Year:	2000	2005	2010	2015	2020	2025	2030
Population	754,293	789,454	816,547	834,618	846,977	856,938	862,787
10-Year Growth	9.0%*	N/A	8.3%	N/A	3.7%	N/A	1.9%

*- Baltimore County's 1990 population was estimated to be 692,134

Geographic Growth Patterns

Baltimore County's growth in population has not been evenly distributed throughout all areas of the County. Some older communities have experienced losses in population in decades past, though revitalization efforts in recent years are helping to reverse this trend. Page 12 displays updated population projections for the years 2000 through 2030 in five-year increments, organized by recreation council boundaries and regions. It should be noted that DRP's recreation regions are not balanced/organized based upon population, and that other factors including the quantity and type of recreational facilities and the level of recreation program participation have the largest impact upon how the councils are apportioned into administrative geographies such as community offices and regions.

Recreation and Parks Council and Region Population Data and Projections: 2000-2030

(based on population data from Baltimore County Office of Planning, February, 2011)

Council	2000 Pop	2005 Pop	2010 Pop	Pop. Change '00-'10	2015 Pop	2020 Pop	2025 Pop	2030 Pop
Baltimore Highlands	7,003	7,044	7,096	93	7,159	7,250	7,327	7,363
Lansdowne-Riverview	10,141	10,142	10,150	9	10,203	10,329	10,428	10,480
Arbutus	21,696	21,864	21,902	206	22,006	22,177	22,351	22,434
Catonsville	36,821	37,245	37,934	1,114	38,554	39,006	39,390	39,586
Edmondson-Westview	21,220	21,504	21,868	647	22,163	22,465	22,689	22,797
Woodlawn	36,863	39,750	40,419	3,556	40,811	41,669	42,526	43,002
Liberty Road	53,097	55,615	58,748	5,651	60,780	61,637	62,374	62,744
Owings Mills	32,071	38,135	42,531	10,460	44,509	45,011	45,513	45,813
Pikesville	47,223	50,156	51,714	4,490	52,120	52,670	53,247	53,491
Region 1:	266,134	281,455	292,360	26,226	298,306	302,213	305,844	307,711
<i>Region Pop. as % of Total:</i>	35.3%	35.7%	35.8%		35.7%	35.7%	35.7%	35.7%
Towson	23,950	24,143	24,319	368	24,449	24,757	24,956	25,059
Towsontowne	20,350	20,380	22,053	1,702	23,858	24,143	24,342	24,446
Lutherville-Timonium	28,246	28,728	29,375	1,129	29,835	30,279	30,573	30,722
Cockeysville	26,594	28,478	29,259	2,665	29,555	30,100	30,583	30,741
Reisterstown	38,275	42,470	45,660	7,385	47,873	48,651	49,259	49,635
Carroll Manor	13,320	13,801	14,152	832	14,394	14,651	14,836	14,937
Hereford Zone	15,240	16,494	16,981	1,741	17,234	17,568	17,818	17,979
Prettyboy	5,413	5,831	6,344	931	6,536	6,633	6,720	6,768
Seventh District	5,324	5,953	6,142	818	6,254	6,384	6,475	6,529
Region 2:	176,711	186,279	194,283	17,572	199,990	203,164	205,562	206,816
<i>Region Pop. as % of Total:</i>	23.4%	23.6%	23.8%		24.0%	24.0%	24.0%	24.0%
Greater Loch Raven	28,353	28,418	28,479	126	28,655	29,193	29,486	29,627
Parkville	44,187	44,708	44,951	764	45,241	45,959	46,448	46,721
Perry Hall	38,141	41,036	42,148	4,007	42,636	43,293	43,784	44,119
White Marsh	6,528	10,244	12,166	5,638	12,989	13,247	13,482	13,645
Kingsville	5,845	6,097	6,268	423	6,401	6,523	6,604	6,660
Overlea-Fullerton	11,494	12,437	13,032	1,538	13,225	13,489	13,675	13,822
Bengies-Chase	18,463	19,256	21,018	2,555	22,361	22,763	23,039	23,166
Region 3:	153,011	162,195	168,062	15,051	171,508	174,467	176,517	177,760
<i>Region Pop. as % of Total:</i>	20.3%	20.5%	20.6%		20.5%	20.6%	20.6%	20.6%
Rosedale	23,960	24,341	24,763	803	25,083	25,462	25,784	25,959
Middle River	21,912	21,913	21,561	-351	22,008	22,324	22,583	22,728
Stembridge	13,946	13,409	13,781	-165	14,077	14,250	14,385	14,454
Essex	10,250	10,283	10,311	60	10,361	10,523	10,643	10,709
Back River	17,256	17,379	17,766	510	18,297	18,567	18,768	18,865
Colgate-Eastpoint	3,218	3,219	3,221	3	3,237	3,297	3,333	3,347
Berkshire-Eastwood	6,505	6,533	6,542	37	6,571	6,635	6,702	6,733
Patapsco Neck-Norwood	8,371	8,395	8,490	119	8,621	8,760	8,858	8,899
Gray Charles	7,011	7,010	6,997	-14	7,024	7,128	7,220	7,247
Bear Creek	3,784	3,784	3,773	-11	3,789	3,821	3,851	3,868
Dundalk-Eastfield	16,583	16,586	17,813	1,031	18,334	18,538	18,735	18,818
West Inverness	6,820	6,817	6,849	29	6,927	7,017	7,095	7,126
Watersedge	1,333	1,329	1,325	-7	1,330	1,354	1,372	1,382
Turner Station	2,988	2,976	2,976	-12	2,987	3,046	3,090	3,112
North Point Village	4,821	5,172	5,176	355	5,198	5,277	5,343	5,371
Edgemere-Sparrows Point	9,678	10,378	10,697	1,019	10,970	11,132	11,252	11,300
Region 4:	158,436	159,525	161,842	3,406	164,815	167,133	169,015	169,918
<i>Region Pop. as % of Total:</i>	21.0%	20.2%	19.8%		19.7%	19.7%	19.7%	19.7%
Grand Totals:	754,293	789,454	816,547	62,254	834,618	846,977	856,938	862,204

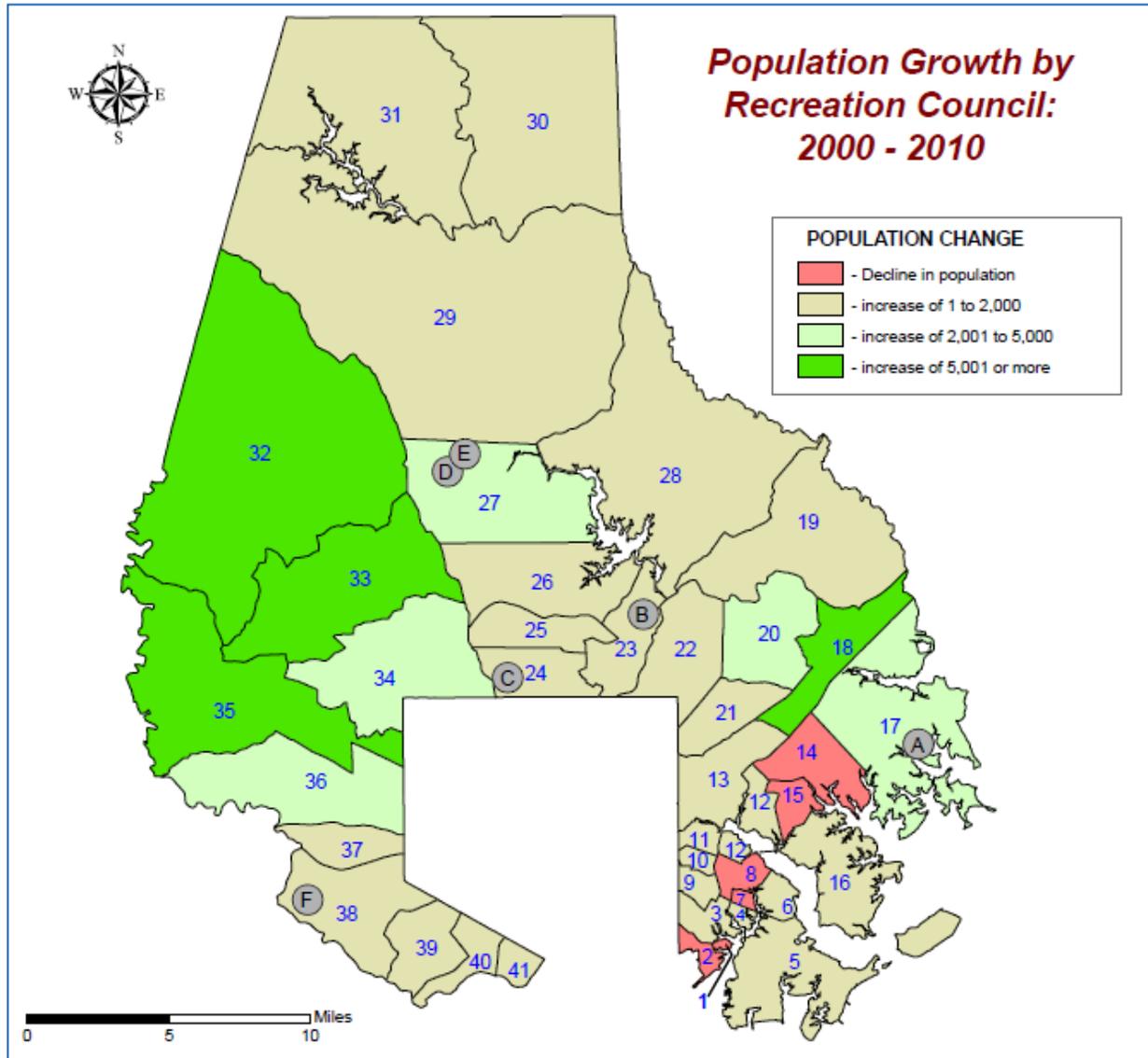
General Population Trends: 2000 - 2010

The map on the following page is a graphic representation of the population changes by council for the ten-year period between 2000 and 2010, listed in the fifth column of the preceding table. The largest population growth during this period took place in and around the County-designated growth areas of Owings Mills (Owings Mills, Reisterstown, Liberty Road and, to an extent, Pikesville) and Honeygo (White Marsh and Perry Hall). Other communities/recreation councils that grew by more than 2,000 population were Woodlawn and Bengies-Chase (both of which experienced residential development in areas that formerly featured mostly low-density residential development and some rural areas), and Cockeysville. The population growth within these nine council areas accounted for approximately 75% of the population growth countywide between 2000 and 2010.



Cowenton Ridge Park is one of a number of park sites acquired to serve the Honeygo Growth Area. Several of the sites have been improved with recreational facilities, while others are planned for future development.

Only six of the councils lost population during this time period: Watersedge, Turner Station, Bear Creek, Gray Charles, Stembridge and Middle River. Of these six councils, only Stembridge and Middle River lost more than 150 population, which is likely attributable to several aged and declining apartment complexes that were converted to other uses—two to parks (Wilson Point Park and the Fields at Renaissance Park) and one to a lower density residential development with single family homes, a park and a commercial complex (Waterview). The remainder of the councils experienced limited to moderate growth, with increases less than 2,000 population, between 2000 and 2010.



REGION 4

1. Watersedge
2. Turner Station
3. Dundalk-Eastfield
4. West Inverness
5. Edgemere-Sparrows Point
6. North Point Village
7. Bear Creek
8. Gray Charles
9. Patapsco Neck-Norwood
10. Berkshire-Eastwood
11. Colgate-Eastpoint
12. Essex
13. Rosedale
14. Middle River
15. Stembidge
16. Back River

REGION 3

17. Bengies-Chase
18. White Marsh
19. Kingsville
20. Perry Hall
21. Overlea-Fullerton
22. Parkville
23. Greater Loch Raven

REGION 2

24. Towsontowne
25. Towson
26. Lutherville-Timonium
27. Cockeyville
28. Carroll Manor
29. Hereford Zone
30. Seventh District
31. Prettyboy
32. Reisterstown

REGION 1

33. Owings Mills
34. Greater Pikesville
35. Liberty Road
36. Woodlawn
37. Edmondson-Westview
38. Catonsville
39. Arbutus
40. Lansdowne-Riverview
41. Baltimore Highlands

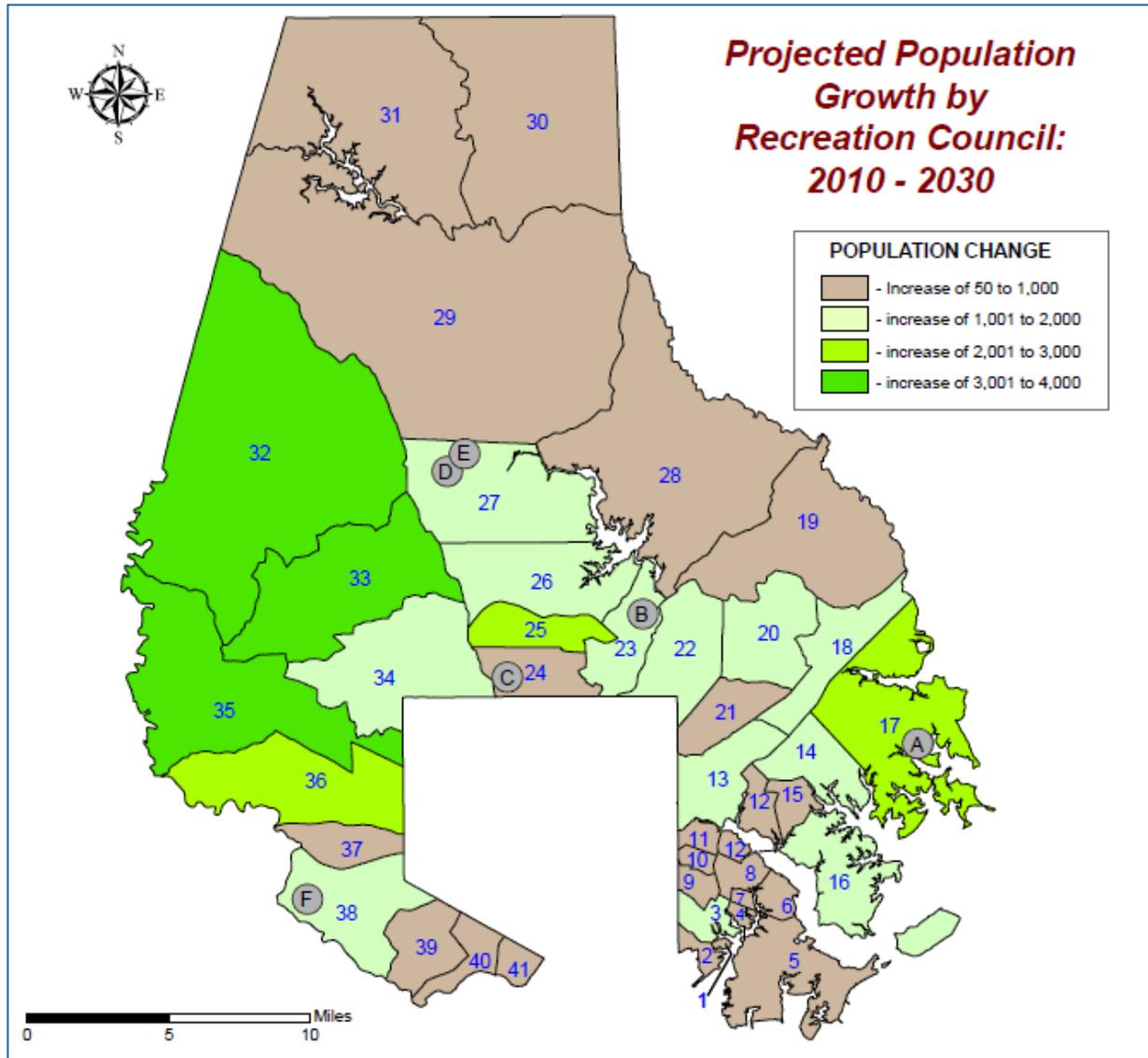
PARK BASED COUNCILS

- | | |
|-------------------------------|---|
| A. Marshy Point Nature Center | D. Oregon Ridge Nature Center |
| B. Cromwell Valley Park | E. Baltimore Co. Agricultural Research Ctr. |
| C. Robert E. Lee Park | F. Banneker Historical Park & Museum |

General Population Trends: 2010 - 2030

The map on the following page is a graphic representation of the projected population growth by council for the twenty-year period between 2010 and 2030. The largest amount of growth (more than 3,000 population per council) is expected to continue to be in and around the Owings Mills Growth Area councils of Owings Mills, Reisterstown and Liberty Road. The anticipated growth in this area alone accounts for approximately 25% of the projected population increase countywide. The three councils expected to grow by between 2,001 and 3,000 population are Woodlawn, Bengies-Chase and Towsontowne. As mentioned in the text about population growth between 2000 and 2010, the first two of these council areas are experiencing pockets of residential growth in areas that previously featured low-density residential development. This growth is expected to continue, and both areas are expected to be further impacted by growth associated with proposed community enhancement areas within or along the fringes of their boundaries (see map on page 19). Towsontowne is undergoing a transformation in which aged and/or underutilized areas are being transformed into relatively high-density residential uses, some of which include a mix of uses (both residential and commercial).

Twelve of the council areas are expected to have a moderate amount of growth, between 1,001 and 2,000 population, within the same twenty-year period. More than half of the councils, including the predominantly rural councils of Kingsville, Carroll Manor, Hereford Zone, Seventh District and Prettyboy, are expected to experience relative light population growth of 1,000 or less.



REGION 4

1. Watersedge
2. Turner Station
3. Dundalk-Eastfield
4. West Inverness
5. Edgemere-Sparrows Point
6. North Point Village
7. Bear Creek
8. Gray Charles
9. Patapsco Neck-Norwood
10. Berkshire-Eastwood
11. Colgate-Eastpoint
12. Essex
13. Rosedale
14. Middle River
15. Stembidge
16. Back River

REGION 3

17. Bengies-Chase
18. White Marsh
19. Kingsville
20. Perry Hall
21. Overlea-Fullerton
22. Parkville
23. Greater Loch Raven

REGION 2

24. Towson
25. Towson
26. Lutherville-Timonium
27. Cockeyville
28. Carroll Manor
29. Hereford Zone
30. Seventh District
31. Prettyboy
32. Reisterstown

REGION 1

33. Owings Mills
34. Greater Pikesville
35. Liberty Road
36. Woodlawn
37. Edmondson-Westview
38. Catonsville
39. Arbutus
40. Lansdowne-Riverview
41. Baltimore Highlands

PARK BASED COUNCILS

- | | |
|---|--------------------------------------|
| A. Marshy Point Nature Center | D. Oregon Ridge Nature Center |
| E. Baltimore Co. Agricultural Research Ctr. | |
| C. Robert E. Lee Park | F. Banneker Historical Park & Museum |

Growth Management and Its Impact on Population Growth

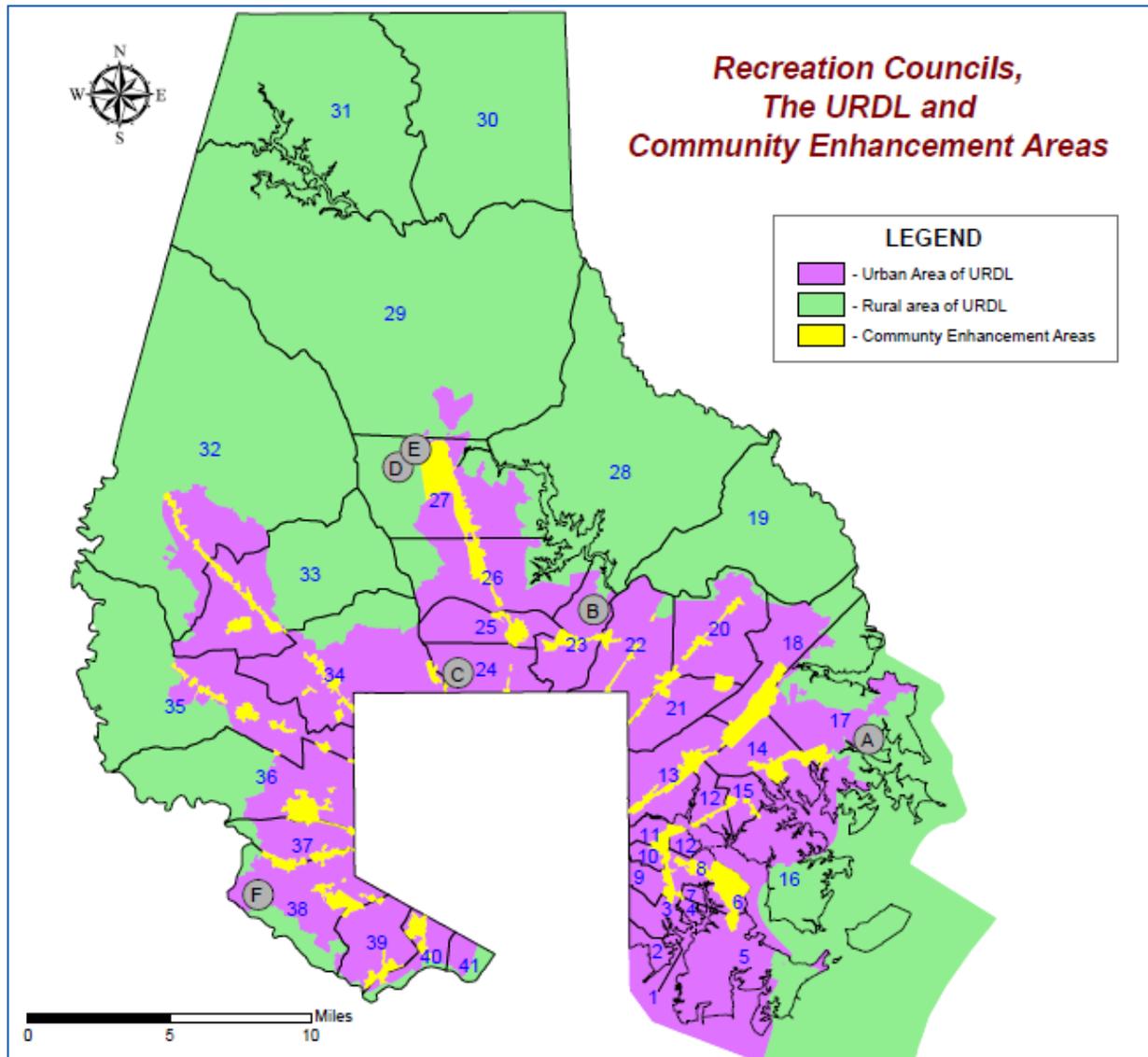
Baltimore County's nationally recognized and lauded growth management policy will continue to greatly impact the pattern of population growth that is envisioned to take place through 2030. At the heart of the growth management policy is the Urban-Rural Demarcation Line (URDL).

The URDL (as described in *Baltimore County Master Plan 2020*): In 1967, Baltimore County took the first significant step toward creating a sustainable policy framework for growth and development when it established an urban growth boundary, the Urban Rural Demarcation Line (URDL). The URDL divides the County into urban and rural land management areas. The division allows infrastructure investments and most land development to be focused in the urban areas, while natural and agricultural resources in the rural areas are preserved.

The urban portion of the URDL is basically one in the same as Baltimore County's Priority Funding Area (PFA), described in the 2009 State of Maryland LPPRP as "areas in which growth and development are to be concentrated. They are defined in the State Finance and Procurement Article and are designated by counties according to State law." The urban area and PFA are where both population growth and the vast majority of public infrastructure investments are concentrated.

The map on the following page shows the recreation council boundaries as they relate to the URDL and to the County's proposed Community Enhancement Areas (CEA's), which were presented in MP2020 as "Areas suitable for sustainable redevelopments that are compact, mixed-use, and walkable." The mixed-use development concept involves a concentration of multiple types of development and land uses within a relatively limited geographic area, often including structures that are multi-story and feature residential and commercial uses. An individual building could include such diverse uses as condominiums, shops, restaurants and offices. Such areas emphasize the concept of "walkability," where residents may easily and safely walk from their home, to their place of employment, to places to shop and dine, all without reliance upon automobiles. Some CEA's also qualify as forms of "transit-oriented development," being situated by or near rail stops or other forms of public mass transportation.

While the County's CEA's place an emphasis upon the importance of parklands and open spaces, particularly in relation to the development's pedestrian access network, this new concept of development does pose some potential challenges in terms of meeting public recreational needs. Being that the geographic land area of a CEA will usually be somewhat limited, it may sometimes be inappropriate or unfeasible to provide a sizeable community park with numerous recreational facilities *within* the bounds of a CEA. Smaller parks and open spaces with limited recreational amenities are more likely components of some CEA's, and the viability of providing public indoor recreation facilities in conjunction with other buildings development in CEA's will need to be explored. In any case, CEA's that move forward are expected to result in relatively concentrated population growth within a potentially short period of time. The availability of existing conveniently situated parks and recreational facilities will need to be evaluated, with solutions and strategies formulated for meeting the needs of the expanded population, whether through the provision of parklands and facilities *within* the CEA, or in close proximity to same.



- | REGION 4 | REGION 3 | REGION 2 | REGION 1 |
|----------------------------|------------------------|--------------------------|-------------------------|
| 1. Watersedge | 17. Bengies-Chase | 24. Towson | 33. Owings Mills |
| 2. Turner Station | 18. White Marsh | 25. Towson | 34. Greater Pikesville |
| 3. Dundalk-Eastfield | 19. Kingsville | 26. Lutherville-Timonium | 35. Liberty Road |
| 4. West Inverness | 20. Perry Hall | 27. Cookeysville | 36. Woodlawn |
| 5. Edgemere-Sparrows Point | 21. Overlea-Fullerton | 28. Carroll Manor | 37. Edmondson-Westview |
| 6. North Point Village | 22. Parkville | 29. Hereford Zone | 38. Catonsville |
| 7. Bear Creek | 23. Greater Loch Raven | 30. Seventh District | 39. Arbutus |
| 8. Gray Charles | | 31. Prettyboy | 40. Lansdowne-Riverview |
| 9. Patapsco Neck-Norwood | | 32. Reisterstown | 41. Baltimore Highlands |
| 10. Berkshire-Eastwood | | | |
| 11. Colgate-Eastpoint | | | |
| 12. Essex | | | |
| 13. Rosedale | | | |
| 14. Middle River | | | |
| 15. Stembridge | | | |
| 16. Back River | | | |
-
- PARK BASED COUNCILS**
- | | |
|-------------------------------|---|
| A. Marshy Point Nature Center | D. Oregon Ridge Nature Center |
| B. Cromwell Valley Park | E. Baltimore Co. Agricultural Research Ctr. |
| C. Robert E. Lee Park | F. Banneker Historical Park & Museum |

February, 2012

Additional Demographic Information and Impacts

The demographic trends reported in the 2005-2006 LPPRP have proven largely accurate, and as such remain valid and are not repeated herein. Additional demographic data about the County in general is presented in Baltimore County Master Plan 2020. Please refer to pages 14-27 of the '05-'06 LPPRP and pages 11-22 of MP2020 for detailed information.

COMPREHENSIVE PLAN FRAMEWORK

This LPPRP enjoys a close, well-established relationship with the County's comprehensive plans, the most recent version of which was Baltimore County Master Plan 2020 (MP2020). The Master Plan incorporates virtually all aspects of local planning. While a few facets of comprehensive planning are incorporated in a relatively high level of detail within the Master Plan, the County's planning process is centered upon the concept of the comprehensive plan being the foundation upon which other County plans and strategic documents are built. The LPPRP is but one of many plans that are formulated with the guidance of the Master Plan, and which subsequently pass through an approval process that results in these plans becoming official addendums to the Master Plan.

Primary Goals of Master Plan 2020

MP2020 features three principal goals, each with associated key actions. Many of the actions associated with the three goals are supported by or have impacts upon parks and recreation within Baltimore County. For example, the joint-use agreement whereby public schools serve as both educational and recreational venues directly supports the public school related action of goal one's bullet seven, while the stormwater runoff action of goal two impacts the manner in which parks and recreational facilities are designed and developed. The three primary goals and associated actions are as follows:

Goal One: Continue the Success of Growth Management

- Direct the future growth within the Urban-Rural Demarcation Line (URDL)
- Protect and enhance Community Conservation Areas
- Promote redevelopment with an emphasis on ailing commercial or industrial properties
- Develop compact, mixed-use, transit-oriented, and walkable neighborhoods
- Advance economic well-being by promoting a high quality labor force
- Provide a mixture of housing types for an emerging diversity of residents
- Support quality public schools to enhance communities
- Prioritize infrastructure improvements via the Capital Improvement Program to endorse sustainable development
- Protect the character and economic vitality of the rural communities

Goal Two: Improve the Built Environment

- Provide adequate open space and recreational opportunities and increase connections to nature by linking open spaces and parks

- Invest in public grounds by tree planting, buffer conservation and habitat restoration
- Expand and deliver multi-modal transportation services
- Reduce pollutant loadings of runoff with enhanced stormwater management
- Meet desire for green communities by providing regulatory incentives
- Ensure integration between regulations and sustainability programs such as LEED (Leadership in Energy and Environmental Design)

Goal Three: Strengthen Resource Conservation and Protection

- Protect health of the natural environment and maintain a valuable biodiversity
- Restore ecosystems and encourage fair, efficient use of natural resources
- Preserve cultural assets to establish a tangible sense of community
- Nurture farming activities and importance of the agricultural industry
- Conserve rural characteristics and scenic vistas

The Twelve Planning Act Visions

The actions identified for the three chief MP2020 goals help to meet the mandates and ideology of the State of Maryland’s twelve planning “visions” that originated as part of the 1992 Planning Act and were most recently updated and expanded during the 2009 Maryland General Assembly legislative session. These visions, as described in MP2020, are:

1. Quality of life and sustainability: a high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment;
2. Public participation: citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals;
3. Growth areas: growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
4. Community design: compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources;
5. Infrastructure: growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
6. Transportation: a well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers;
7. Housing: a range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;
8. Economic development: economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State’s natural resources, public services, and public facilities are encouraged;

9. Environmental protection: land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;
10. Resource conservation: waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;
11. Stewardship: government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
12. Implementation: strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, State, and interstate levels to achieve these visions.

CHAPTER TWO: RECREATION, PARKS AND OPEN SPACE

This chapter presents Baltimore County’s vision for recreation, parks, and open space. This vision was presented in an abbreviated manner within Baltimore County Master Plan 2010 and serves herein as an update to the vision of the 2005-2006 Baltimore County Land Preservation and Recreation Plan. This chapter also serves as the basis for the recreation and parks capital projects listed in “Appendix C – Acquisition, Development, and Rehabilitation Priorities,” that are summarized herein.

Recreation, parks and open space play a vital role in making the State of Maryland an attractive place in which to live. The State and Baltimore County have long been dedicated to ensuring that sufficient, diverse public parklands and open spaces are available to the citizens of Maryland, and that a broad spectrum of recreational opportunities are made available for the equally broad range of leisure tastes and preferences possessed by the populace. No single agency, jurisdiction or entity is capable of providing everything that is needed to meet recreational demands and preserve needed parklands. Instead, recreation and parks opportunities are provided at a variety of levels by different public agencies that complement one another, from the federal level all the way down to small localities. It is important to note that Baltimore County does not have any incorporated localities or towns, and that its URDL-based growth management policy instead directs where the majority of development occurs. This means that Baltimore County Recreation and Parks is responsible for nearly all public recreational needs that a typical incorporated town or locality in another jurisdiction might provide for its citizens. The County’s recreation and park system reflects this dynamic, consisting of a wide variety of parks and facilities that serve various spectrums of the population from countywide down to individual neighborhoods.

RECREATION, PARKS AND OPEN SPACE GOALS

Following are the State and County goals relating to recreation, parks and open space. The State’s goals have their foundation in the visions of the State Planning Act, while the County’s reflect the planning policies identified within Baltimore County Master Plan 2020. Additionally, the County’s goals are supportive of and help to achieve those of the State.

State Goals for Recreation, Parks and Open Space

Within the State of Maryland, the following overriding goals are in place to help define the State’s parks and recreation vision, providing a framework from which State and local parks and recreation departments work together to provide quality leisure opportunities for Maryland’s citizens and visitors.

- Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens, and thereby contribute to their physical and mental well-being.

- Recognize and strategically use parks and recreation facilities as amenities to make communities, counties, and the State more desirable places to live, work, and visit.



Wilson Point Park in the Middle River community is an example of how parks may be used as key components of community revitalization efforts

- Use State investment in parks, recreation, and open space to complement and mutually support the broader goals and objectives of local comprehensive / master plans.
- To the greatest degree feasible, ensure that recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile, and help to protect natural open spaces and resources.
- Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.
- Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

The State of Maryland and local jurisdictions together strive to achieve common goals by using a multi-tier approach that helps ensure that a wide variety of recreation and leisure opportunities are available to the citizenry and visitors to the state. At the state level, the Maryland Department of Natural Resources (DNR) provides and administers state parks, forests, natural resource areas, wildlands, and a variety of other public lands whose primary emphasis is upon natural resource-based forms of recreation and preservation of key natural resources and environments. While certain State parklands and preservation areas include some forms of recreation that are not reliant upon the presence of natural resources, the vast majority of recreational pursuits – from hiking, to swimming, to hunting, to camping – are natural resource-based.

At the county or local level the emphasis is much different, with county and municipal recreation and parks agencies being responsible for making a much wider variety of recreational

opportunities available from the neighborhood and community levels upwards. Most county and local parks cannot rival the vast acreages associated with the majority of state parks and lands. Baltimore County's largest park, the ~1,100-acre Oregon Ridge Park, is quite small in comparison to the 18,000-acre Gunpowder Falls State Park that stretches between Baltimore and Harford Counties, and the 16,000-acre Patapsco Valley State Park, which straddles Baltimore, Howard, Carroll and Anne Arundel Counties. County and local parks are often more facility-intensive, providing both indoor (e.g., gymnasiums, activity/multi-purpose rooms, indoor sports fields, auditoriums, interpretive centers) and outdoor (e.g., ball fields and diamonds, sports courts, playgrounds) recreation facilities. Additionally, most counties including Baltimore County provide green/open space at the local level, including natural or predominantly undeveloped areas within urbanized communities that may not have convenient access to nature's grandeur within state parks. The hundreds of preserved open spaces, greenways and stream valleys throughout Baltimore County help to "green" the urbanized areas of the County, making them more livable while at the same time providing numerous environmental benefits.

Progress Towards Achieving the 2005-2006 LPPRP's Goals and Objectives for Recreation, Parks and Open Space

To reflect this plan's role as an update of the prior LPPRP the goals, objectives and priorities as presented in the '05-'06 plan follow, with assessments (in italics) of any progress that has been made towards meeting those goals.

1. Acquire a variety of parklands and recreation sites in efforts to meet the State goal of providing thirty acres of parkland per thousand citizens within the County.
 - Utilize Program Open Space (POS) as a key funding source for the acquisition of parkland. Support efforts to secure the utilization of 100% of State real estate transfer tax for land preservation programs, as was the intent when the tax was enacted.

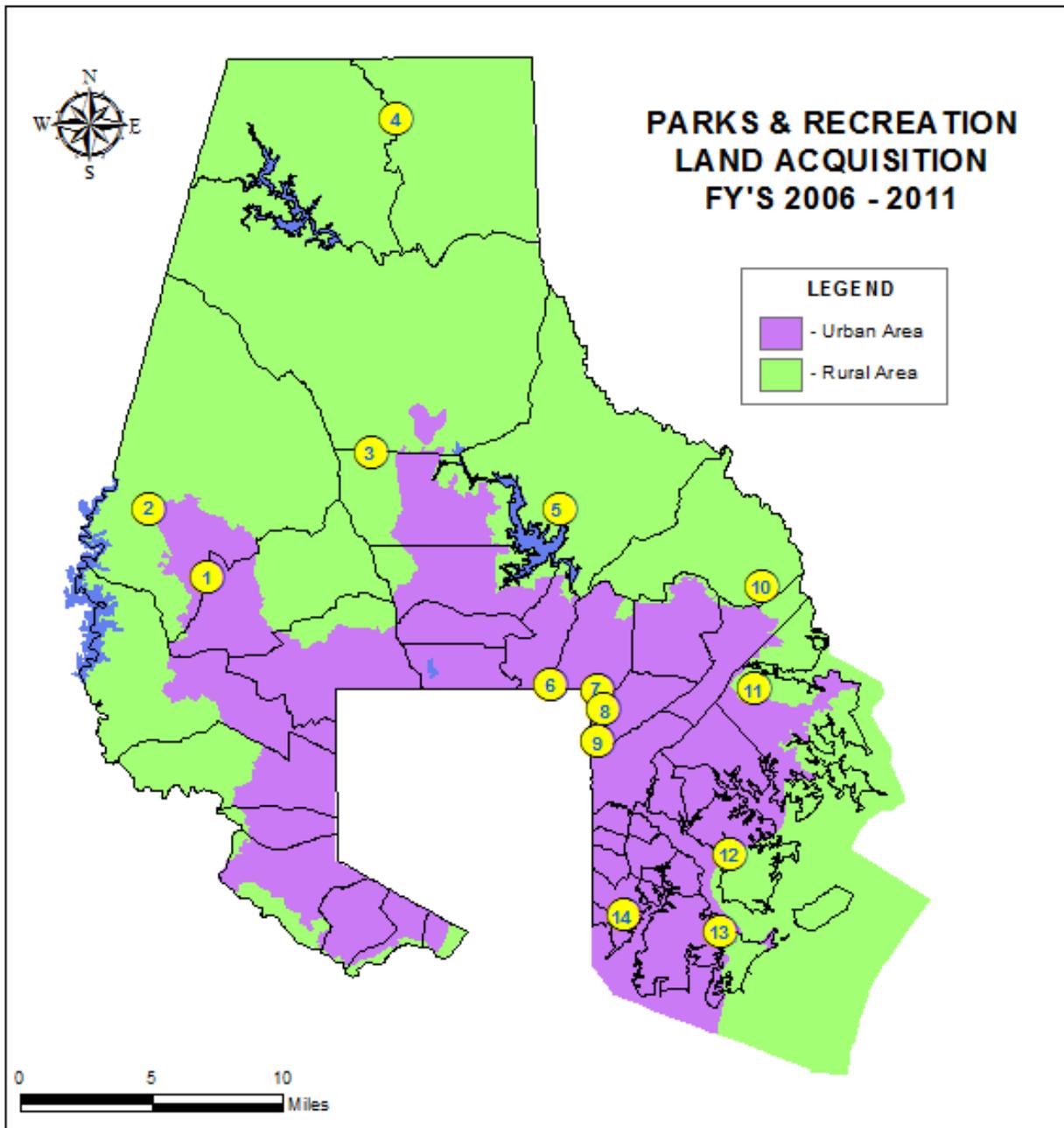
Approximately 390 acres within 11 separate sites were acquired with the use of \$13.7 million in local-side POS funding between FY's 2006 and 2011. These acquisitions range from park additions between 0.4 and 50 acres, to the purchase of the 6.5-acre former Perring Racquet Club to serve as a regional indoor recreation facility, to the POS and LWCF (federal land and Water Conservation Fund) assisted acquisition of the ~150 Rolling Mill Farm property that now serves as the Baltimore County Center for Maryland Agriculture and Farm Park. Additionally, DNR utilized state-side POS funding for a joint project with Baltimore County Recreation and Parks and the Baltimore County Department of Environmental Protection and Sustainability to preserve the ~250-acre BeeTree Preserve in northern Baltimore County through the first conservation and public recreation access easement in the County.

Efforts to fully protect POS have had only moderate success. The fiscal difficulties at the local, state and national levels in recent years led to a number of POS-impacting budgetary measures approved by the Maryland General Assembly. During the 2007 special legislative session a budgetary measure was approved that annually redirects \$21 million or more in POS funding from the counties to pay for the operations of the Maryland Park Service. This translates to a loss of approximately \$2.8 million in POS funding each year for Baltimore County. Additionally, approximately \$103 million in

local/county POS funding was diverted during the 2010 Maryland legislative session to help alleviate the State's budget crisis. Fortunately, the Governor and General Assembly concurrently legislated that this diversion would be paid back to the counties over a multi-year period, which has since been extended and is presently slated to run through fiscal year 2014. The FY'12 annual POS allocations for the counties was partially deferred as a result of a legislative action, allowing for the funding to be made available to the counties in thirds over a 3-year period rather than in their entirety at the start of FY'12. No new POS allocation was provided to the counties for FY'13, with the allocations instead being restricted to pay backs of what was taken or due in prior fiscal years. The above legislative actions have greatly diminished the flow of POS funding to the counties, and has in some instances diminished the confidence that counties have in POS as a reliable park funding source. Maryland DNR has itself been hindered in its efforts by reduction in state-side POS funding for their capital projects and partnership projects with local jurisdictions.

- Strategically target all available parkland funding resources to areas of existing and projected future needs, whether these needs be acreage-based (to meet the State acreage goal), facility-based (to provide land for needed recreational facilities) resource-based (to preserve significant or endangered natural areas), or policy-based.

The map on the following page, titled "Parks and Recreation Land Acquisition: FY's 2006-2011," displays properties acquired via purchase or donation from fiscal years 2006 through 2011. Eleven of the fourteen sites acquired are either within or at the very edge of the urban portion of the County, which generally serves as the County's Priority Funding Area. Two of the three rural area acquisitions (Rolling Mill Farm and BeeTree Preserve) were largely targeted for resource-based purposes, as described previously within the prior bullet. Seven properties were acquired to serve as additions to existing parks and recreation sites, including one (Fullerton) to provide much needed parking for park patrons, another (Vincent Farm) to allow for the construction of a public school recreation center, and a third (Concrete Homes) to enable the construction of the Watersedge Community Center. The Mount Vista Golf Course Property, formerly owned by the Baltimore County Revenue Authority, was transferred at no cost to the Department of Recreation and Parks, and together with the adjacent earlier-purchased Schmidt Property will help to serve the growing Kingsville and White Marsh council areas, which are grouped administratively within a single community office. The Smith Property – Ashmere Road, Somogyi and Karll Trust acquisitions provide sites that may be developed as parks to meet existing and future needs, and the Perring Racquet Club acquisition helped to meet growing demand for indoor recreation activities on a regional basis.



KEY TO SITES ACQUIRED

- | | |
|--|--|
| 1. Smith Property - Ashmere Road, 6.1 acres | 8. Fullerton Park & ESRC Addition, 0.4 acres |
| 2. Reisterstown Reg'l. Park Addition, 50.2 acres | 9. Hazelwood Park Addition, 3.6 acres |
| 3. Rolling Mill Farm, 149.3 acres | 10. Schmidt Prop. & Mt. Vista Golf, 137.5 |
| 4. BeeTree Preserve EA SEMENT, 252.7 acres | 11. Vincent Farm ESRC Addition, 7.7 acres |
| 5. Cloverland Park Addition, 13.0 acres | 12. Somogyi Property, 86.4 acres |
| 6. Perring Racquet Club, 6.5 acres | 13. Karl Trust Property, 41.4 acres |
| 7. Double Rock Park Addition, 5.0 acres | 14. Concrete Homes Park Addition, 1.1 acres |

- Employ the Baltimore County development process to provide quality local open space, obtain fees-in-lieu where appropriate (to help fund park acquisition and development), and to secure vital greenway connections. Resolve existing problems with the open space dedication process to ensure that local open spaces are deeded to the County in a timely and accurate manner.

Over 490 acres of land in the form of 119 combined local open spaces, greenways and flood plains were deeded via the development process to Baltimore County and assigned to DRP between FY's 2006 and 2011. These sites range in size from less than one-tenth of an acre to 32 acres. This does not include similar properties, including forest conservation reservations, that were assigned to the County's Department of Environmental Protection and Sustainability or the Department of Public Works, nor are open spaces owned by homeowner or condo-owner associations counted within these figures. While the greenways and flood plains are predominantly natural areas with only limited recreational opportunity provided, the majority of local open spaces consist of open, relatively flat green spaces that are suitable for such activities as dog walking or playing catch. Approximately ten of the dedicated greenway acquisitions made it possible to construct the first phases of the Red Run Greenway Trail network in the Owings Mills Growth Area.

A total of nearly \$2.8 million in fees-in-lieu of open space were collected between July of 2005 and November, 2011. Finally, a number of development agreements have included developer-funded and constructed recreational improvements such as new ball diamonds, paths and playgrounds.



Playgrounds such as this, situated at the Bonnie View Local Open Space in the Pikesville community, are sometimes provided as part of a development's open space agreement. Such convenient walk-to recreational opportunities often serve the surrounding community in addition to the specific development in which they are constructed.

- Revise the Greenways Map that appears in Baltimore County Master Plan 2010 and Baltimore County Land Preservation and Recreation Plan: 2000-2004 to create new designated greenways, and formulate a comprehensive greenways plan.

Though this specific recommendation has not been achieved as written, other activities that have transpired since 2005 have served to promote and lay the groundwork for achieving the general intent of this action. Additional greenway and greenway trail recommendations continue to be made within individual community plans. Further, the County's new bicycle and pedestrian access plans – one for Eastern Baltimore County and another for Western Baltimore County - provide a much more extensive perspective on bike and pedestrian corridors, and include hundreds of recommendations that may be applied within the development process and the County's capital improvement programs. These plans also spurred the establishment of the Baltimore County Pedestrian and Bicycle Access Advisory Committee in 2011, which is charged with the responsibility of devising implementation strategies for the bicycle and pedestrian access plans and for the general promotion of expanded safe pedestrian and bicycle access countywide.

- Exercise all means necessary for the acquisition of key prospective park sites, up to and including the powers of master plan conflict and condemnation.

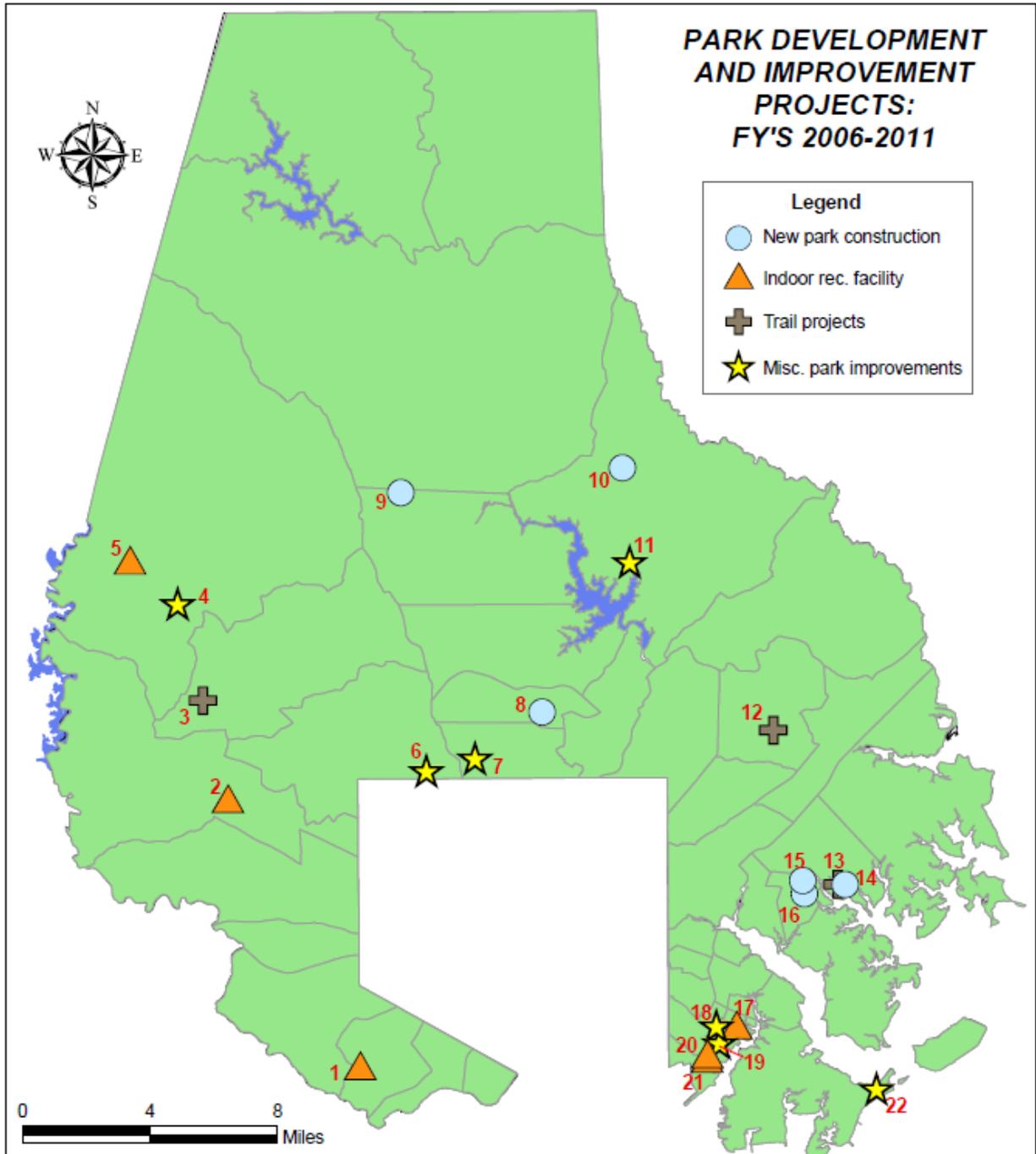
A single condemnation proceeding was initiated since the prior LPPRP, involving the acquisition of a key parcel of property to serve as an addition to Robert E. Lee Park.

- Work with landowners to secure tax credits and similar agreements that will enable them to donate (or sell at a reduced value) their land to the County if such properties would be of sufficient benefit to the County.

While no properties have been donated to the County in recent years, additional lands have come to the County through the tax sale process, triggered when privately-owned open space retained by a developer or a home or condo-owners association goes to tax sale as a result of the owners defaulting on property taxes. As a matter of practice, DRP seeks to obtain these open spaces (at no cost) through the tax sale process, which makes such lands available to the County prior to going to tax sale. This serves as another manner in which open space is preserved without acquisition-related costs.

- Provide a diversity of recreational facilities and areas to meet the needs of Baltimore County citizens, and to adequately serve the organized programs of the local recreation and parks councils.

Baltimore County continues to provide additional recreational facilities of a wide variety, though economic conditions have resulted in significant reductions in park spending in recent years and continue to be a major limiting factor. The majority of recent projects have involved capital renovations to existing parks and recreation facilities to keep them safe, usable and attractive. Fewer new park or site improvement projects are being initiated as the need for rehabilitation is deemed the top priority. See the map on the following page, as well as the next four action bullets, for progress reports for various types of new parks and facilities.



**PARK DEVELOPMENT
AND IMPROVEMENT
PROJECTS:
FY'S 2006-2011**

- Legend**
- New park construction
 - ▲ Indoor rec. facility
 - ⊕ Trail projects
 - ★ Misc. park improvements

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> 1. Arbutus Recreation Ctr. Dev't. 2. Randallstown Comm. Ctr. Dev't. 3. Red Run Trails 4. Hannah More Park Dog Park, Skate Park and Amphitheater 5. Reisterstown Reg'l. Sportsplex 6. Bonnie View Playground 7. Robert E. Lee Park Dog Park 8. Olympian Park Construction | <ul style="list-style-type: none"> 9. Ag. Center - Farm Park Const. 10. Sweet Air Park Const., incl. Jacksonville Comm. Center 11. Cloverland Park Rugby Field 12. Indian Rock Park Trail 13. Hawthorne Community Trail 14. Wilson Point Park Const. 15. Waterview Park Const. | <ul style="list-style-type: none"> 16. Fields at Renaissance Park Construction 17. Inverness Comm. Ctr. Dev't. 18. Stansbury Park Pavilion 19. Chesterwood Park Field and Sand Volleyball Court 20. Watersedge Comm. Ctr. Dev't. 21. Sollers Pt. Multi-Purp. Ctr. Dev't. 22. Millers Isl. Park Multi-Use Court |
|---|---|---|

- Provide a sufficient quantity of traditional outdoor recreation facilities such as ball diamonds, athletic fields, sports courts, playgrounds and picnic areas. In the case of athletic fields, seek to provide enough fields to meet existing demands while at the same time allowing worn and de-vegetated fields to be “rested” and rehabilitated.

Many of the star and circle symbols on the prior map, representing miscellaneous park improvements and new park construction respectively, involved the construction of traditional outdoor recreation facilities between fiscal years 2005-2011. New fields and/or ball diamonds were provided at Sweet Air Park, Wilson Point Park, The Fields at Renaissance Park and Chesterwood Park. A small multi-purpose court was constructed at Millers Island Park, a property leased from Maryland DNR to serve as a neighborhood park for the Millers Island peninsula. Developer-funded playgrounds were installed at Bonnie View and Waterview, at Sweet Air Park (assisted by the fundraising efforts of local citizens), and at Wilson Point Park and The Fields at Renaissance Park. Picnic pavilions were erected at Sweet Air, Wilson Point, Chesterwood, and Fields at Renaissance Parks.

- Provide sufficient indoor facilities and access time to meet expanding demands for year-round recreation, to serve programs that require indoor space, and to facilitate use by community and civic organizations.

Recognizing the importance of providing year-round recreational opportunities for the public, Baltimore County has continued its efforts to provide recreation, community and multi-purpose centers, many of which serve multiple uses including recreation. Since the start of FY’06 eight new centers have been constructed countywide. Six were individual center construction projects (triangles on map), while two (Jacksonville Community Center at Sweet Air Park and Stembidge Community Center at the Fields at Renaissance Park) were constructed as part of new park development projects.

The diversity of facilities and recreational opportunities at the centers has expanded in recent years. The Randallstown Community Center, at 58,000 square feet, is the County’s largest community center, and features a 25-meter, six-lane indoor pool operated by the YMCA, a 300-seat performance hall, and computer/tech center, in addition to the gymnasium and activity room facilities that are traditionally provided at the centers. The Reisterstown Sportsplex, operated under a cooperative agreement between DRP and the Baltimore County Revenue Authority, features an indoor sports field on one side of the building, and indoor ice rink on the other. The 14,400-s.f. Jacksonville Community Center features both a senior center and recreation center, and represents a major improvement over the nearby jointly-used Paper Mill Center that it replaced. The County’s latest indoor recreation facility, the 28,000-s.f. Sollers Point Multi-Purpose Center, features a gymnasium, combination auditorium/multi-purpose room, class/activity rooms, a tech center, community museum, commercial kitchen and library. In addition to these indoor recreation facilities built at existing park sites, the former Perring Racquet Club was purchased and renovated to serve as a regional recreation center and features the County’s only public facility with two indoor sports fields.

- Construct additional trails and paths to meet growing demands for linear-based recreation (walking, jogging, bicycling, etc.). Work with County and State agencies to establish

pedestrian and bicycle connections between parks, residential areas and other points of interest, in conjunction with plans such as the Eastern Baltimore County Pedestrian and Bicycle Access Plan.

Trail construction projects were completed at three sites between fiscal years 2006 and 2011. The Red Run Trail Network in Owings Mills consists of trails with both paved and mulch surfaces, and represent the early stages of what is intended to be a trail network that will reach virtually all corners of the Owings Mills Growth Area. A short paved path was constructed at Indian Rock Park in Perry Hall as the first segment of what is expected to be a large regional trail system. The third new trail, the Hawthorne Community Trail, is a network of both on and off-road segments that run throughout the peninsula-based Hawthorne community, connecting to Hawthorne-Midthorne Park, Darkhead Creek Park, Kingston Park and Hawthorne Elementary School Recreation Center. The Hawthorne Trail is planned to connect with a larger regional trail that will connect the communities of Middle River and Chase. Additional trail expansion also took place at Marshy Point Park and Nature Center (not on map) as part of a greater park improvement project. The new park projects at Sweet Air, Wilson Point, and the Fields at Renaissance Park also included paved paths networks that help diversify the recreational uses of those sites.



Boardwalk overlook with interpretive sign, situated along a portion of the Red Run Greenway trail network in Owings Mills.

- Provide new types of recreational facilities, where appropriate, and where sufficient demand has been expressed by County citizens.

The County continues to develop new, non-traditional recreational facilities to meet the diversified recreational demands of the citizenry. Public facility “firsts” in Baltimore County between fiscal years 2006 and 2011 included indoor sports fields (Reisterstown Sportsplex, Southeast Regional Recreation Center and Northeast Regional Recreation Center), indoor ice rink (Reisterstown Sportsplex), and formalized dog parks (Hannah

More Park, Robert E. Lee Park). Cloverland Park became the home of the County's only public cricket field.

- Provide appropriate service amenities such as restrooms, storage areas, water fountains, parking areas, sidewalks and paths, and facility/security lighting.

The appropriate types of service amenities continue to be incorporated into new park development projects such as those at Sweet Air Park, Wilson Point Park and the Fields at Renaissance Park. Additionally, many other support amenities are provided as needed through minor park improvement projects (not displayed on map). One example is the addition of storage buildings at nine parks and an equal number of school recreation centers. These small structures are particularly helpful in supporting the organized programs of the recreation councils. Another important type of project is parking expansion at sites that are lacking in parking, with recent examples being such projects at Belmont Park, Northwest Regional Park, Oella Park and Center, and Chesterwood Park.

2. Renovate and rehabilitate parks to address the issues of facility aging and outdated recreational infrastructure.

As capital funding has dwindled, the need for prioritizing the use of available funding has become even more essential. Park and facility rehabilitation projects to keep sites and facilities safe, functional and attractive are among the highest priorities at present.

- Evaluate the functionality and condition of the County's older parks, and conduct appropriate site redesign, rehabilitation and improvement projects.

Two large-scale park rehabilitation/modification project took place since the prior LPPRP, both in southeast Baltimore County. The first involved the transformation of Chesterwood Park in the Dundalk community. A former Baltimore County Highways Shop was relocated from the site, with its land area being converted to park uses including a lighted athletic field, storage building and an expanded and upgraded parking lot. Other site renovations were also completed within the original park area, including rehabilitation of picnic pavilions, repair and expansion of walkways, and installation of a sand volleyball court. These site enhancements and renovations allow the park, long a popular picnicking venue, to offer an even wider array of recreational opportunities. The second, more recent project of this nature is the ongoing transformation of the Sollers Point High School Recreation Center to a park and multi-use community center.

- Conduct comprehensive capital renovation programs, including existing programs for playground equipment, courts, fields and facility lighting, and parking lots; seek opportunities for the expansion of such programs to other types of recreational facilities and support amenities.

The hundreds of recreational facilities operated and maintained by Baltimore County and the DRP demand constant attention, requiring that they be regularly evaluated and that priorities for renovations are set. This form of project is typically the most numerous of the capital project types, reflecting both the extent and age of the County's recreational infrastructure. In the period including fiscal years 2006-2011: more than 75 tennis, multi-purpose and specialized recreation courts have been renovated; a similar

number of playground renovations/retrofits took place, involving work ranging from replacement of defunct or vandalized equipment, to surface mulch replacement; standard field renovations have taken place at twelve sites; over a dozen lighting renovations projects, ranging from large field lighting projects with more energy-efficient systems to smaller parking lot lighting jobs, have occurred; and a similar number of parking renovation projects were completed.

- In cases where facilities are no longer needed or desired, explore opportunities for re-utilizing or retrofitting the facilities for other recreational purposes.

There are numerous reasons why the County may elect to remove or modify an existing recreational facility. In some cases a facility has become disused, and is removed as unnecessary, or retrofitted into some other facility type/use. The existing tennis courts at Hawthorne Park were converted to a soccer court in early FY'06 as a result of community input. Some facilities may be removed as a result of repeated vandalism. A repeatedly vandalized playground was removed from the Rutherford Heights Open Space after vandals burnt the playground equipment. Use issues may also arise and lead to facility removal or modification, ranging from foul language and other poor behavior, to illicit or criminal activities, to unsanctioned after-hours facility use or abuse. Such issues have led to the removal of basketball hoops at numerous multi-purpose courts at parks and school recreation centers.

3. Participate in, and play a vital role within, community revitalization programs such as the County's "renaissance" initiative.

- Provide quality parks and recreational facilities within community revitalization areas and renaissance communities. *Note: The "renaissance" initiative has been replaced by the designation of Community Enhancement Areas (see definition on page 7).*
- Actively participate in community redesign processes, recognizing the important role that parks play in providing and maintaining attractive, healthy neighborhoods.
- Maintain and improve parks in older communities to ensure that these sites remain attractive and functional, and do not contribute to community degradation.

Baltimore County has recognized the role that parks and recreation sites play in community revitalization and stabilization. A number of the major park projects took place between fiscal years 2006 and 2011 helped to achieve the first two bulleted actions above. In the Essex-Middle River area alone there were four new park projects that transformed former land uses to provide diverse recreational opportunities—Wilson Point Park with its waterfront promenade, piers, boat ramp, picnic facilities, pathways, playground and athletic field; the Fields at Renaissance Park and its community center, ball diamond, athletic field, pathways, picnic facilities, playground and multi-purpose court; the smaller Chesapeake Gateway Park with its landscaped grounds and seating area with views of the water; and the developer-constructed Waterview Park, a small walk-to neighborhood park with its playground and short loop path. The construction of the expansive Randallstown Community Center continued the parks and recreation component of revitalization efforts along the Liberty Road corridor that also included the 2002 construction of Stevenswood Park. Numerous FY'06-'11 park renovation and enhancement projects likewise helped to achieve the aims of the third bulleted action.

Belmont Park, in the Parkville community, was enhanced through the construction of a much-needed parking addition and installation of two picnic pavilions, along with the renovation and expansion of the park's playground. Carriage Hills Park in the Liberty Road corridor was enhanced with a new parking lot, walkway, and picnic pavilion, as well as a renovated and expanded playground. Chesterwood Park in Dundalk underwent the enhancement project described previously under goal #2. The Hawthorne Community Trail and renovations and improvements to Hawthorne-Midthorne Park helped to maintain and expand recreational opportunities in that peninsula-based community.



The new picnic pavilion and paved path at Carriage Hills Park in Randallstown expands the park's recreational opportunities

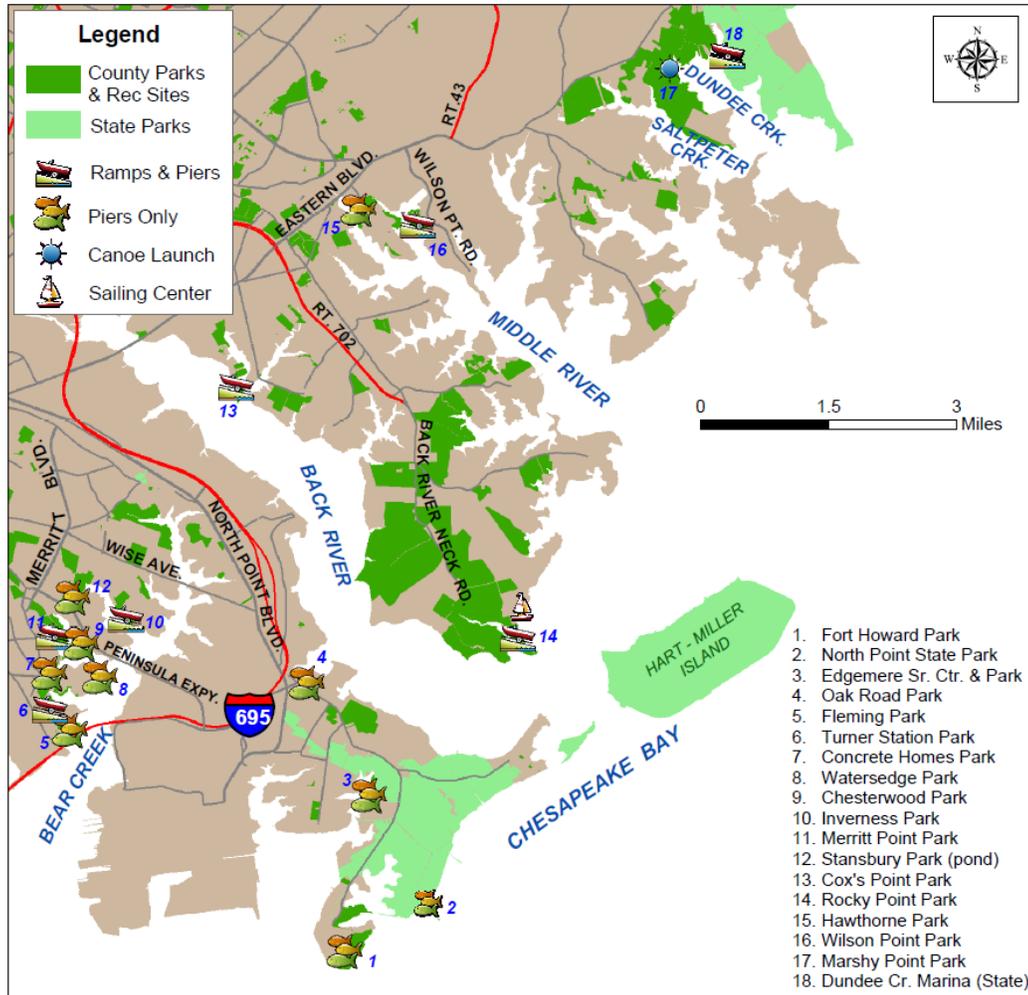
4. Expand waterfront access to the Chesapeake Bay and its tributaries.

- Pursue opportunities for the acquisition of waterfront land to serve as parkland.

Two properties acquired since the writing of the last LPPRP, the Somogyi and Karll Trust Properties, feature limited waterfront (Somogyi) or tidal wetlands (Karll). No other waterfront park sites were acquired in that time period.

- Provide an assortment of recreational facilities at the County's waterfront parks, ranging from water-specific facilities such as boat ramps and fishing piers, to general amenities including picnic pavilions, playgrounds and paths.

Baltimore County continues to develop and enhance waterfront parks to offer diverse recreational opportunities. The map on the following page displays waterfront facilities available in eastern-southeastern Baltimore County, where the majority of the County's shoreline is situated. The map does not show the County's public beaches at Rocky Point and Oregon Ridge Parks, nor the State's Hammerman Area of Gunpowder Falls State Park. Neither does it display the Patapsco River-based boat ramp and pier at Southwest Area Park or water-based facilities at the reservoirs, including the boat ramp situated at the Loch Raven Fishing Center.



A few noteworthy waterfront projects took place between fiscal years 2006 and 2011. The previously described Wilson Point Park construction project created a waterfront boardwalk promenade with piers, used by walkers and fishermen alike. The park's double-lane boat ramp has provided conveniently situated public boating access to fill the void that existed between public ramps at Rocky Point Park and the State's Dundee Creek Marina. Wilson Point also features other amenities including paths, picnic pavilions and a playground that allow visitors to enjoy a pleasant day with expansive waterfront views. At the more natural end of the spectrum are the improvements that were constructed at Marshy Point Park and Nature Center, situated on a peninsula in eastern Baltimore County. In addition to an expansion of the nature center building, recent park improvements included canoe and kayak facilities (launch pier and canoe storage building), construction of an access road to an isolated section of the park, and additional trails that lead to a number of scenic waterfront overlooks.

- Utilize the Marshy Point Nature Center at Dundee and Saltpeter Creeks Park as a key platform for providing citizens of the region with opportunities to experience, learn about, and gain an appreciation for the Chesapeake Bay and its ecosystem.

With its location on two major tributaries of the Chesapeake Bay, Marshy Point (now named Marshy Point Park and Nature Center) is perfectly situated to serve as a hands-on venue for learning about the Bay and tidal ecosystems. The expansion of the nature center added a large classroom to better accommodate the school groups that visit the park to learn about the natural environment, including all fifth grade students attending Baltimore County's public schools. A host of interpretive programs take place at the park and nature center, from one-day programs and events, to school group visits, to lengthier nature camps. The facilities that have been added, such as the trails and the canoe launch and storage building, provide greater access for both organized programs and general recreational use. At present DRP is working with a non-profit group that wishes to construct the next section of the regional greenway trail that passes through the park, as a memorial effort. The trail is ultimately planned to connect a series of public lands including Chase Elementary School Recreation Center, Eastern Regional Park, the Tidewater Village Open Space, Marshy Point, and the Hammerman Area of Gunpowder Falls State Park.

- Evaluate potential Bay-related uses, both recreational and environmental, for the 400+ acres former Shapiro Property on the Back River Neck peninsula.

No progress has been made to date, with a portion of the property continuing to serve as an airfield. A limited portion of the site is also used by a model aircraft group.

- Evaluate all existing waterfront park sites, both developed and undeveloped, to explore opportunities for enhancement while at the same time undertaking appropriate environmental conservation measures.

This is an ongoing process that is impacted by the availability of capital funding resources. Recent declines in funding, as well as policy changes to certain grants programs, have resulted in the delay or cancellation of some proposed projects, including the addition of a floating pier at Fleming Park and Community Center, and renovations to the storm-damaged pier at Fort Howard Park. The establishment of the County's first formalized water trails for canoe and kayak access was proposed as part of the County's efforts to commemorate the upcoming bicentennial of the War of 1812 and its Battle of North Point, but there is insufficient funding to implement such plans at present. Environmental conservation efforts continue to take place as needed, particularly in the form of shoreline restoration projects managed by the County's Department of Environmental Protection and Sustainability. Measures to improve water quality and protect the Chesapeake Bay continue to be made at parks and waterfront recreation sites, ranging from planting of forest buffers as was done at Chesterwood Park, to the establishment of naturalized no-mow areas such as the one that was included within the Wilson Point Park development project. The County is hopeful that funding associated with major port dredging projects will allow some projects such as those described above to proceed.

5. Pursue alternative funding resources for park acquisition, development, and capital improvements, and for recreational programs and special events.
 - Aggressively pursue both public and private grant opportunities.

Some success has been achieved in the area of grant procurement since the prior LPPRP. The largest fiscal impact came in the form of a number of substantial State of Maryland grants approved as part of the State's annual legislative sessions. Chief among these was a \$3 million matching State grant for site rehabilitation and enhancements at Robert E. Lee Park, for which Baltimore County gained responsibility through a 2009 long-term agreement with the City of Baltimore. This grant money, combined with County funding, allowed Baltimore County to replace the deteriorated and unsafe pedestrian bridge that serves as the primary access to the park's main use area, construct a formal parking area, create a dog park on the point of the park's peninsula, re-route and restore certain trails and paths, correct substantial erosion problems, construct a boardwalk to provide pedestrian access from the nearby light rail station, and complete other associated work. An additional opportunity to secure an alternative funding source for parks and recreational facilities in southeast Baltimore County may be upcoming, through the "Harbor Team" project that is associated with dredging of the Baltimore Harbor and its associated shipping lanes.

- Solicit businesses and citizens for donations, enabling them to contribute to the quality of life in the jurisdiction in which they live and do business. Expand the scope of existing sponsorship programs.

Private donations have contributed to several projects in recent years, including \$52,000 raised by local citizens for the playground at Sweet Air Park and \$200,000 contributed by the Lutherville-Timonium Recreation Council towards the construction of a synthetic turf field at Seminary Park. A much larger-scale donation came in the form of the no-cost transfer of the 111-acre former Gunpowder Falls Golf Course from the quasi-public Baltimore County Revenue Authority to DRP, allowing the site to be transformed from a financially struggling public golf course to a public park. Finally, Baltimore County continues to work with a group of citizens that propose the construction of a memorial trail at Marshy Point Park and Nature Center.



The inspirational "Our Children's Playground" at Sweet Air Park was partially funded by \$52,000 in private donations. The butterflies are a symbolic gesture dedicated to the memory of children who passed at an early age, with the playground serving as a legacy that may be enjoyed by children and families for generations to come.

- Enter into appropriate manage-lease agreements to provide citizens with recreational opportunities that are outside the scope of what may feasibly be offered by the County.

Three significant manage-lease agreements have been initiated in recent years, providing facilities that DRP is not in a position to administer. Two indoor swimming pools – one at the newly constructed Randallstown Community Center and the other at the rehabilitated Dundalk Center – have been opened for public use, under the management of the YMCA. The Reisterstown Sportsplex at Reisterstown Regional Park was jointly constructed by DRP and the Baltimore County Revenue Authority, providing an indoor sports field operated by DRP and an indoor ice rink administered by the Revenue Authority. These agreements help to provide diversified public recreational opportunities to the citizens without significant impacts upon Recreation and Parks' funding resources.

- Evaluate and make adjustments to existing fee structures where appropriate.

Various fee structures have been modified since the time of the prior LPPRP, including those associated with DRP's revenue producing facilities (the beaches and Loch Raven Fishing Center), and those for the rental of ball fields by groups not affiliated with the recreation and parks councils (e.g., private sports camps). While most fees have increased to help offset increased operational costs, the County modified the entry fee structure for its beaches in 2011 to allow children of ages eleven and under to enter for free, supporting efforts to provide local citizens with free or low-cost leisure opportunities at a time when many are facing financial struggles.

- Utilize the local open space waiver fund for the acquisition of additional local parks and for the construction of recreational facilities.

Approximately \$1.1 million in open space waiver (fee-in-lieu) funding has been invested within eight separate projects since the last LPPRP. Projects ranged from playground construction and renovations, to the construction of a skate park (Hannah More Park), to the construction of a memorial plaza at Fort Howard Veterans Park. The waiver fees have also been utilized as a funding source for grants to the non-profit NeighborSpace of Baltimore organization, which acquires properties to serve as open space and passive parks in communities within the urban section of the URDL. Approximately \$680,000 in waiver funding has been allocated to NeighborSpace since the start of fiscal year 2006.

- Procure surplus State lands that are of recreation, parks or open space benefit.

While a number of surplus properties owned by the State have been explored in the recent past, none have been acquired. However, the County is presently working with the Maryland Environment Trust (MET) to accommodate the transfer of an ~18-acre property MET owns adjacent to Robert E. Lee Park. Robert E. Lee Park itself is owned by the City of Baltimore, but is now operated and administered by Baltimore County Recreation and Parks via a long-term license agreement with the City.

6. Promote a greater appreciation for the natural environment through interpretation and hands-on experiences, and expand efforts to protect sensitive environmental areas within the County's parklands.

- Perform assessments of existing and future park sites to delineate sensitive environmental areas and to identify appropriate protective measures.

The natural features of properties that are being considered for acquisition are considered as part of the parkland acquisition process, and since the time of the last LPPRP a procedural decision has been made to conduct professional environmental assessments on all properties being considered for acquisition via purchase or donation. Thorough analysis of environmental considerations such as forest buffers, flood plains, steep slopes and critical areas likewise takes place within the design phase of park construction and enhancement projects. In some cases sensitive areas are restored and/or protected through the planting of natural vegetation or establishment of “no-mow” areas, particularly within critical areas or near streams. Such measures help to sustain water quality and likewise contribute a “greening” effect to parks. DRP regularly works Baltimore County EPS and groups such as conservation organizations and the County’s Forestry Board to initiate tree planting projects at parks and other recreation sites including school-recreation centers.

- Promote environmental awareness through the use of interpretive signage and educational programs at both the County’s interpretive centers and general park sites.

An important aspect of Baltimore County’s environmental sustainability efforts is the education of the public to garner a greater appreciation for the natural environment. Environmental education now takes place in all of the County’s public schools, but parks – and in particular the County’s parks with interpretive centers – offer excellent opportunities to experience and learn about nature in a hands-on, in-person manner. The previously described improvements to Marshy Point Park and Nature Center (a site recognized within the multi-state Chesapeake Bay Gateways program) have enhanced the site’s ability to serve as a key venue for learning about the Chesapeake Bay and its tidal ecosystem. Site improvements continue to be made at Cromwell Valley Park, including renovations to the Merrick House to allow the building to host public programs, most of which are nature-focused.

A less-known form of environmental interpretation is a main emphasis of the recently acquired and newly developed Baltimore County Center for Maryland Agriculture and Farm Park, situated at the eastern edge of the Worthington Valley, gateway to the County’s traditional “horse country” and near the edge of the URDL where the urban part of the County transitions into the rural area. The center and farm park offer an expanding scope of learning opportunities for farmers and prospective farmers, including education on sustainable, environment-friendly farming practices. The general public can learn about the importance of farming, and bring home information that they can apply in their own yards and gardens, while at the same time enjoying the farm and nature-focused recreational opportunities afforded by a day in the country.

- Work with DEPRM on such projects as stream restoration, floodplain reforestation, and forest health assessments.

DRP and Baltimore County’s Department of Environmental Protection and Sustainability (formerly DEPRM) continue to work together on a wide range of projects at parks and recreation sites countywide. Projects that are either underway or have been completed since the prior LPPRP include: stream restoration projects at Cromwell

Valley Park (Minebank Run), the Fields at Renaissance Park (Hopkins Creek), Catonsville Community Park (unnamed stream), public parkland along the Gwynns Falls, St. Patrick's Field leased site (Redhouse Creek) and Overlook Park (Herring Run); shoreline restoration projects at Carrollwood Park and Battle Grove Park (EPS also worked with the State of Maryland on another important shoreline restoration project at Pleasure Island, part of Hart Miller Island State Park); and forest health assessments and projects at Oregon Ridge Park, Cromwell Valley Park, Oregon Ridge Park, Villa Nova Park, and various public lands on the Back River peninsula including Rocky Point and Pottery Farm Parks.

7. Enhance park and facility accessibility and provide quality recreational opportunities for individuals with disabilities.

- Retrofit existing facilities to make the County's parks as universally accessible as possible. Place particular emphasis upon efforts to provide access from parking areas and park entry points to site amenities.

The vast majority of accessibility enhancements are now tied in with larger overall park and facility renovation and improvement projects. Accessibility is assessed as a key factor in any new project, with the most common associated work being the renovation and expansion of sidewalks and paths to provide access to site amenities. An example of this common type of project is the Hannah More Park field renovations project, within which new paths with appropriate grades were constructed to provide access from the parking area to the fields. An example of a project completed for the sole purpose of enhancing access is the recent construction of an accessible ramp at Riderwood Hills Park to provide access to that park's recreational facilities.

- Evaluate and revise design standards to ensure that new facilities are sufficiently accessible and meet Americans with Disabilities Act Guidelines (ADAG).

The requirements of the Americans with Disabilities Act are fully considered as part of the design project for all capital projects.

- Provide specially designed adaptive facilities similar to the existing wheelchair softball diamond at Rockdale Park, "super-accessible" playgrounds and accessible community gardens.

No such facilities have been developed since the prior LPPRP, though various renovations and site improvements (including some funded through County grant funding) have taken place on a portion of Cromwell Valley Park at which the Therapeutic Alternatives of Maryland (TALMAR) gardens and horticulture therapy center operates. The non-profit TALMAR serves individuals of all ages, with a focus upon those with special needs and disabilities.

8. Expand opportunities for citizens to participate in and experience arts programs and events, as well as historically and culturally significant sites.

- Rehabilitate and upgrade the County's arts facilities.

Since the time of the prior LPPRP the County has completed a major upgrade of the restroom facilities at Lurman Woodland Theater (on the grounds of Catonsville High

School Recreation Center) and made additional improvements including path repairs and extension at Holt Park and Center for the Arts.

- Provide additional strategically sited venues for the arts throughout the County.

New performing arts theaters/auditoriums were included as part of the construction of the Randallstown Community Center and Sollers Point Multi-Purpose Center, and the new Watersedge Community Center's activity room was designed and constructed to better serve the large dance programs of the local recreation council. In most cases such facilities are designed to be multi-purpose in nature, and may be used for both the arts and other recreational activities. Such use supports state and local goals of maximizing investment to meet multiple public needs.

- Provide arts and cultural programs and special events at local, regional and countywide levels.

The County continues to achieve this objective, with activities, programs and events ranging from local arts programs offered by the recreation and parks councils, to regional festivals and events such as ethnic festivals and concert series at venues such as Lurman Woodland Theater and Dundalk Heritage Park, to larger events such as the Baltimore Symphony Orchestra concerts at Oregon Ridge Park, which draw concert-goers from throughout the County and beyond.

- Work with Baltimore County Public Schools to maximize the use of school-based arts facilities such as auditoriums.

The auditoriums and other indoor facilities at school-recreation centers continue to provide conveniently situated venues for local arts programs ranging from crafts, to introduction to art, to dance. This allows the public, and in particular children, nearby opportunities to participate in the arts.

- Help protect sites of cultural and historical significance, and provide applicable interpretive facilities, displays and programs.

The County continues to invest substantial resources into the preservation and protection of sites and structures that have historical and/or cultural significance. Some examples from recent years include the previously mentioned renovations to the Merrick House at Cromwell Valley Park, the jointly funded (State and County) rehabilitation projects at the Todd House on the North Point Peninsula, the construction of a period-style cabin on the area where Banneker Homestead is being partially replicated at Benjamin Banneker Historical Park and Museum, and renovations and enhancements to the Perry Hall Mansion, a structure that dates to the 1770's and which was acquired by the County in 2002. Other current efforts involve sites associated with the War of 1812 and the 1814 Battle of North Point.

9. Evaluate facility design standards and specifications and make modifications as necessary to better meet recreational demands, enhance facility safety and functionality, and to ensure that parks and facilities are attractive community enhancements.

- Investigate and implement methods for rectifying problems with the devegetation of athletic fields.

Heavy use of natural surface (turf/grass) fields continues to lead to problems such as devegetation and associated soil runoff. One major program that has been implemented since the time of the prior LPPRP is the County's effort to provide synthetic turf fields that are strategically situated at parks, school-recreation centers and community colleges. To date thirteen synthetic turf fields have been constructed, at a cost of over \$11.5 million. Modern synthetic turf fields offer a number of significant benefits, including: much longer longevity prior to requiring major renovations, a more consistent playing surface that studies have shown reduce the occurrence of severe injuries, and better management of rainfall that results in the fields remaining available for play just after and even during periods of rainy weather.

- Perform regular evaluations of facility specifications and make any necessary modifications.

The County is ever mindful of the need to consider and, if necessary, revise facility specifications. Many lighting renovations projects have taken place in recent years to bring the County's field lighting system up to modern illumination standards, while also enhancing system energy efficiency. Additionally, the County works with playground manufacturers and vendors to remain aware of updated playground safety standards, which help to ensure that playground and tot lot equipment is as safe as is feasible. Finally, the majority of sizeable new County buildings are being designed and constructed to meet the environmental sustainability standards known as LEED (Leadership in Environmental and Energy Design).

- Revisit the design of recreation and community centers and make modifications to respond to staff concerns and to enable these facilities to be more functional for recreation and community purposes.

Baltimore County has, in recent years, implemented a wider variety of community center designs, employing a function-based process for designing and constructing facilities based on need and function. In cases such as the 58,000-square foot Randallstown Community Center and the 28,000+ square foot Sollers Point Multi-Purpose Center the structure size is much larger than the base standard 9,000-s.f. community center, with space provided for such facilities as swimming pools, libraries, auditoriums, and/or tech labs. In the case of the 24,000-square foot Jacksonville Community Center the building serves as a multi-agency/function facility with both a recreation center and senior center. The functionality of the County's centers is greatly enhanced by placing more emphasis upon proposed and needed uses.

- Design parks and facilities to be compatible with and visually benefit the surrounding community, and to encourage recreational use.

The surroundings of park sites are an important consideration to the County during the park design phase. Every effort is made to construct or renovate a park in a manner that is suitable and complementary to the park's surroundings, whether a densely developed community or a historically significant environment. Two prime examples are the Wilson Point Park construction project and the Robert E. Lee Park renovations and enhancements project. In the case of Wilson Point, the park design reflected the heritage of the eastern Baltimore County area and greater Middle River in general as an important aircraft manufacturing hub during and after the time of World War II. Design

elements that pay homage to that heritage were implemented when the park was developed. Robert E. Lee Park's rehabilitation and enhancement project, which continues as of the writing of this plan, has been sensitive to the park's situation within the federally designated Lake Roland Historic District. Project coordination involved communications with the Maryland Historical Trust (MHT), with particular attention given to rehabilitating the entry bridge's abutments in a manner conducive to their status as historically significant structures. Other site enhancements such as fencing were done in a manner that blends well with the park's historical and naturalistic setting.



Simple design elements such as the use of black fencing, railings and bollards help the recent renovations and improvements at Robert E. Lee Park blend with the historical and natural elements of the park.

10. Allocate sufficient resources to guarantee that parklands and recreational facilities are managed and maintained in a quality manner, and to allow for a high standard of public services.

- As the park system continues to grow, and more sites and recreational facilities are established, provide sufficient staffing to ensure that the County's parks and facilities are well managed, programmed and maintained.

Shifting park maintenance and management services, such as grass mowing and tree maintenance, to contractual services has enabled required park maintenance to occur while monitoring overall operating expenses during difficult economic conditions. Some limited and strategic changes have been made in the area of recreation services structure to provide additional staff support and resources in communities that have larger populations and/or a greater number of facilities coupled with strong program participation. Additional staffing has been added where most needed to administer new parks and facilities including the Reisterstown Sportsplex, Randallstown Community Center, Northeast Regional Recreation Center, and Robert E. Lee Park. At the upper

administrative level, structural changes have likewise taken place, largely in the form of the transfer of certain functions (local open space and greenways review within the development process, capital project coordination and management, and - most recently - park maintenance) to other agencies as part of the County's efforts to consolidate functions and reduce operating costs.

- Provide staff with sufficient resources with which to carry out their duties. Recreation program staff must be provided adequate office equipment, while maintenance staff must be allocated appropriate quantities and types of maintenance equipment.

Since the time of the last LPPRP there have been concerted efforts made to provide staff with the tools required to best perform their duties. This has particularly been the case with information technology and communications equipments, as more and better resources have been provided to staff to help the agency to better respond to changing public demands and communications preferences/trends. Specialized equipment such as motorized carts have been provided at some larger parks that have permanent staff, for purposes ranging from security to maintenance and program support.

- Keep abreast of, and participate in, national and statewide initiatives that are targeted towards keeping parks clean and safe, and which promote the wellbeing of park visitors and recreation program participants. A recent example is DRP's creation of a graffiti eradication team (GET) to quickly remove graffiti, especially in cases where it is offensive and/or gang-related.

DRP continues to monitor national and state trends in parks and recreation in an effort to better serve its constituency and manage its parks and facilities. Staff participation in the Maryland Association of Counties (MACo) Parks and Recreation Affiliate, and in the Maryland Recreation and Parks Association (MRPA) offer two platforms that often provide valuable insights. Such participation has provided numerous benefits in the recent past, such as the utilization of another county's (Harford County) model to comply with new State regulations pertaining to concussion awareness, and garnering the assistance of fellow parks and recreation agencies (New York City, Maryland DNR, Frederick County, Anne Arundel County) to develop Baltimore County's first ranger program, at Robert E. Lee Park.

11. Participate in various partnerships to maximize resources and efforts for the benefit of Baltimore County citizens.

- Partner with the volunteer-based recreation and parks councils to provide quality recreational opportunities.

The recreation and parks councils continue to be an essential element of the delivery of recreation services to the citizens of Baltimore County. In FY'11 alone over 1.5 million hours of volunteer service was provided through the councils. Additionally, the councils actively raise funds that help keep registration costs low and affordable, and in FY'11 contributed more than \$2.76 million to help pay the field leaders and building attendants that oversee parks and recreation sites during programs, activities and events. As economic conditions have impacted the County's available fiscal resources for parks and recreation, the councils have largely exerted extra effort and expended more of their resources to help fill the void. Another invaluable contribution that some councils bring

is their ability and willingness to assist with the funding of capital improvements or renovations, an example being the Lutherville-Timonium Recreation Council's contribution of \$200,000 towards the cost of the Seminary Park synthetic turf field. The councils, in particular those associated with interpretive centers and facilities, also serve as a platform through which groups and individuals such as Boy and Girl Scouts donate their services to work on park improvement projects.

- Utilize the Board of Recreation and Parks as an integral link between the citizens of Baltimore County, the recreation and parks councils, the County Council, and DRP.

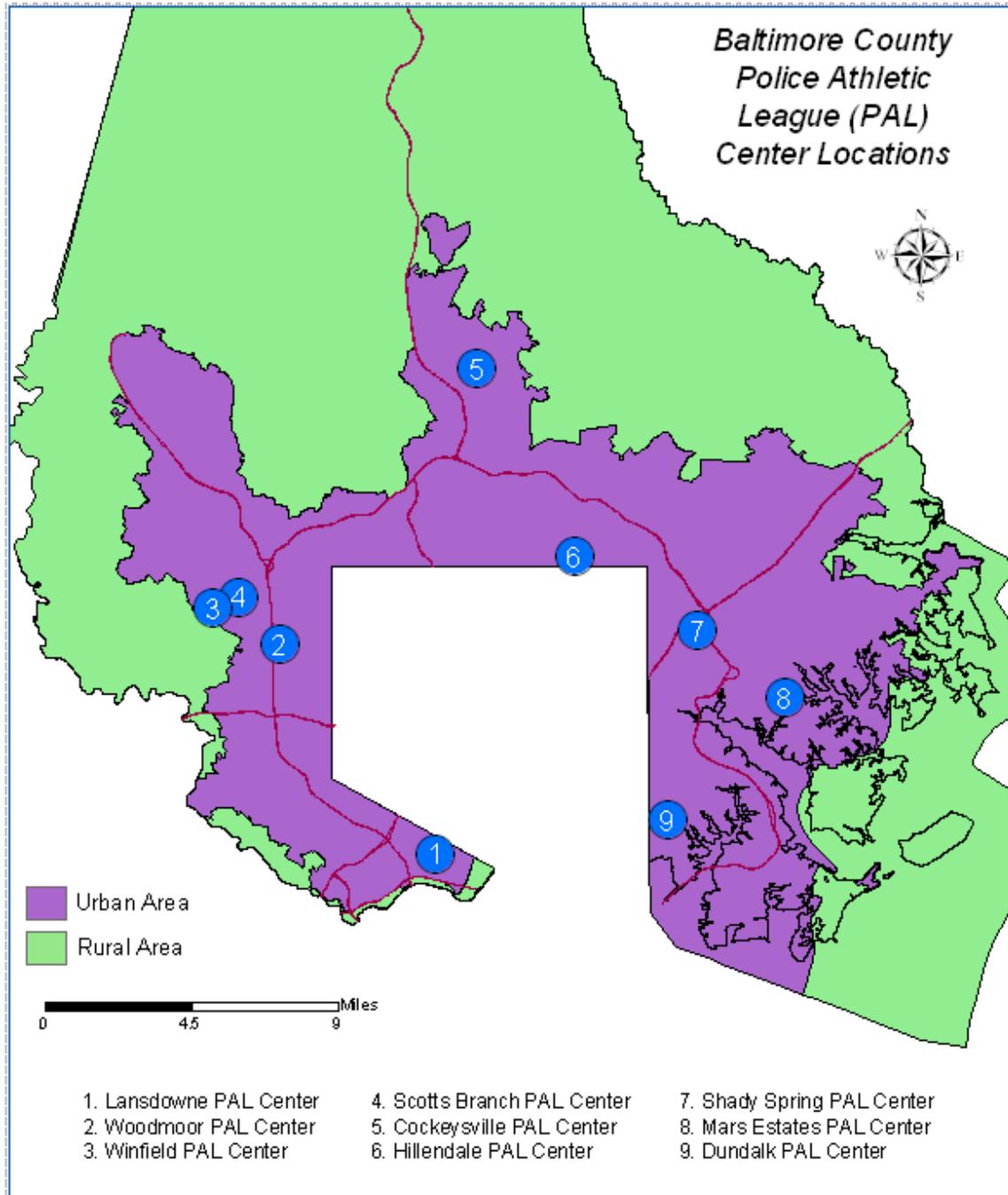
The Baltimore County Board of Recreation and Parks continues to serve as an important medium for the citizens and councils to voice their thoughts and concerns, and which DRP consults for a wide range of issues.

- Work with Baltimore County Public Schools to enhance the effectiveness of the joint-use agreement for school recreation centers and to resolve use conflicts. Establish an “oversight committee” to oversee and administer the joint-use agreement.

Efforts continue to be exerted to make the joint-use agreement and the shared function of school-recreation centers as seamless as possible. Close coordination takes place between DRP and Baltimore County Public Schools at multiple levels to seek to avoid and resolve any use disputes or problems that may arise. Since the adoption of the prior LPPRP a special facility-specific joint-use agreement has been formulated to better administer the use of stadium facilities (including synthetic turf fields) at high school recreation centers. To date the proposed oversight committee that was recommended has not been formed.

- Work with other Baltimore County agencies such as the Office of Community Conservation, the Department of Environmental Protection and Sustainability, the Department of Planning, and the Police to combine resources and meet public needs. The Police Athletic League (PAL) program is a particularly important effort, providing recreational opportunities that complement the traditional programs of local recreation councils.

There are many success stories that have resulted from cooperative inter-agency efforts. Several new parks and recreation sites, including Wilson Point Park, The Fields at Renaissance Park, Randallstown Community Center and the Sollers Point Multi-Purpose Center are the product of joint efforts by Community Conservation (now incorporated into the County Department of Planning) and DRP. As mentioned previously, DRP works with the County's Department of Environmental Protection and Sustainability to facilitate a wide range of projects that help to sustain and enhance the environment. Finally, chief responsibility for the management of the County's PAL Centers has returned to DRP since the time of the former LPPRP, with the agency working hand-in-hand with the Police Department to offer both recreation and guidance to youths between the ages of 8 and 17. The map on the following page displays the PAL Center locations, all of which are situated within the urban portion of the County's URDL.



- Participate in cooperative efforts with the State of Maryland, neighboring jurisdictions, and other recreation and parks agencies throughout the State.

A number of noteworthy multi-jurisdictional projects have taken place within the past five years. These include the previously described BeeTree Preserve conservation and public recreation access easement (joint County – DNR project), Robert E. Lee Park license agreement (no cost agreement with Baltimore City), and jointly-funded (County, State, federal government) acquisition of the site of the Baltimore County Center for Maryland Agriculture and Farm Park. Two other agreements that would transfer park property to

the County are presently underway—one involving State land and the other City property. Additionally, Baltimore County has been working with the Maryland Department of Natural Resources, the National Park Service and other local jurisdictions on cooperative efforts to commemorate the bicentennial of the War of 1812. Finally, numerous other park sites continue to be operated by the County through leases and similar agreements with the State of Maryland (Kingsville Park, a portion of Cromwell Valley Park, and a portion of Wilson Point Park) and Baltimore City (Loch Raven Fishing Center and Prospect Park).



The Loch Raven Fishing Center, situated on Loch Raven Reservoir, is operated by Baltimore County under a lease agreement with the reservoir's owner, the City of Baltimore.

- Work and collaborate with non-profit, civic and community organizations, especially in cases where such organizations are in a position to support and supplement the County's missions. Explore additional opportunities for groups and citizens to provide volunteer services.

The County works hand-in-hand with multiple non-profit and civic organizations on mutual aims that benefit the citizens of Baltimore County. The non-profit group NeighborSpace of Baltimore County, partially funded by the County, helps in the "greening" of urbanized, developed communities by acquiring properties for public use and/or general conservation. Groups such as the Gunpowder Falls Conservancy conduct County-sanctioned tree planting projects at parks, open spaces and greenways, helping to promote environmental health. Numerous community and civic groups conduct both sanctioned and informal park cleanups as part of their efforts to keep their communities and parks clean and attractive.

12. Expand the use of technology to enhance agency operations, and to better meet the needs of the public.

- Seek further opportunities for using the Internet to better serve County citizens, and to make the public aware of recreational opportunities and the park system.

Efforts have been made to expand DRP's presence on the Internet, particularly in the area of recreation program information. A program search function has been created to allow the public to look up types of programs and activities, learn of the communities where the program types are offered, and often link to other County or recreation and parks council web pages where more detailed program information is presented. There have also been discussions with the County's Office of Information Technology pertaining to prospective addition of comprehensive park and recreational facility data to the County's "My Neighborhood" web application, which the public may visit to bring up maps of various public facilities.

- Utilize technological resources to streamline and improve upon various agency operations. Procure additional electronic resources that would enhance operations and allow the agency to better serve the public.

Some key actions that have taken place since the prior LPPRP include the enhancement of information technology resources (both hardware and communications/data connections) at DRP's remote offices, the establishment of technology labs with public computer access at a number of community centers, and the installation of modern security and surveillance systems at certain sites to better protect the public's investment in recreational facilities. In recent years DRP has used geographic positioning system (GPS) technology to better map park trails and for other operational purposes. The implementation and expansion of a computerized maintenance management software system has likewise helped to better facilitate the submission and flow of park maintenance requests.

Updated County Goals and Objectives for Recreation, Parks and Open Space

Baltimore County's goals and objectives pertaining specifically to recreation, parks and open space were revised within the County's Master Plan 2020, starting on page 124 of that plan. Following are the updated goals and objectives from MP2020, which were presented as "policies" and associated "actions" within that document:

1. Policy: Acquire a variety of parklands and recreation sites to achieve parkland acquisition goals and meet public recreation needs.

Associated actions:

- Utilize Program Open Space (POS) as a key funding source for the acquisition of parkland.
- Strategically target all available parkland funding resources to areas of existing and projected future needs, whether these needs be acreage-based, facility-based, resource-based, or policy-based. Specific focus will need to be applied to the County's proposed Community Enhancement Areas (CEAs), where population growth will be concentrated.

Parklands and facilities needed for the CEA should be provided within and/or in close proximity to their bounds when possible to promote walkability and sustainability.

- Employ the Baltimore County development process to provide quality local open space, obtain fees-in-lieu where appropriate (to help fund park acquisition and development), and to secure vital greenway connections. Continue to refine the open space dedication process to ensure that local open spaces are deeded to the County, homeowners' association, or other appropriate party in a timely and accurate manner.
 - Reinvestigate and update, as needed, the County's policies and regulations pertaining to Greenways. Continue to require the dedication of Greenways within the County development process and employ these lands to create trail and path networks such as those underway in and around the Owings Mills Growth Area. The Department of Recreation and Parks should work with the Department of Planning and other county agencies to add community plan recommended greenways and other appropriate linear land areas to the Greenway Map, which identifies land areas that must be preserved by dedication or easement.
 - Exercise all means necessary for the acquisition of key prospective park sites, up to and including the powers of master plan conflict and eminent domain.
 - Work with landowners to secure tax credits and similar agreements that will enable them to donate or sell their land at a reduced value to the County or local established land trust if such properties would be of sufficient public recreational or open space benefit.
 - Continue support of the Neighborspace Program as a proven mechanism for preserving smaller neighborhood-oriented open spaces.
2. Policy: Provide a diversity of recreational facilities and areas to meet the needs of citizens, and to serve the organized programs of the local recreation and parks councils.

Associated Actions:

- Provide a sufficient quantity of traditional outdoor recreation facilities such as ball diamonds, athletic fields, sports courts, playgrounds, and picnic areas.
 - Provide sufficient indoor facilities and access time to meet expanding demands for year-round recreation, to serve programs that require indoor space, and to facilitate use by community and civic organizations.
 - Construct additional trails and paths to meet growing demands for linear-based forms of recreation such as walking, jogging, and bicycling. Work with County and State agencies to establish pedestrian and bicycle connections between parks, residential areas and other points of interest, in conjunction with the county's pedestrian and bicycle plans and community plans. Community Enhancement Area standards and plans should include strong pedestrian and bicycle access components so as to encourage non-motorized forms of transportation and provide associated recreational opportunities.
 - Provide appropriate service amenities such as restrooms, storage areas, parking areas, sidewalks and paths, and facility/security lighting.
3. Policy: Renovate and rehabilitate parks to address the issues of facility aging and outdated recreational infrastructure.

Associated Actions:

- Evaluate the functionality and condition of the County’s older parks, and conduct appropriate site redesign, rehabilitation, and improvement projects.
 - Where appropriate continue comprehensive capital renovation programs, including existing programs for playground equipment, courts, fields, facility lighting, and parking lots; seek opportunities for the expansion of such programs to other types of recreational facilities and support amenities.
 - Explore opportunities for reutilizing or retrofitting facilities for other recreational purposes if they are no longer needed or desired.
4. Policy: Participate and play a vital role within community revitalization programs such as the County’s renaissance initiative.

Associated Actions:

- Provide quality parks and recreational facilities within community revitalization areas and renaissance communities. Where appropriate, replace unsuitable or poorly functioning land uses with parks that will help to enhance the community. *Note: The “renaissance” initiative has been replaced by the designation of Community Enhancement Areas (see last bullet under this policy, as well as definition on page 7).*
- Actively participate in community redesign processes, recognizing the important role that parks play in providing and maintaining attractive, healthy neighborhoods.
- Maintain parks in older communities to ensure that these sites remain attractive and functional, and contribute to the strength of the community.
- Continue to require the provision of appropriate and adequate open space opportunities within or in proximity to the County’s proposed Community Enhancement Areas. Evaluate the required local open space requirements to ensure that these remain adequate.

5. Policy: Expand waterfront access to the Chesapeake Bay and its tributaries.

Associated Actions:

- Provide an assortment of recreational facilities at the County’s waterfront parks, ranging from water specific facilities such as boat ramps and fishing piers, to general amenities including picnic pavilions, playgrounds and paths.
- Utilize Marshy Point Park and Nature Center on Dundee and Saltpeter Creeks as a key platform for providing citizens of the region with opportunities to experience, learn about and gain an appreciation for the Chesapeake Bay and its ecosystem.
- Evaluate all existing waterfront park sites to assure adequate use, while undertaking appropriate environmental conservation measures.
- Participate in the National Park Service-led Captain John Smith Chesapeake National Historic Trail initiative, employing the trail as a tool for increasing tourism and park visitation.
- Designate viable water trails to connect waterfront parks and provide opportunities for canoeing and kayaking. Seek to establish an interpretive water trail on the North Point Peninsula as part of the county, state and federal efforts to commemorate the bicentennial of the War of 1812 and the Battle of North Point (1814).

6. Policy: Pursue alternative funding sources for park acquisition, development, capital improvements, recreational programs and special events.

Associated Actions:

- Aggressively pursue both public and private grant opportunities.
- Solicit businesses and citizens for donations and expand the scope of existing sponsorship programs.
- Enter into appropriate manage-lease and similar agreements to provide citizens with recreational opportunities that are outside the scope of what may feasibly be offered by the County.
- Procure surplus State lands that are of recreation, parks, or open space benefit when these become available.

7. Policy: Promote a greater appreciation for the natural environment through interpretation and hands-on experiences, and expand efforts to protect sensitive environmental areas within the County's parklands.

Associated Actions:

- Perform assessments of existing and future park sites to delineate sensitive environmental areas and to identify appropriate protective measures.
- Promote environmental awareness through the use of interpretive signage and educational programs at both the County's interpretive centers and general park sites.
- Work with DEPRM on such projects as stream and shoreline restoration, floodplain, reforestation, wildlife management, and forest health assessments. *Note: The agency name has changed from DEPRM to Environmental Protection and Sustainability (EPS).*
- Collaborate with County agencies and other partners to improve green design standards and enhance sustainability for recreation facilities.

8. Policy: Enhance park and facility accessibility and provide quality recreational opportunities for individuals of all abilities.

Associated Actions:

- Continue to provide access from parking areas and park entry points to site amenities.
- Ensure that new facilities are sufficiently accessible and meet Americans with Disabilities Act Guidelines (ADAG).

9. Policy: Expand opportunities for citizens to participate in and experience arts programs and events, and historically and culturally significant sites.

Associated Actions:

- Provide arts and cultural programs at local, regional and countywide levels.
- Work with Baltimore County Public Schools to maximize the use of school-based arts facilities.
- Help protect sites of cultural and historical significance, and provide applicable interpretive facilities, displays and programs.

- Participate in special initiatives such as the historical trail efforts that are underway in preparation for the 200th anniversary of the War of 1812 and the Battle of North Point.

10. Policy: Evaluate facility design standards as necessary to better meet recreational demands, enhance facility safety and functionality, and ensure that parks and facilities are sustainable, attractive community enhancements.

Associated Actions:

- Continue to investigate and implement methods for rectifying problems with the de-vegetation of athletic fields, whether through the replacement with synthetic field surfaces or other means.



Synthetic turf fields are an example of a modern, emerging technology that has been implemented to enhance functionality and reduce maintenance. Such fields, unlike traditional grass fields, may be used soon after or even during rainy weather. The fields manage water flow very well, and are not prone to such problems as de-vegetation and compaction, which often leads to sediment runoff and erosion at traditional grass and dirt fields.

- Perform regular evaluations of facility specifications and make any necessary updates or modifications.
- Revisit the design of recreation and community centers and make modifications, where necessary, to enhance functionality, maximize recreational and community use, and meet LEED (Leadership in Energy and Environmental Design) standards.
- Design parks and facilities to be compatible with and visually benefit the surrounding community.
- Revise park design practices to meet current environmental regulations, including the new State requirements related to stormwater management.

11. Policy: Participate in various partnerships to maximize resources and efforts for the benefit of Baltimore County citizens.

Associated Actions:

- Partner with the volunteer-based recreation and parks councils to provide quality recreational opportunities.
- Utilize the Board of Recreation and Parks as an integral link between the citizens of Baltimore County, the recreation and parks councils, the County Council, and Department of Recreation and Parks.
- Work with Baltimore County Public Schools to maximize the effectiveness of the joint-use agreement for school recreation centers.
- Work with other Baltimore County agencies such as the Office of Community Conservation, the Department of Environmental Protection and Sustainability, the Department of Planning, and the Police to combine resources and meet public needs. The Police Athletic League (PAL) program is a particularly important effort, providing recreational opportunities that complement the traditional programs of local recreation councils while providing invaluable mentoring experiences to participating youths. *Note: The Department of Environmental Protection and Sustainability has been renamed the Department of Environmental Protection and Sustainability (EPS), and the Office of Community Conservation now operates as a function of the County's Department of Planning.*
- Participate in cooperative efforts with the State of Maryland, neighboring jurisdictions, and other recreation and parks agencies throughout the State and country.
- Work and collaborate with non-profit, civic and community organizations, especially in cases where such organizations are in a position to support and supplement the County's missions. Explore additional opportunities for groups and citizens to provide volunteer services.

12. Policy: Expand the use of technology to enhance agency operations, and to better meet the needs of the public.

Associated Actions:

- Seek further opportunities for using the Internet to better serve County citizens and to make the public aware of recreational opportunities and the park system.
- Utilize technological resources to streamline and improve upon various agency operations. Procure modern technological resources that would enhance operations and allow the agency to better serve the public with sustainable technologies.

Master Plan 2020 attests to the dynamic nature of parks and recreation, and its impacts upon other County goals, objectives, policies and priorities. In addition to the above policies and actions, the plan included many recreation and parks related policies and actions in other sections of the Plan. Following is a summary of the additional parks, recreation and associated MP2020 content, referenced by plan section and page:

- Continue to provide high quality waterfront parks and related programs that accommodate a variety of recreational and leisure activities, while concurrently working to protect the Bay and its tidal ecosystem. The waterways should be made more accessible and the use of waterfront parks encouraged wherever appropriate within the framework of good environmental stewardship. (The Waterfront – Recreation and Parks, page 90)
- Create walkable communities with physical and visual access to the waterfront for public enjoyment. (The Waterfront – Waterfront Access, page 89)
- Increase visibility and access to visitor destinations in Baltimore County. (Tourism, page 141)
- Enhance existing visitor destinations in Baltimore County. (Tourism, page 142)
- Improve and expand the visitor experience in Baltimore County. (Tourism, page 142)
- Continue to promote recreational amenities and activities within the Owings Mills Growth Area. (Owings Mills Growth Area – Recreation and Parks, page 68)
- Promote walkable communities and neighborhood connectivity. (Owings Mills Growth Area, page 67)
- Preserve valuable cultural, historic, recreational, and environmental resources by limiting development and acquiring available land for public benefit. (Rural Communities – Resource Preservation Areas, page 91)



The ~250-acre BeeTree Preserve, adjacent to the Torrey C. Brown (formerly North Central) Rail Trail in northern Baltimore County, was preserved through the purchase of a State-funded conservation and public recreation access easement, whereby the public may use the site for suitable recreational activities while all management and maintenance responsibilities are retained by the landowners

- Promote outdoor physical activity in all regions of the County, in collaboration with appropriate County agencies. (Public Safety and Health – Physical Activity, page 118)
- Continue to implement a recreational hygiene program through a better understanding of environmental factors. (Public Safety and Health – Recreational Hygiene, Page 120)

- Expand pedestrian and bicycle policies and facilities to meet the needs of current and future residents, enhance safety, improve access to transit, and support community revitalization. (Transportation, page 55)
- The infrastructure projects in the Capital Budget and Program should be used to maintain existing healthy communities, and leverage county resources to direct future mixed-use growth to the Community Enhancement Areas. (Public Infrastructure, page 46)
- Complete a transportation analysis to review the existing and proposed road network, mass transit options, pedestrian and bicycle accessibility. (Middle River Redevelopment Area – Transportation, page 80)
- Preserve historic structures and their settings. (Historic and Cultural Resources, page 95)
- Encourage community activities using public school buildings. (Public Education, page 106)
- Use resources effectively and efficiently for renovation, addition, or construction. (Public Education, page 106)
- Continue to implement water quality improvement measures in and along the waterfront, and continue to enforce water quality, forest, and habitat protection components of the State-mandated Critical Area law. (The Chesapeake Bay, Waterways, and Waterfront Areas, page 165)
- Continue to assure the sustainable management of public and private forest resources to provide ecosystem services and meet human needs. (Land Resources, page 172)
- Implement biological diversity protection measures for the County’s diverse habitats and their dependent wildlife and the ecological processes that ensure healthy, productive, and sustainable ecosystems. Restore lost or degraded ecosystem functions, and foster environmental stewardship. (Biological Diversity and Sensitive Areas, page 175)
- Implement the goals of Master Plan 2020 to create compact, sustainable, socially attractive, vibrant, walkable, mixed-use communities. (Implementation, page 181)

PROGRAMS, PROCEDURES AND MECHANISMS

Baltimore County and DRP utilize an array of programs, procedures and mechanisms to help achieve its goals and objectives and further its policies. These include capital programming and funding strategies, County codes and regulations, in-house procedures, and agreements and partnerships with recreation councils, other governmental agencies (both within and outside of Baltimore County) and other parties. All of these tools are necessary to achieve the County’s recreation, parks and open space goals, and to deliver a high quality recreation and parks system in a cost and resource-effective manner. The following outlines the key programs, procedures and mechanisms currently in place. The bulleted goals listed in the “Recreation, Parks and Open Space Goals” will be achieved through the successful implementation and enhancement of these mechanisms, and by the establishment of other needed programs, procedures and mechanisms.

Parkland Acquisition: Baltimore County has traditionally adhered to the long-standing State of Maryland-prescribed goal of providing 30 acres of parkland per thousand citizens (the procedure for calculating the parkland acreage per thousand is described in “Appendix D – Calculation of the Default State Recreational Acreage Goal”). As of the writing of the *2005 Baltimore County Land Preservation and Recreation Plan* the County had approximately 19 acres of parkland per thousand citizens. The calculation of the current parkland per thousand level is presented later in

this chapter. The County employs a variety of mechanisms and strategies to acquire parklands needed to meet the needs of citizens and to try and achieve the State's parkland acreage goal. These include:

- Land Purchases: In order to procure high quality properties suitable for the construction of neighborhood, community, regional, countywide and special parks, funding must be made available for land purchases. The three key funding sources for purchasing parkland are Maryland's Program Open Space (POS), Baltimore County bond dollars and County general funds.
 - a) Program Open Space: POS funding, which derives from State of Maryland real estate transfer tax revenues, is shared between the Maryland Department of Natural Resources (DNR) and the counties, including Baltimore City. Unless a county has reached its parkland acreage goal, a minimum of 50% of the county's annual POS funding allocation must be utilized for parkland acquisition, with the remainder available to be spent on park development or rehabilitation. POS funding may be requested for 100% of the appraised value of most parkland purchases.

Because POS funding is based upon the amount of incoming real estate transfer tax revenues, the amount of funding is variable and fluctuates with economic conditions. Transfer tax revenues grew precipitously during the real estate boom, during which home prices and property values were at an all-time high. More recently, however, the annual revenues have dwindled substantially, reflecting the economic difficulties in general and the beleaguered housing market specifically.

State legislation has likewise had significant impacts upon the flow of transfer tax revenues to POS and other land preservation programs. State funding diversions (taking of transfer tax revenue to pay for expenses other than those for which the tax was created) between FY's 2003 and 2006 took approximately \$17.5 million in POS funding from Baltimore County alone. Changes to the transfer tax sharing formula have likewise reduced POS funding to the counties, including legislation enacted in 2007 that transfers the funding burden for the operations of Maryland State Forest and Parks to the local side of POS. This results in the greater of \$21 million per year or 20% of the local-side POS funding being taken from the counties to fund Forest and Parks operations. Based on Baltimore County's typical share of the local POS funding, the County loses approximately \$2.8 million in POS funding per year as a result of this single legislative action. Finally, recent economic difficulties at the State resulted in a legislative decision at the 2010 Maryland Legislature to borrow \$103 million in local POS funding (in cash) statewide and backfill it with bond funding paid back to the counties over a multi-year period. This impacted approximately \$8.1 million in Baltimore County POS funding. While this action had major impacts upon local parks and recreation agencies, counties and municipalities, the provision to pay back borrowed funding represented a much less damaging option than simply diverting/taking the POS funds with no pay back provision.

The actions and situations described above have combined to drastically reduce the amount of POS funding available to the County. Baltimore County's annual allocation of

\$18.1 million in FY'07 was a record high and something of an anomaly, being multiple times higher than the FY'94 – FY'06 allocations of between \$2 million and \$6 million annually. The County's allocation dropped precipitously to only \$836,000 in FY'10, second lowest since the creation of POS to the FY'77 allocation of \$741,000. As of the writing of this plan the pay back of the \$103 million in POS funding borrowed in 2010 has effectively been extended from three years (FY's 11-13) to five years (FY's 11-14), and the FY'12 POS allocation from transfer tax revenues was being split over multiple years rather than coming to the counties in its entirety at the start of the fiscal year.

The amount of POS funding and federally-derived Land and Water Conservation Fund (LWCF) – State Assistance funding allocated to DNR has likewise dwindled in recent years, challenging DNR's ability to fund their own acquisitions, as well as local acquisitions for which that agency sometimes provides funding assistance. The continuing economic difficulties will likely prolong the POS funding challenges that have plagued the State, counties and localities over the past several years, thereby limiting the funding available for park acquisition and development.



View of Rolling Mill Farm at the edge of Worthington Valley, prior to the property's acquisition to serve as the Baltimore County Center for Maryland Agriculture and Farm Park. Acquisition was funded with both local and state-side POS funding, as well as the most recent LWCF grant for a Baltimore County acquisition project (in 2007).

- b) **County Bond Dollars:** During various election years an assortment of County bond referendums are placed on the ballot, including a borrowing question for parks, preservation and greenways. These questions ask Baltimore County voters to approve the issuance of general obligation bonds to fund County capital projects, generally spent over a two-year budget cycle that begins in even-numbered year. In the case of parks, preservation and greenways, the bond funding is for general recreation and parks capital projects rather than one or more *specific* projects/jobs. There have been 27 such bond referendum questions for parks, preservation and greenways since 1958, ranging from a

low amount of \$500,000 in 1958 to a high of \$10,029,000 in 2000. Each has been approved by the County’s voters with high approval ratings (the 2010 referendum issue for parks, recreation and greenways was the 4th highest of nine County bond issues, garnering an approval rating in excess of 66%). This perfect record for approval attests to the citizens’ strong support for parks and recreation in Baltimore County. The following chart displays the approved parks, recreation and greenways bond funding for the past four two-year budget cycles, as well as the corresponding percentage of the overall County bond funding that was approved.

Fiscal Year	Bond Dollars Approved	% of Total County Bond \$'s
2006	\$5,550,000	2.4%
2008	\$8,320,000	3.3%
2010	\$5,000,000	2.0%
2012	\$5,000,000	1.9%
Total:	\$23,870,000	2.4%

The bond funding dedicated to parks, recreation and greenways ranged from \$5 million to \$5.55 million in three of the four funding cycles. The total amount of \$23.87 million equates to an average of just under \$3 million per year (over eight years from FY’s 2006-2013). The percentage of the overall County bond funding dedicated to parks, recreation and greenways dropped to less than 2% for the funding allocated in the FY’12 capital budget. It is important to note that funding from other bond referendum issues (e.g. general government buildings, community improvements, waterway improvement program) sometimes contributes to parks and recreation projects.

- c) County General Funds: General funds derive from various types of tax revenues brought in by the County. These are the primary source of operating funding, but are also made available for capital projects when tax revenues are sufficient. General funds are sometimes utilized to provide a required match for various types of State and federal funding. The following table displays the total general fund allocations to DRP’s capital budget since fiscal year 2006. The funding is used for park acquisition, development and rehabilitation.

Fiscal Year	General Funds*
2006	\$7,198,000
2007	\$4,390,000
2008	\$4,805,000
2009	\$12,020,000
2010	\$2,250,000
2011	\$0
2012	\$0
Total:	\$30,663,000

*- reflects new general funds only, and does not include general funds reallocated from elsewhere within the County’s capital budget

The unusually high funding amount in FY'09 was targeted to a number of large projects with substantial budgets, including the synthetic turf field initiative and the Northeast Regional, Watersedge and Jacksonville Recreation/Community Centers. The relatively small amount of funding in FY'10, as well as the lack of general funds for fiscal years 2011 and 2012, reflects the difficult financial times that have dominated recent budgets.

- Other Means of Parkland Acquisition: Baltimore County supplements its traditional fee-simple park acquisition program with an assortment of other strategies aimed at providing the citizens with a wide diversity of parklands. These include:
 - a) Local Open Space (LOS): Baltimore County Zoning Regulations describe LOS as “land provided in residential subdivisions as necessary and desirable for the local recreational needs of residents of such subdivisions. It provides for such recreational types of spaces as play lots, local unusual natural scenic beauty, recreational walkways and pathways, and special street center islands. The term local open space parcel shall not include the larger open space park and play field areas of the type which serve larger than local needs and which are incorporated in the Master Plan.” The County Code states that LOS regulations shall “provide for open spaces in order to offer recreational opportunities close to home; to enhance the appearance of neighborhoods through the preservation of natural green spaces; to counteract the effects of urban congestion and monotony; and to encourage participation by all age groups in the use and care of LOS tracts.”

This important program, which is tied to Baltimore County's development process, requires that developers dedicate a mandated amount of open space within residential housing projects in the County. The program functions through terms outlined in the Baltimore County Local Open Space Manual, most recently revised in February of 2000 and amended by County legislation over the years. The LOS program also provides options for the developer-funded construction of recreational facilities on open spaces or local parks, as well as the payment of "fee-in-lieu" of open space under certain circumstances. LOS may be owned by the County, or owned and maintained under home and condominium owners associations.

The development process and Local Open Space Manual also require that greenways reservations or easements be granted to the County for development projects taking place along Master Plan-designated greenways (see Greenways-related recommendations later in this chapter for further details).

- b) Donation: Private landowners sometimes approach the County with offers to donate their property for park purposes. Some individuals who do so are interested in seeing their land preserved in a natural state, and/or used for public recreation, while others may wish to reap a tax benefit for such donations.
- c) Other: There are a few infrequently utilized methods for acquiring additional land to serve as County parkland. One such method is the process of trading properties with another entity such as Maryland DNR. Such transactions may take place in cases where one or both involved entities would enjoy a benefit such as improved constituent services

or the enhancement of site management capabilities. Another means through which additional parkland may be procured is through the acquisition of land that has gone to tax sale as a result of landowners failing to pay property taxes. Such properties are typically acquired at no cost. Finally, the County's previously mentioned partnership with the non-profit organization NeighborSpace of Baltimore County helps to preserve additional green space in urbanized communities.

The County has been hard-pressed in its efforts to have parkland acquisition keep pace with the strong population growth that has taken place over the past several decades (a full parkland acreage needs assessment appears later in this chapter). The volatility of the real estate market has substantial impacts upon parkland acquisition. When the real estate market is strong, more funding is usually available, particularly in the form of POS funding since that program's funding source is the real estate transfer tax. However, a strong market almost always translates into higher land values, so that less land may be had for the money. Conversely, a down real estate market is usually indicative of a struggling economy, resulting in less transfer tax funding (and POS) and overall budget reductions that often limit park acquisition efforts.

Prospective park acquisitions are usually identified in one of two ways: first, by the Department actively seeking out lands capable of meeting a specific need (thereby helping to achieve one or more actions identified in various County plans); or second, by pursuing properties identified by others and brought to the Department's attention. In the first instance, suitable properties within a specific geographic area are identified as potential acquisitions needed to help meet local acreage needs and/or accommodate needed recreational facilities. Parcels adjacent to existing park and open space sites might be pursued to serve as additions to those sites, allowing for facility expansion or for the development of what may have previously been a substandard site. Other parcels might be identified to meet a specific initiative such as providing a regional park. Still other properties might be targeted as projects of joint State-County interest.

The second most common manner in which prospective acquisitions are identified occurs when landowners, real estate brokers, local recreation and parks councils or staff, elected officials, civic associations, or concerned citizens contact the County to report the availability of a given property. This method is less likely to lead to an acquisition than the previously described method, as these sites are often not as conducive to serving as parks as are sites that have been identified, analyzed, and selected in-house.

All prospective acquisitions are thoroughly investigated and analyzed based upon a wide variety of criterion. First and foremost is the relative need for the property, and its ability to help achieve parkland acreage and recreation facility needs. The population to be served is closely considered, be it a relatively small geographic area such as a neighborhood, community or recreation council, or a larger geographic entity such as a recreation region. Often, specific property searches will be conducted to identify prospective sites for acquisition within the area of interest. This process goes hand-in-hand with the State goal of strategically targeting parks and recreation resources to the area to be served. Sites that are conducive to being developed with recreational facilities to help meet recreational demands are usually given higher priority than sites that are not as suitable for development. This is particularly the case when acquisition funding resources are limited. As such, preliminary site assessment takes place with the use of

geographic information systems and other internal resources, and subsequent site visits take place if the property is deemed worthy of further consideration. Other factors that are evaluated when prospective acquisitions are explored include:

- Willingness of the property owner to sell;
- Cost factors—price, physical limitations and other factors that could prove costly if the site were to be developed as a park;
- Site access, both in terms of proximity to population served, and local road and pedestrian network;
- Relationship to other County and State initiatives and plans (e.g., the County’s revitalization program, County and State growth area plans and “smart growth” guidelines, community plans, etc.);
- Potential local conflicts, especially in cases where a site is needed to meet certain recreational needs, and such facilities may not be welcome by neighbors;
- Partnership opportunities, especially with Baltimore County Public Schools (for school recreation center sites) and Maryland DNR;
- Presence of natural resources and environmentally sensitive areas. This can be viewed in both a positive and negative manner. Some sites are pursued to preserve natural resources or provide access to areas such as the waterfront, while other sites may be rejected because of environmental constraints that would limit the County’s ability to construct needed recreational facilities; and
- Special status/attributes of the property, such as cultural or historical significance.

Developing Parks and Recreational Facilities: Baltimore County is dedicated to providing its citizens with diverse recreational opportunities to help meet the leisure time needs of as broad a portion of the population as is feasible. While the County realizes that it cannot satisfy all possible recreational demands, every effort will continue to be made to provide a wealth of recreation options for citizens of all ages and abilities.

DRP is the County agency charged with the primary responsibility of providing public recreational opportunities and venues. Other County agencies including the Department of Aging, the Police Department, and Baltimore County Public Schools complement the agency’s efforts by providing activities and venues for senior citizens; support for programs for youth at Police Athletic League (PAL) Centers; and physical fitness, sports, arts, and other assorted activities within the learning curriculum, scholastic sports, and after-school clubs and programs. Colleges and universities situated within the County provide recreational facilities for their students and alumni, and provide other leisure opportunities at venues such as sports stadiums, theaters and arts galleries. The significant green spaces on college and university lands are also often enjoyed by nearby residents. The Community Colleges of Baltimore County (CCBC) partner with DRP, providing limited, organized use of their swimming pools and select ball fields, including DRP-funded synthetic turf fields at CCBC-Dundalk and CCBC-Essex.

The citizens of Baltimore County are likewise provided many other types of leisure options by both the public and private sector. Maryland DNR owns and operates the Soldiers Delight Natural Environment Area, Patapsco Valley, Gunpowder Falls, North Point, and Hart-Miller

Island State Parks. These are large public land holdings that offer a multitude of recreational opportunities (often natural resource-based) unavailable within most Baltimore County Parks. DNR's holdings offer a vast network of trails suitable for numerous activities including walking, jogging, hiking, bicycling, mountain biking and horseback riding. These trails provide for the majority of citizen demands for many trail-based activities. The large Baltimore City-owned properties in the County—Loch Raven, Prettyboy and Liberty Reservoirs, and Robert E. Lee Park—also have substantial trail networks on which certain recreational activities are permitted. A portion of Loch Raven Reservoir's road network is also closed to motorized traffic and dedicated to public recreation uses on weekends. DNR's sites also provide camping facilities and vast picnic areas, and offer resource-based recreational activities including fishing, boating, windsurfing, swimming, nature interpretation and managed hunting. The City's reservoirs offer other important recreational outlets including fishing, boating (from canoes to electric motor boats) and golf (Pine Ridge Golf Course at Loch Raven Reservoir). DRP leases the Loch Raven Fishing Center at Loch Raven Reservoir from Baltimore City, managing boat rentals, boat launching permits, and other related services.

Important hands-on and traditional educational opportunities are offered at Maryland State Parks and Soldier's Delight, complemented by Baltimore County's natural and historical interpretive centers—Oregon Ridge, Marshy Point, Cromwell Valley, and Benjamin Banneker. These sites allow visitors to learn about nature, helping to develop their understanding of, and appreciation for, the natural environment. Such experiences are all the more essential in Baltimore County, given the County's proximity to the Chesapeake Bay.

An assortment of leisure choices is also made available by quasi-public agencies, non-profit institutions, and the private sector as well. The Baltimore County Revenue Authority operates five public golf courses, as well as the new ice rink at Reisterstown Sportsplex. YMCA's provide affordable recreational opportunities that complement what the County and local recreation councils have to offer. Faith-based institutions and civic organizations such as Boy and Girl Scouts of America, Lions Clubs and American Legions regularly provide leisure activities for both their members and the public. Private entities offer a wide range of facilities for fee-based use, ranging from health and swim clubs, to marinas, to private campgrounds.

All of the recreational opportunities provided by these other agencies, groups and institutions provide important supplements to the parks, facilities and programs furnished by DRP, resulting in the vast majority of public recreation interests being accommodated in one way or another.

- **Key Types of County Parklands:** Baltimore County offers a wide selection of parklands and recreational facilities, ranging from natural grassy and wooded lots smaller than a tenth of an acre, to intensely developed community parks, to parks featuring hundreds of acres of natural areas. These sites and facilities provide recreational opportunities at a variety of scales, some serving only the residential development in which they are situated, and others attracting visitors from across and outside the County. In terms of general classification, parks are distinguished from open spaces by the presence of some form of permanent/structural recreational facility(s), with their full acreage counted towards parkland acreage goals.

- a) **Countywide Parks and Facilities:** This category consists of both the County’s largest parks and other parks with types of facilities or attractions that are considered to have countywide appeal. This would include large parks such as Oregon Ridge (~1,100 acres), Cromwell Valley Park (over 435 acres of combined County and State-owned land), the ~415-acre Robert E. Lee Park, and Rocky Point Park (377.1 acres, including the Rocky Point Golf Course), each of which feature substantial natural/undeveloped areas. Also included would be Benjamin Banneker Historical Park and Museum (126.6 acres) and the Baltimore County Center for Maryland Agriculture and Farm Park (~150 acres). The City-owned reservoirs are also considered to be countywide facilities, but are categorized as natural resource/open space lands. Countywide parks and facilities are assumed to have the widest geographic service area, and the acreage of these sites is allocated countywide for the purpose of parkland acreage needs analysis.
- b) **Regional Parks and Facilities:** The types of parks with the next largest service areas are regional parks and facilities. These sites are considered to command an area of interest less than countywide, but more than a single community or recreation council. Sizeable parks such as Meadowood Regional Park (96.2 acres), Northwest Regional Park (322.7 acres), Reisterstown Regional Park (79.7 acres), and Eastern Regional Park (122.5 acres) would fall within this category. Smaller sites which would regularly draw a significant number of visitors from more than the surrounding community would also be included—Southeast Regional Recreation Center (3.2 acres) and the Northeast Regional Recreation Center (6.4 acres). The acreage of regional sites would be allocated based upon their defined service area when performing parkland acreage needs analysis.
- c) **Community and Neighborhood Parks:** Both of these park types are considered to provide for “local” recreation. Community parks feature some type of facility that would be regularly utilized by one or more local recreation council, or draw visitors from outside of the immediate neighborhood. Facilities typical at such parks include ball diamonds, athletic fields, community centers, and picnic pavilions (which may be reserved through local recreation councils and offices). Neighborhood parks are generally utilized almost exclusively by residents of the surrounding neighborhood, typically being within walking distance and frequently lacking on-site parking. Facilities often found at neighborhood parks include playgrounds/tot lots and multi-purpose courts.
- d) **School Recreation Centers (SRC’s):** One of the foundations of community-based recreation in Baltimore County is the long-standing joint-use agreement between Baltimore County Public Schools and DRP. This agreement secures the use of nearly all public schools as dual-use educational and recreational facilities, thereby helping to maximize public investment. There are three basic types of school recreation centers—high schools, middle schools and elementary schools. Middle school recreation centers generally provide the highest level of recreational use to the programs of the County’s affiliated recreation councils, typically having more recreational facilities than elementary schools, and being more available for public program use than high school recreation centers (whose inter-scholastic sports teams, clubs and programs have first priority use of the facilities). In some cases DRP will construct park facilities on sites acquired to serve as SRC’s, but which are not yet developed with schools. These sites,

such as Nottingham Park, Mays Chapel Park, Dulaney Springs Park and Hydes Road Park, serve as parks until the need for a school arises. On occasion, Baltimore County Public Schools will release and transfer such sites to DRP when they are certain a school will not be needed or is not feasible given site conditions. Within the park acreage needs methodology employed by the County (based on State standards), 60% of the acreage of school recreation centers may be counted.

- e) Local Open Space (LOS): This type of land was previously described within the “parkland acquisition” section of this chapter. LOS is intended to have a very localized service area, providing for use and enjoyment by the development in which it is situated, or the immediate neighborhood surrounding its location. The physical nature of LOS is variable, with some parcels being entirely wooded and/or including sensitive environmental areas such as wetlands or streams. Other LOS parcels are open, grassy and relatively flat, being conducive for limited recreational uses (e.g., playing “catch,” community gatherings, picnicking, walking dogs, etc.). LOS regulations were refined to require that the substantial portion of newly dedicated LOS must be relatively flat and open, and thereby more usable for limited recreation purposes. Another function of LOS is to simply provide open, green space within developments; helping to make the neighborhood more attractive, providing a visual break from the man-made surroundings, and contributing multiple environmental benefits. LOS and other forms of open space may only have one-third of their acreage counted towards the County’s parkland acreage goal based on the standard acreage analysis methodology. When a LOS is improved with recreational facilities, it is reclassified as a neighborhood park for inventory and parkland acreage needs evaluation purposes.
- f) Other Types of Parklands: A variety of other site classifications are utilized by Recreation and Parks for inventory and parkland needs analysis purposes.

Undeveloped parks and undeveloped school recreation centers are non-LOS properties which are intended to remain natural and undeveloped. This category of parkland also includes unimproved stream valleys, drainage and utility reservations, and forest buffer reservations, regardless of the County agency that administers said property. For parkland calculation purposes these are considered natural resource lands and only one-third of their acreage may be counted towards the County’s acreage goal. This classification previously included park sites that are likely to be developed as parks in the future, but are presently in an unimproved, natural state. Such sites are now classified as parks (rather than open spaces) within acreage calculations in order to more accurately reflect their intended use.

Community centers, whether stand-alone with no surrounding recreational facilities, or situated at a park with other facilities, supplement the indoor recreational facilities provided within school recreation centers. Some centers, such as the Arbutus Recreation Center, are assigned specifically to DRP and fall entirely within the agency’s purview. Community centers such as the new Sollers Point Multi-Purpose Center are multi-agency buildings with only portions of their space dedicated for recreation purposes, but which feature other important community-serving facilities such as health and senior centers.

The community centers are also regularly utilized as meeting places by civic organizations and citizen groups.

Leased recreation sites are lands leased by the County for the purpose of providing public recreation. Examples include State-owned sites such as Millers Island Park, Kingsville Park, and the Merrick/Willow Grove portion of Cromwell Valley Park; and privately owned land such as Chestnut Ridge and Saint Patrick's Field. These sites feature recreational improvements that are used by local recreation councils and the general public, though their acreage may not be counted towards the County's parkland acreage goal.

Waterfront parks fall within the previously listed classifications (i.e., countywide parks, community parks, undeveloped parks, etc.), but are considered particularly important components of the County's park system. The Chesapeake Bay and its tributaries are geographic entities that help define the nature of Baltimore County. The preservation of lands and delivery of diverse recreational opportunities along the County's waterfront remains a high priority. Many of the County's waterfront parks have been enhanced with facilities such as fishing piers and boat ramps.



Rocky Point Park Beach, with the Baltimore County Sailing Center in the background. Baltimore County initiated a beach admissions fee structure change in 2011 to allow children 11 years of age and under to enter free of charge accompanied by a paying adult. The beaches offer convenient, nearby respites from Maryland's summer heat.

Greenways are linear parklands most often associated with streams, and are sometimes developed with trails or paths for recreational use. All greenways provide environmental benefits including stream valley preservation and the protection of wildlife corridors, and help to “green” the communities and other land areas they border.

All of the lands described above combine to form a park system that provides the citizens of Baltimore County with a myriad of leisure time possibilities and options. Natural areas and green open spaces, from small open spaces situated in urbanized areas to 15,000+ acre state parks, appeal to a certain sector of the population that wishes to experience nature or relax and wind down in the great outdoors. The diverse parks and recreational facilities provided at the neighborhood, community, regional and countywide levels serve as venues for both organized and informal recreational uses, and are instrumental to serving the programs of local recreation councils.

- **Funding Park and Facility Construction:** The three primary funding sources for parkland acquisition - POS, County bond dollars, and County general funds - also provide the majority of funding for park development and recreational facility construction. Other types of funding utilized for both acquisition and development projects include local open space (LOS) waiver funds, federal programs such as the Land and Water Conservation Fund (LWCF), and donations. In the case of donations, local recreation councils often donate funding for specific capital improvements that would benefit the community they serve. Civic associations and private individuals/groups also sometimes donate money for specific park projects.

There are an assortment of other funding mechanisms that may be utilized for park development projects. Most such programs have very specific mandates and guidelines, and seek to achieve explicit goals such as enhancing waterfront access, providing opportunities for non-motorized transportation, and promoting community revitalization. Some of the key programs that the County has utilized to date include the State of Maryland's Waterway Improvement Fund (WIF) and Community Parks and Playgrounds (CPP) program, and the federal Transportation Act for the 21st Century (TEA-21).

Maryland Waterway Improvement Fund (WIF) moneys have been used to help finance the construction and rehabilitation of such waterfront facilities as boat ramps and fishing piers, as well as waterfront-related amenities. WIF has also been an important source for channel dredging projects that keep waterways open and usable for boaters. Unfortunately, the program (like many other land preservation and recreation funding programs) has suffered from a reduction in its revenue stream, as there has been a substantial drop in boat sale excise taxes and the State has been forced to restructure the program and reduce grant funding.

The CPP program is relatively new, having been established in fiscal year 2002 to fund capital improvements and rehabilitation projects targeted to established communities within priority funding areas (Baltimore County's priority funding area being the designated urban portion of the County, within the URDL). The County was granted more than \$5.2 million in CPP funding between fiscal years 2002 and 2009, an average of about \$650,000 per year, but State-legislated changes to the program restricted it to municipalities only starting in FY'10. This effectively prevented Baltimore County from using the program to benefit its citizens, as the County has no incorporated municipalities.

Another State funding source that the County has obtained in certain fiscal years is State Bonds. During the State's legislative session, local governments traditionally submit State Bond requests. These requests, if approved by the Legislature and the Governor, enable the

State to borrow money for the purpose of funding specific capital projects. For example, the Maryland Consolidated Capital Bond Loan of 2009 granted \$3 million in matching bond funding to Baltimore County for renovation and enhancements to Robert E. Lee Park. The County also received a \$450,000 matching bond for the construction of the agricultural resource center at the Baltimore County Center for Maryland Agriculture and Farm Park. Baltimore County's legislative delegation at the State (State Senators and Delegates) have long been supportive of parks and recreation, and have been instrumental in advocating for and procuring bond funding through the legislative process.

The federal TEA-21 program provides funding for a variety of purposes, including bikeways, recreational trails, and scenic byways. The County has received a total of just over \$1.5 million in TEA-21 funding for three "viewshed" projects, one streetscape project, one pedestrian improvements project, and two trail projects-- one, the State's Torrey C. Brown Rail Trail, and the other, Baltimore County's Number Nine Trolley Line Trail. Baltimore County EPS also procured additional TEA-21 funding for a small trail construction project within the Chase/Eastern Regional Greenway.

The County has utilized the LWCF State Assistance Program, the federal government's key outdoor recreation funding program for state and local governments, for 19 projects since the County's first LWCF grant in 1977. These grants brought nearly \$3 million in LWCF funding to the table for a variety of park acquisition and development projects, including recent renovations to the historic Merrick House at Cromwell Valley Park, and the construction of Perry Hall (community) Park.

The funding programs identified above are the most frequently utilized sources of money for park acquisition, development and rehabilitation projects. Other sources include: funding that derives from another area of the County's capital improvement program, including federal grant money secured by other agencies for a purpose such as community revitalization; other grant or special funding from the State of Maryland; and miscellaneous federal and private grant programs.

Planning Process: Baltimore County employs a strong planning process in virtually all aspects of its operations. The County's Department of Planning is the lead agency for countywide comprehensive planning, and often acts as a "bridge" between citizens and County agencies. One of the best ways citizens can play an active role in the County's planning process is through participation in community plans and other topic-specific plans (e.g., the Eastern and the Western Baltimore County Bicycle and Pedestrian Access Plans). As of December of 2011 there were fifty adopted community and special-purpose plans. In some cases there are numerous plans for the same geographic area or community, as updated plans were prepared in order to keep current and respond to change.

DRP participates in many countywide and community planning efforts with the Department of Planning and other County agencies, ensuring that public parks and recreation interests are served wherever appropriate. At the same time, DRP has its own comprehensive planning process. The LPPRP is the foundation of the agency's planning process, traditionally providing the guiding policies, goals and objectives for parks and recreation in Baltimore County. The

plan's scope of influence most significantly impacts and directs the County's investment in park acquisition, development and rehabilitation. This plan displays a high level of specificity, with general goals, objectives and policies identified in this chapter, and much more specific project-based priorities compiled in *Appendix C*. The LPPRP is brought through the County's plan adoption process, which includes review and approval by the Baltimore County Planning Board and the Baltimore County Council. This results in the LPPRP being adopted as an addendum to the County's Master Plan.

This LPPRP shall first and foremost be utilized as a guide for prioritizing the use of future parks and recreation capital funding within the Parks, Preservation and Greenways section of the County capital improvement programs. It is important to note that the projects identified within *Appendix C* are not the *only* parks and recreation capital projects that will be funded during the "life" of this plan. Needs and scenarios can change rapidly, and DRP and other County agencies must always have the flexibility to adjust priorities and respond to opportunities. Still, the projects within Appendix C should comprise the majority of capital expenditures for parks and recreation in the near future, and any new capital projects not listed herein must adhere to the goals, objectives and policies of this document. Alternately, some capital projects may be funded as a result of recommendations within community and topic-specific plans and reports, both existing and future. The LPPRP also serves as a primary resource for the compilation of the County's POS Annual Program, in which DRP lists the capital projects for which it envisions seeking state and federal funding in the upcoming years.

DRP reviews its capital funding priorities on a continuing basis, but formally on an annual basis. The agency staff that works within the communities throughout the County submit their priority requests based upon their experience with local recreation councils and knowledge of the communities and citizenry they serve. The needs identified are combined with those formulated by the agency's administrative staff, and are then prioritized based on a wide range of factors that relate directly to the goals, objectives and policies identified within the LPPRP. There is never sufficient funding available to address all of the identified needs, so the process of prioritizing projects is always essential.

The means for prioritizing projects to be funded varies by the type of project at stake. In general, there are three broad classes of capital projects—acquisition, development, and rehabilitation. The following describes the prioritization process used for each of these project types:

- Acquisitions: Baltimore County is approximately two-thirds of the way towards meeting the State's prescribed county parkland acreage goal of 30 acres per thousand citizens. Because nearly all areas of the County have parkland acreage deficits of varying extents, it is prudent to seek to acquire additional parkland in nearly all areas of the County. The method of selecting which parts of the County to target for parkland acquisition is somewhat complex, and not entirely regimented and precise. A wide range of factors play a role in deciding where to target the available acquisition funding resources at any given time. Some of the key factors evaluated include:
 - a) Acreage Needs: The amount of acres of parkland per thousand citizens in a given geographic area or jurisdictional entity (i.e., recreation area, community or council) plays

a partial role in prioritization, but may not be of primary significance since nearly all areas of the County have some parkland acreage deficit, and the use levels of existing parklands may vary by community.

- b) **Recreational Needs:** It is a principal priority of DRP to ensure that sufficient recreational opportunity is provided countywide. This factor will often be reason enough to pursue acquisition of land in a given area that has obvious recreational facility needs, but no existing undeveloped parkland suitable for the construction of the required facility(s). This factor is also closely tied to the State goal of providing parklands and recreational opportunities in close proximity to the population to be served.
- c) **Growth Trends:** It is important to be aware of the County’s population and housing growth trends, and to understand the potential impacts of these trends from a geographic standpoint. Over recent decades two specific locales in Baltimore County, Owings Mills and Perry Hall-White Marsh, were designated as growth areas. These areas were intended to be the targets for concentrated, planned growth that continues today. It was therefore essential that DRP understood the scope of the expected growth (both geographically and in terms of population expansion), and respond to the projected parks and recreation needs that would result from that growth. In Owings Mills the original parks and open space plan, entailing the creation of a large lake with surrounding lands, turned out to be unfeasible, resulting in the County having to meet parkland needs in other ways. The County responded by acquiring several regional parks that would help service the growth area, and by aggressively pursuing greenways through the development process.



Northwest Regional Park and its diversity of recreational opportunities helps to meet the recreational demands of the citizens of the Owings Mills Growth Area and beyond

In Perry Hall – White Marsh “The Honeygo Plan” was established, with parkland being identified as a required “adequate public facility” for the first time. Concerted land

acquisition efforts were initiated, resulting in the acquisition of five new sites to serve the growth area. These new community park sites, along with Honeygo Run Regional Park, help to meet both existing and projected future recreational demands in the greater Perry Hall-White Marsh area.

The new high-density mixed-use redevelopment concept that is espoused in Baltimore County Master Plan 2020 poses a new growth management policy and method that will impact DRP's ability to provide a sufficiency of quality, diverse parks and recreation opportunities for County citizens. DRP is working closely with the County's Department of Planning and other County agencies to develop strategies for the Community Enhancement Areas such as the Middle River Redevelopment Area, to help ensure that appropriate parks and recreation accommodations are made within and/or in close proximity to redevelopment areas.

- d) **Availability of Suitable Land:** Certain communities within the URDL are almost entirely built out, with little or no suitable land available for the acquisition and development of viable park sites. This poses a challenging problem, as those communities tend to have unmet recreational needs and lack undeveloped parkland capable of further recreational development. A prime example is the greater Towson-Towsontowne community. Acquisition opportunities may not exist or be scarce in such areas of the County, and properties that do become available (and usually feature existing improvements) may be prohibitively expensive. In rural areas the difficulty of finding property suitable to serve as parkland faces somewhat different challenges. Facility-rich parks in rural areas are best situated in a centralized location that serves the more dispersed population, preferably with good road access since most park visitors will be driving to the park(s). Meanwhile, properties encumbered with agricultural land preservation easements or targeted as high priorities for agricultural or natural resource preservation are best avoided for parks that will feature recreational improvements. DRP consults with the County's Department of Environmental Protection and Sustainability (EPS) when investigating sites in rural areas, so as to avoid conflicts with other land conservation programs/initiatives.
- e) **General Goals, Objectives and Policies:** Certain types of acquisitions may be pursued as a direct result of State or County goals, objectives or policies. At times special initiatives are initiated for the purpose of achieving goals and objectives, and to put policies in action. The County's regional parks initiative was aimed at addressing widespread unmet recreational needs, acquiring parkland to make progress towards the State goal, accommodating planned growth, and providing parkland and facilities for the use of some communities in which there was little or no suitable land available for the acquisition and development of community or neighborhood parks. Numerous sites have been acquired for the explicit purpose of community conservation/revitalization. Still others have been pursued because of their waterfront location and the County's long-standing commitment to provide citizens with access to the Bay and its tributaries.
- f) **Partnerships:** DRP sometimes invests in acquisition of sites in partnerships with other agencies. The most common example would be school recreation center sites that are

typically purchased with funding from both the agency and Baltimore County Public Schools. On occasion the County partners with Maryland DNR to acquire land that will then be owned and administered by one agency or the other. Such State-County acquisitions typically feature a natural resources component. Such was the case with the acquisition of the BeeTree Preserve Conservation and Public Recreation Access Easement on property adjacent to the Torrey C. Brown Rail Trail in northern Baltimore County.

- Development: This classification of capital project includes two general sub-classes, new park development, and park improvements.
 - a) New Park Development: New park development can take place shortly after a site is acquired, or many years later on a site that has been “land banked” and sitting undeveloped. Those projects that take place shortly after site acquisition are usually situated in areas in which immediate recreational needs exist, or in areas in which strong growth is taking place and a subsequent expansion in recreational demand is anticipated. Alternately, the development project could be taking place on a site that is acquired as part of a County initiative such as community revitalization. In such cases it is not unusual for the acquisition and development phases to be tied closely together, with funding allocated in consecutive fiscal years to expedite the creation of a new park. This, however, has become a less frequent occurrence as a result of recent fiscal challenges, as the figures below attest:

<u>New Parks Developed Within 5 Years of Site Acquisition: FY’s 2003-2012</u>	
FY’s 2003-2007	7 parks
FY’s 2008-2012	3 parks

New park construction on long-owned undeveloped sites typically takes place as a result of recreational demands outgrowing the available recreational facilities in a given area, or to accommodate new population growth that is taking place. Such projects can prove contentious from a public relations standpoint, as neighbors and nearby residents of the site may have grown accustomed to the parkland being undeveloped and assumed that it would always remain so. An important element of all new park development projects is public input. A series of public meetings are hosted by DRP prior to the design phase for new park development, and for major park improvement or rehabilitation projects. In the case of new parks, the public is initially offered the opportunity to say what types of facilities and areas they do and do not wish to have provided at the site in question. This information is used to create a number of “concept plans” that are presented in another community meeting, and which reflect both public demands and site conditions including areas suitable for development and those that must be preserved (e.g., forest buffers, steep slopes). Multiple meetings may be necessary to establish and select a concept that is most amenable to the public. The extent to which these plans are thereafter implemented depends upon available funding and competing priorities.

The initiation of any park development project, whether new or at a long existing park site, is largely dependent upon the amount of capital development funding available and

the immediacy of need in the area in comparison to other sites and communities. When fiscal resources are considerably limited few new park development projects will take place, with capital resources instead having to be concentrated upon renovation and rehabilitation projects to guarantee that existing parks and facilities remain safe and functional.

- b) Park Improvements: Park improvement projects are far more numerous than new park development projects, and may range from something as small as the installation of a picnic grill, to the construction of a major facility such as a ball field, fishing pier, athletic facility lighting, or storage/restroom/concessions building. There are literally hundreds of such requests from staff pending at any given time, with most such requests having an impact upon a facility's or site's ability to serve the programs of the local recreation councils. Since most parks and recreation sites (and a much larger proportion of the population) are situated within the URDL, the vast majority of park improvement funding is invested within the communities within the URDL. Some park improvement projects may be expedited if a recreation council or other organization or group contributes partial or full project funding.

Another factor that sometimes plays a role in determining whether or not, or when a new park or improvement project is funded is the availability of "outside" funding sources—that is, funding not already programmed within Recreation and Parks' budget. The procurement of unanticipated government and private funding sources such as grants and donations can often lead to the activation of a project that had previously gone unfunded. As with new park development projects, few park improvement projects take place when funding is extremely limited and must instead be dedicated to park and facility rehabilitation.

- Rehabilitation: The County's parks and recreation funding resources must not only accommodate new growth and recreational demands through park acquisition and development, but rehabilitate the hundreds of existing sites that have been in place for many decades. As parks and facilities age, they become worn by use, weather and other factors, and in some cases become outdated. It is therefore important to invest sufficient capital funding into site rehabilitation and replacement in order to keep facilities safe and functional. The County has been pro-active in addressing the challenge of aging parks and facilities, undertaking a number of comprehensive capital renovation and replacement programs. Recreational building, sports court, parking lot, fencing, ball field, facility lighting, and playground equipment renovation and replacement programs upgrade older facilities whose condition has deteriorated, or which have become outdated. In some cases safety standards are updated, resulting in a need to conduct renovations to adhere to new guidelines or requirements. Within such programs, matrices are sometimes established to prioritize the facilities in need of renovation/replacement, based on site assessments in which such factors as physical condition, public safety, and level of recreational use are considered and rated. These matrices are then utilized to set priorities for the available rehabilitation and/or replacement project funding. In rare circumstances, large-scale park rehabilitation projects are initiated to "reinvent" parks that no longer meet the needs of local citizens. Such projects

are typically driven by citizens that express a desire to have a neighborhood or community park redesigned or upgraded.



Modular storage and concessions buildings such as this one at Bloomsbury Community Center are a cost effective means for meeting the storage needs of site recreation programs while concurrently providing the volunteer recreation and parks councils with opportunities to conduct concessions-based fundraising to support public recreation programs.

Zoning, Growth Management and Development Regulations: Baltimore County has formulated and implemented one of the State of Maryland’s most highly-touted zoning processes to effectively control growth. A variety of residential, commercial and industrial zones have been created and applied to channel the vast majority of development to areas within the URDL. Strong resource conservation zoning that greatly limits the use of land and density of development is meanwhile applied to areas outside the URDL. Thus, zoning is central to the County’s growth management strategy. Every four years the County conducts a “comprehensive zoning map process” (CZMP) in which any person, property owner, business or community association may petition for a zoning change on any property in Baltimore County. Other zoning revision requests may be made by Department of Planning Staff, the Planning Board and the County Council. The 2004 CZMP, which implemented a new resource conservation zone termed “RC8 – Environmental Enhancement,” featured zoning revision requests that covered vast geographic areas outside the URDL. In the 2004 CZMP 91% of the acreage involved was situated in the rural area of the County. A key result of that CZMP process was the reclassification of large amounts of acreage within resource conservation zones, not to more permissive zoning types, but to other resource conservation zones that allow less density for residential development. Other growth management measures are implemented through legislative efforts, as was the case with the establishment of the “Neighborhood Commons” (NC) overlay district in early 2012, whereby the preservation of open spaces by community and advocacy groups is encouraged.

There is no specific zoning classification for parkland within Baltimore County. Instead, parks and recreation sites tend to be zoned in a manner compatible with the area in which the sites are situated. Sites in residential areas within the URDL tend to have the same or similar density residential zoning as surrounding residences. Parks within resource conservation areas usually have the same resource conservation zoning classification as surrounding properties. The most significant effect of zoning on parks and recreation is the impact zoning has on property values. Certain zones command very high per acre land values, thereby making parkland acquisition in such areas more difficult.

The development regulations and other regulatory mechanisms in place within Baltimore County have a more noticeable impact upon land preservation in general, and recreation, parks and open space in particular. These regulations ensure that environmentally sensitive areas and important natural resources are safeguarded (see the *Natural Resource Conservation* chapter herein), and that developers help contribute to public infrastructure needs. In most cases developers must complete roadway and sidewalk improvements, helping to enhance both motorized and pedestrian access. The regulations with the most impact upon parks, recreation and open space, however, are those incorporated within the previously described *Baltimore County Local Open Space Manual*. The manual and the program guarantee that residential development companies and partnerships help meet the needs of the individuals moving into their developments by dedicating mandatory open space and greenways, and/or paying a fee-in lieu of open space.

See the Baltimore County Master Plan 2020 for more detailed information on zoning, growth management and development regulations.

Addressing Specialized Recreational Needs: The County and DRP strive to provide for the recreational needs of all sectors of the population. The capital improvement program provides parks and facilities for all ages and abilities, and for a broad range of recreational tastes and demands. Effort has been invested in diversifying the design and construction of parks. Instead of constructing only the ball fields needed to serve the programs of local recreation councils, other facilities and amenities that would be attractive to other citizens are usually provided. For example, a paved path network might be provided to offer options to individuals of all ages, ranging from parents and grandparents with babies in strollers, to children on bicycles, to adults and senior citizens on foot or in wheelchairs. An accessible playground might be installed for the use of children, including individuals that require accessible playground surfaces and transfer platforms.

The County is aware that there must be a special emphasis placed upon the needs of certain members of the population, and is committed to providing targeted services to meet these needs.

- **Youth:** Meeting the recreational needs of children and teenagers has always been the top priority of DRP. A myriad of sports, arts, educational and social programs have long been offered through the local recreation councils, utilizing County facilities including parks, leased recreation sites and school recreation centers. These programs provide young people with experiences to grow in both mind and body, offering positive outlets into which they may channel their energy and creativity. The County realizes that the process of growing up involves innumerable choices, and that young people face many potential pitfalls along the

way. Concerted efforts have been made within the past decade to provide sufficient positive opportunities for all youths, in particular the children and teens that live in communities with higher than average unemployment, crime and substance abuse rates. Recreation and Parks has partnered with Baltimore County Police in the Police Athletic League (PAL) initiative. These centers provide youth within many such communities with a safe, fun and potentially life-changing place to go. Quality recreational opportunities are provided and PAL staff serve as mentors that offer guidance and act as positive role models and influences.



Members of the Mars Estates PAL, who participated in a stream cleanup project at Back River, take a moment to pose with the fruits of their labor.

Parks and recreational facilities likewise play an important role in offering all youths venues at which to recreate, whether through organized recreational programs, or on an informal basis during their free time. Parks help to keep kids “off the street,” and offer safe places to play, ride bicycles, or simply experience nature. The County’s natural and historical interpretive facilities in particular play a role in educating young people about the environment, history and culture. The Marshy Point Nature Center is now one of two environmental interpretation centers visited as part of Baltimore County Public Schools’ fifth grade environmental studies curriculum.

- **Senior Citizens:** The County continues to exert significant resources and efforts into meeting the leisure time needs of the aging population. As indicated previously, efforts are being made to make new parks as usable for all ages as possible. Programmatically, DRP will continue to supplement the leisure options made available to seniors by the Department of Aging (the County’s lead agency for senior services) at 20 senior centers throughout the County. In some circumstances County capital resources are maximized by construction of community centers with space for both DRP and Aging programs.
- **Individuals with Disabilities:** Baltimore County is committed to delivering quality recreational opportunities to all citizens, regardless of their physical or mental abilities. Realizing that many citizens require special accommodations in order to participate, DRP

strives to make its recreational facilities as universally accessible as possible, and has established a Therapeutic Recreation Services office. New facilities constructed at County parks and recreation sites adhere to Americans with Disabilities Act Accessibility Guidelines (ADAAG), ensuring that individuals with disabilities are provided reasonable access to the opportunities these facilities offer. The County has also constructed a series of specialized facilities targeted towards individuals with disabilities. A prime examples of this is Rockdale Park, which features a paved wheelchair ball diamond, community gardens with raised boxes that are more readily accessible to people in wheelchairs, a wheelchair discus/javelin area, and accessible playground and picnic pavilion, all connected by paved paths. A number of “super-accessible” playgrounds with rubberized surfaces have been constructed throughout the County as well. Another standout facility is the Talmar (Therapeutic Alternatives of Maryland) Gardens and Horticultural Therapy Center at Cromwell Valley Park, which utilizes greenhouses, gardens and other areas/facilities within its enriching horticultural therapy programs.

DRP’s Therapeutic Recreation Services office provides a wide variety of recreation opportunities and services for individuals with disabilities countywide. The office designs and provides programs designed specifically for individuals with disabilities, furnishing specialized adaptive equipment where necessary. The office likewise arranges for the inclusion of individuals with disabilities within the general recreation programs provided by recreation councils, with the goal being reasonable accommodations for full participation in all agency programs.

Joint-Use and Other Agreements: The most important and extensive joint-use agreement impacting recreation, parks and open space is the agreement between DRP and Baltimore Public Schools (BCPS) that provides for the County’s public schools to serve dual educational and recreational roles. Beginning in 1952, this agreement serves as a key example of the maximization of capital and physical resources. There are currently over 160 school recreation centers countywide, each providing recreational facilities that are used to varying extents for both school and recreational purposes. Nearly all school recreation centers feature gymnasiums, activity rooms, storage, restrooms, ball fields and sports courts. Some schools also include auditoriums/theaters and other rooms assigned used for arts activities and programs. Elementary school recreation centers provide playground equipment that supplements the playgrounds/tot lots provided by DRP, and many high schools also feature running tracks that are well utilized on an informal basis by the public when scholastic sports activities are not taking place. In recent years, DRP-funded synthetic turf fields (and, in some cases, associated lighting systems) were installed in place of grass fields at five high school recreation centers and at two community colleges, with special facility specific joint-use agreements established to formalize field use priority. The construction of these fields significantly expanded facility use by the programs of the local recreation and parks councils. DRP also assisted in the funding of a number of high school recreation center stadium facilities, assisted by State bond funding. The general joint-use agreement for school recreation centers remains a vital strategy without which many recreational programs offered by local recreation and councils would not be possible.

Additional public recreation opportunities are provided via the Community College of Baltimore County (CCBC), with campuses in Catonsville, Essex and Dundalk. Limited access is provided

at CCBC swimming pools and ball fields for the recreation council programs. The CCBC campuses, like other colleges and universities across the County, also provide recreational and leisure opportunities for their students and alumni.

Leases provide another type of agreement that helps the County to better deliver sufficient recreation services. Baltimore County leases parkland from civic organizations, private institutions, the City of Baltimore, and the State of Maryland. Various recreation councils arrange their own leases with private parties to provide recreation program space when there are insufficient County resources. Sites leased to serve as parks or provide recreational opportunities include:

Site Name	Acres
Robert E. Lee Park	~415.0
Cromwell Valley Park – Willow Grove Area	269.0
Loch Raven Fishing Center	~5.0
Kingsville Park	22.0
Prospect Park	20.0
Sandy Hills Park (portion of site)	3.7
Villa Maria	5.0
Campus Hills	4.0
Christian Temple	6.0
Millers Island Park	6.0
Wilson Point Park (State-owned portion)	7.0
Chestnut Ridge	4.0
Saint Patrick’s Field	2.3
Long Green Baptist Church	1.6
Saint John’s Church	0.7
Towson American Legion Field	3.0

The manner and cost of these leases varies widely, but in all cases public access is obtained and the sites are actively utilized. Conversely, Baltimore County leases out some of its properties to groups and individuals where appropriate. In the case of parks and recreation, some park sites that have yet to be developed are leased to farmers as an interim activity until the site is to be developed. Numerous former park caretaker houses are also rented out by the County.

Protecting and promoting the Natural Environment: DRP strongly believes that people need to be able to experience the natural environment before they can truly appreciate its majesty and vulnerability. While the Department’s primary charge is providing recreational opportunities, especially of a local nature, its role as a major landholder puts the agency in a position to positively impact the natural environment. Thousands of acres of natural resource lands and sensitive environmental areas are preserved within Baltimore County’s parks. In many cases park visitors are unaware of the extent of preserved lands – particularly woodlands – as they instead focus on the developed portion of parks. Each of the following parks features over 100 acres of woodlands:

PARK	WOODED ACRES*

Oregon Ridge Park	900
Rocky Point Park and Golf Course	125
Cromwell Valley Park (partial lease)	170
Northwest Regional Park	200
Honeygo Run Regional Park	105
Marshy Point Park and Nature Center	275
Banneker Historical Park and Museum	105
Robert E. Lee Park (leased)	260
Western Area Park, incl. golf courses	110
BeeTree Preserve (easement)	235
Total:	2,485

*- approximate acreage

It should be noted that the above chart does not include non-park sites preserved through other land conservation programs such as Rural Legacy, nor does it include vast forested areas within Maryland State Parks or the reservoir properties.

Most of the County's regional and countywide parks and facilities protect sizeable natural areas, conserving woodlands, wetlands, stream valleys, steep slopes, and providing valuable wildlife habitat. The County's extensive greenways and stream valley park network protects miles of rivers and streams, helping to maintain water quality and protect the Chesapeake Bay, to which all of these rivers and streams flow.



More than 100 acres of woodlands lie beyond Honeygo Run Regional Park's paved loop path, here enjoyed by a pair of senior citizens. Honeygo's woods tie into an even larger network of woodlands, including those within adjoining greenways and open spaces. The woods also help to buffer and protect Honeygo Run.

Previous mention has been made of DRP's interpretive facilities, all of which offer some degree of environmental education. These dynamic facilities welcome visitors and expose them to the

natural areas featured within the parks in which the centers are situated. Interpretive displays and programs provide insight about the natural environment, as well as the historical and cultural aspects of the area. The interpretive facilities and programs (both on and off site) take a hands-on approach that is generally very effective in developing an appreciation of the natural environment. Efforts to enhance the County's interpretive parks and facilities continue, with improvements having been made at Marshy Point Park and Nature Center (a Chesapeake Gateways site), Banneker Historical Park and Museum, and Cromwell Valley Park over the past several years.

DRP works with the Department of Environmental Protection and Sustainability (EPS) to facilitate environment-friendly projects within County parks. These range from shoreline and stream enhancement projects, to water quality improvements, to forest health assessment studies and programs, to the establishment of reforestation areas. EPS also assists DRP with environmental assessment of prospective parkland acquisitions, and with the identification of sensitive environmental areas and buffers prior to park construction or enhancement projects.

Promoting Economic Development and Tourism: Parks and recreation continue to play an important role in economic development on a variety of levels. Park construction projects have long provided employment opportunities, going back to the days of the Civilian Conservation Corps (CCC) in the 1930's and 40's. Modern projects employ a diversity of trades, professions and businesses, from engineering firms that prepare project plans and documents, to construction contractors, to purveyors of landscaping trees and plants. These projects also help support the companies that manufacture such products as playground equipment, modular buildings, and lighting equipment. On-call contracts are of particular value to the local economy, employing numerous companies whose owners and workers often live in the immediate area. Park maintenance operations require equipment and materials to perform their maintenance functions and complete minor park improvements, purchasing many of these goods from local companies. Similarly, manufacturers, distributors and merchandisers rely heavily upon public recreation programs to purchase sports equipment, uniforms, etc. Program participants and visitors to County parks also support the local economy by patronizing nearby retail, food and beverage businesses.

Numerous studies have found that quality parks and open spaces have a significant positive influence upon property values. These studies have found that the property value of homes adjacent to or in close proximity to parklands is often enhanced by the presence of the parkland. A prime example of this phenomenon is the State's Torrey C. Brown Rail Trail (formerly the North Central Rail Trail). Originally opposed by many of its neighbors, the trail is now highlighted as a key selling point within real estate listings for nearby homes. The County contributes to the wellbeing of neighboring property values by ensuring that its parks are attractive and well maintained. The availability of parks and recreational facilities sometimes plays an important role in the decision making process of individuals and businesses that are contemplating a move to the County or a given community. The green space provided within parks and open spaces also contribute to the attractiveness of an area, and can be an important factor in a prospective homebuyer's perception of a community.

While the expansion of tourism is not itself a primary DRP aim, there is no doubt that the County's parks, facilities and recreation programs draw countless numbers of visitors to Baltimore County. Major parks and facilities such as the County's Oregon Ridge Park, the County-leased Robert E. Lee Park, and the State's Torrey C. Brown Rail Trail regularly draw large numbers of visitors from outside the County. Special events and multi-day tournaments, particularly at the regional parks, bring in visitors and participants that spend one or more nights in the area. These individuals spend their money at local hotels, restaurants, gas stations, etc., supporting local business and generating additional tax revenues.

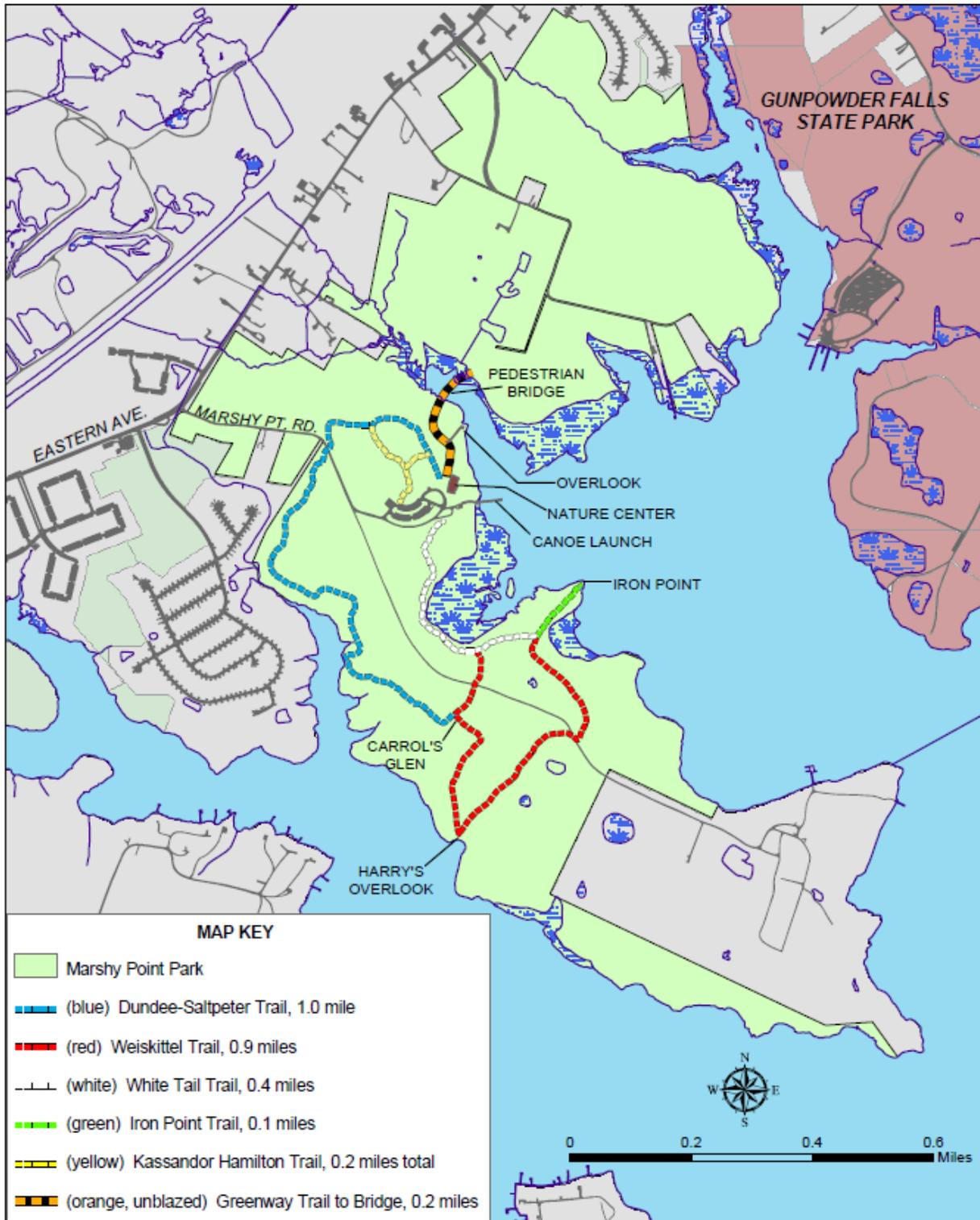
Using Technology to Enhance Services: Scientific and technological advancements have greatly enhanced the ability of governments to deliver quality public services, while bringing about entirely new public expectations. DRP utilizes technological resources in virtually all aspects of its operations, to both perform its duties more efficiently, and enhance public services. As an example, over the past decade and a half the use of geographic information systems (GIS) has greatly expanded for a variety of purposes. Preliminary site investigation for prospective acquisitions, review of digital orthophotography overlaid with property boundaries to investigate maintenance and ownership issues, site analysis for the purpose of new park design, and the creation of assorted maps for public meetings, presentations, etc. are all examples of the use of just one type of computer software.

In the area of constituent services, a large volume of information on DRP's park system and services has been made available on the Internet, with the page dedicated to searching for recreational activities being a fixture on the County web site's list of "most requested services" (web page). Recreation and Parks web site visitation numbers have consistently increased each year, clearly showing how the Internet has become a primary information source for the public. Providing information online has made materials much more publicly accessible, and enhances the agency's ability to quickly direct constituents to the information they seek. The establishment of an agency e-mail account, over and above office e-mail accounts, has enhanced communications and given the public the opportunity to have their inquiries directed to the appropriate area without undue research and effort on their part. Another technological enhancement that has been implemented is a computerized maintenance management system (CMMS). This system allows for the streamlining of parks and recreation maintenance requests, better organizes everyday maintenance tasks, and substantially improves the collection of pertinent maintenance data. The success of the CMMS has resulted in the County exploring the feasibility of the system being expanded to other forms of property maintenance. Finally, in recent years DRP has employed geographic positioning system (GPS) technology to perform detailed and highly accurate trail mapping, leading to the production of new trail maps (see map on following page) and assisting with various trail management and planning processes.

All of the above programs, procedures and methods are utilized to the best extent possible to provide high quality recreational opportunities to the citizens of Baltimore County, and to effectively meet County and State recreation, parks and open space goals.

Sample trail map:

MARSHY POINT PARK & NATURE CENTER - TRAILS



Property lines compiled from existing deed information, and are not to be considered authoritative. Trail lengths are approximate. Map created by the Balto. County Dept. of Rec. and Parks, April 2010.

ASSESSING PARKLAND AND FACILITY NEEDS

A required component of the LPPRP is the assessment of needs for parkland and recreational facilities. The processes utilized to assess these needs involve mathematic formulas and traditional methodologies that result in numeric estimations of how many additional acres of parkland are needed, and how many of various types of recreational facilities are needed. Both the acreage and recreation facility needs assessment utilize forms of supply and demand analysis.

Supply data is captured from County park and facility inventories, which include certain specific data fields to adhere to State of Maryland standards. As part of the LPPRP formulation process, the County provides the Maryland Department of Planning (MDP) with digital data for its park and facility inventory, with the data utilized at the State level within the formulation of the Maryland LPPRP. It is important to recognize that while the parkland and facility needs analysis processes provide numeric data that gives a general picture of the needs, further qualitative assessments need to take place in order to gain a better sense for actual needs.

Supply of Parklands and Recreational Facilities

The two types of resources that are considered when performing supply and demand analysis for parks and recreation purposes are *parklands* and *recreational facilities*.

Parklands: The full process for enumerating parkland acreage needs is presented in *Appendix D*. Baltimore County presently adheres to the State-established goal of providing 30 acres of county parkland per thousand population. The County’s parkland acreage needs are presented in further detail within the “needs assessment” section of this chapter. Following is a summary of the existing supply of parkland within Baltimore County. The information is broken down by each of the four recreation regions that comprise the County (see map on page 10). It is important to note that the figures provided reflect the *creditable parkland acreage*, which is the amount of land that may be counted towards the parkland acreage goal based on the standardized “30 acres per thousand” analysis process. These figures differ from the *gross* amount of parkland, as certain types of lands may only be counted on a partial basis towards the parkland acreage goal.

- **Countywide and Regional Acreage**: This type of parkland is “shared” in terms of acreage credit, with countywide parks and open spaces assumed to serve all four recreation regions, and regional parks each having designated primary service areas, some of which cross recreation region borders (for example, the primary service area of Meadowood Regional Park is deemed to be the Pikesville, Towson, Towson towne, Lutherville-Timonium and Cockeysville recreation councils. The creditable acreage breakdown is as follows, representing the full (100%) acreage of all regional and countywide parks, and one-third of the acreage of countywide open spaced (the three reservoirs and Essex Sky Park property):

Parkland Type	# of Sites	Creditable Acres
Countywide Parks	17	3,879
Countywide Open Space	4	5,037
Regional Parks & Facilities	9	977
Totals:	30	9,893

- Local Acreage by Recreation Region: The following table displays the various types and amounts of *creditable* “local” parkland acreage by recreation region.

	# of School Recreation Centers	School Recreation Center Acreage	# of Local Parks*	Local Park Acreage	# of County Open Spaces/ Natural Sites**	County Open Space/Natural Acreage	# of Private Open Spaces/ Natural Sites***	Private Open Space/Natural Acreage	Total # of Local Sites	Total Local Acreage
Region 1	57	793.6	49	1,066.2	341	388.3	94	100.4	541	2,348.5
Region 2	33	488.6	33	489.8	202	283.1	102	108.1	370	1,369.6
Region 3	28	394.1	40	590.6	321	311.8	84	77.6	473	1,374.1
Region 4	43	497.0	58	974.6	116	128.6	32	42.1	249	1,642.3
Totals:	161	2,173.3	180	3,121.2	980	1,111.8	312	328.2	1,633	6,734.5

*- includes existing and proposed neighborhood and community parks

**- incl. County LOS, undeveloped parks and greenways, and drainage & forest buffer reservations

***- includes private homeowners association (HOA) and condo-owners assoc. (COA) local open space

Site Classification Changes/Notes: The process of evaluating parkland site classifications as they relate to parkland acreage needs assessments involves occasional changes to how sites are classified. The following summarizes some of the key recent changes, which have transpired since the prior LPPRP:

- Robert E. Lee Park (leased from the City) and the BeeTree Preserve Conservation and Public Recreation Access Easement have been added to the County’s parkland inventory and classified as parks, reflecting their public recreation opportunities.
- Ten greenways, open spaces and other public properties in the Owings Mills area have been reclassified as parks as a result of the construction of the Red Run Trail, which runs through or along each of the properties.
- A number of previously unimproved sites that were classified as open space have been developed since the writing of the last LPPRP, and have thus been reclassified as parks. This includes Sweet Air Park, Wilson Point Park, the Fields at Renaissance Park, Cowenton Ridge Park and Perry Hall Park.
- Numerous presently unimproved sites (e.g., Gough Park Site, Tidewater Village Park Site, Hazelwood Park Site, Ashmere Road Park Site) have been reclassified from open spaces to parks to better reflect their *ultimate* anticipated use and to be counted more accurately within parkland acreage needs assessments.
- Park classifications were changed in numerous instances to better reflect the role of the parks. For example, Fort Howard Park, despite its size (92.8 acres) was reclassified from a regional park to a community park since its types and quantity of facilities are more akin to a community park.
- Minor site acreage adjustments were made to correct errant records/data.
- Park acreage was split in cases where most of a large park serves a region or the County, while part serves local recreation needs. For example, County Home Park has a golf course (countywide appeal) as well as a section with local recreation facilities.

Recreational Facilities: The process of estimating recreational facilities needs is not nearly as basic and direct as the acreage needs evaluation methodology. Numerous formulas and processes exist for estimating recreational facility needs. The two most common methods are straightforward per capita recommendations, and a more complex supply-demand methodology. The per capita process provides recommended service levels for various types of recreational facilities (e.g., one tennis court to serve every 2,000 population, or 0.5 miles of multi-use trail for every 1000 population). The supply-demand method uses recreation demand survey results to estimate the overall “demand” for various facilities based on the estimated number of times survey respondents participated in recreational activities, then compares these figures with the “supply” accommodated by available recreational facilities. Both types of assessment methods provide general estimations of need that must be further analyzed and adjusted based on local conditions and variations in recreational demand (not all communities have the same recreational preferences). A qualitative analysis of the results must take place after formulation of the base needs numbers in order to reflect local factors. The County’s recreational facility needs assessment, as well as a description of the supply-demand methodology utilized, is presented later in this chapter.

The following is a synopsis of the types of recreational facilities provided throughout the County, as well as a count of these facilities. The “primary provider” for each type of facility is included within the facility descriptions. In cases where “Baltimore County” is listed as a provider, the facilities may be situated at parks, school recreation centers and leased recreation sites.

- **Ball Diamonds and Athletic Fields:** Ball diamond is the generic term that refers to facilities designed with infield and outfield areas, a pitcher’s mound, three bases, and home plate, and used for sports including baseball, softball and t-ball. Diamonds can be built with grass or “skinned” (i.e. dirt) infields, and are constructed to support one or more distances between bases. The County typically constructs 60’ diamonds, 60’/75’ diamonds (which can be set up for any distance between bases of 60’ to 75’), and 90’ diamonds. The difference in base path distances varies by sport, age group and league type/rules. Athletic fields are rectangular multi-purpose fields constructed to support such activities as soccer, football, lacrosse, field hockey, rugby, etc. Baltimore County does not construct athletic fields for one express sport, but rather to accommodate many types of field sports. The configuration of ball diamonds and athletic fields varies widely by site and greatly impacts the manner in which these facilities may be utilized. A relatively small number of diamonds and fields are “stand alone,” which means that they are single physical entities that are not encroached upon by other fields or diamonds. The vast majority of diamonds and athletic fields in Baltimore County are “overlays.” This means that the diamond(s) and athletic field(s) intersect, so that the diamond(s) and field may not be used concurrently.

The significance of stand-alone versus overlay is important to understand, as it greatly impacts the potential use of facilities. Traditionally, most recreational sports have been played in very defined and regimented seasons. Spring and early summer were the domains of baseball, softball and lacrosse. Fall and late summer were the seasons in which soccer and football programs took place. The allocation and scheduling of ball diamonds and athletic fields was fairly straightforward. Baseball and softball were by far the most highly

demanding spring activities, and only a relatively small number of athletic fields would be needed to provide for lacrosse, whose appeal was generally isolated in terms of geography. In fall the vast majority of ball diamonds would no longer be needed, as soccer and football dominated. Recreational demands have shifted vastly over the decades, so that the concept of sports seasons has faded somewhat. This has led to various sports being played in non-traditional times of the year, such as fall baseball and softball, and spring soccer. This, combined with a boom in girls' sports and year-round demand, has made the process of field and diamond allocation far more challenging. Diamonds that would have been shut down in fall are now needed to serve fall baseball and softball. More and more athletic fields are needed in spring to accommodate year-round demand for many field sports, and to serve activities such as lacrosse that have grown immensely over the years. It is therefore important to understand that raw counts of ball diamonds and athletic fields can be misleading since so many of these facilities are overlaid and cannot be used to support different activities at the same time.



Girls lacrosse game under the lights at Perry Hall Park. According to U.S. Lacrosse, there was a growth of over 9% in youth lacrosse participation from 2009 to 2010 alone. Additionally, the number of girls varsity lacrosse programs grew by over 48% over the past five years, the largest such increase in girls' high school sports.

Other factors impact the usability of ball diamonds and athletic fields. Many diamonds situated on the same site, particularly those built decades ago, are arranged in a manner that could restrict the use to one diamond or the other at any given time. The prime considerations are the sport being played, the age group of the participants, and the distance between the home plates of the diamonds. When this distance is short, there would be few options to use both diamonds at the same time -- perhaps only if younger age groups and/or t-ball were taking place on each.

Athletic fields offer a different set of challenges and opportunities. In some cases full-sized athletic fields are not needed to support an activity—lacrosse games for younger age groups,

for example. Rather than having one such game occupy a full athletic field, two or more smaller “temporary” fields are sometimes laid out atop a single “regulation” athletic field. Athletic fields are also prone to becoming de-vegetated much more quickly than ball diamonds, especially if used heavily for lacrosse and/or football. Clear wear patterns develop around the goal areas for lacrosse, and lengthwise in the middle of football fields. Such wear can lead to a need to reconfigure the field boundaries (where possible), or even result in the field being taken out of service for a period of time so that it may be rehabilitated. The replacement of grass fields with synthetic turf surfaces took place at thirteen sites since the prior LPPRP, thereby resolving the issue of field wear at those recreation venues.

Another factor impacting level of use is facility lighting. Diamonds and athletic fields with lighting systems can be used for an extended period of time, past daylight hours, and are particularly useful in early spring and late fall when daylight hours are shorter. Such diamonds and fields can thus support many more games than unlit sites each year.

Both ball diamonds and athletic fields are essential to the programs offered by the local recreation councils. In some cases, certain programs of the councils have leased private land on which to operate as a result of an inadequate number of County-owned facilities. Nearly all diamonds and athletic fields also receive unscheduled use for informal recreation. Baltimore County is the primary provider of this type of recreational facility within the County.

- **Outdoor Courts:** Traditionally DRP has provided two basic types of outdoor courts at parks and school recreation centers—tennis courts and multi-purpose courts. While multi-purpose courts are intended to be used for a variety of purposes, their main feature has long been basketball goals. Much has changed over the decades that has impacted upon the use of existing courts. Tennis has been on a steady decline since its heyday in the 1970’s. The basketball goals at multi-purpose courts have often been removed as a result of neighbor complaints of disorderly conduct. To date no perfect solution to this problem has been formulated, frustrating the neighbors of multi-purpose courts, those who wish to use outdoor basketball courts, and DRP. The most recent approach taken at some courts has been the removal of one goal from each court, thereby transforming the courts into half-courts. The half-courts are seemingly less attractive to the older teens and young adults that local residents have identified as the chief transgressors.

The County’s courts have long been used for a wide range of other recreational activities, regardless of whether the courts were designed or conducive for same. Multi-purpose courts are sometimes furnished with painted game lines for activities such as the games hopscotch and four square. Many tennis and multi-purpose courts are used as a makeshift “indoor” soccer fields, roller hockey courts, or hard-surface lacrosse fields. Roller skater/bladers and bicyclers, particularly children, have long utilized the courts as alternative to skating or riding on sidewalks or the road. Some such activities have led to court evolutions in Baltimore County. DRP has installed a plastic surface outdoor court, complete with dasher boards, for soccer, lacrosse and roller hockey at North Point Government Center, constructed

three roller hockey courts, and developed “street-style” skateboard and rollerblade facilities at four parks.

The extent of use offered by courts varies widely. Courts at school recreation centers are restricted to use by students during school hours. Some courts have been lighted to provide extended hours of use. Skatepark use is regulated and restricted to specific use hours. Baltimore County is the primary provider of various types of recreational courts throughout the County.

- **Indoor Facilities:** The demand for indoor recreational facilities such as gymnasiums and activity rooms has seen a marked increase over years. This increased demand may be attributed to a number of factors. Some of the activities that have long taken place in these facilities—basketball, volleyball, dance, aerobics and fitness, etc.—have substantially grown in popularity. Certain sports that traditionally take place outdoors have developed indoor variations (e.g., indoor soccer or indoor lacrosse) that allow participants to play their sport of choice virtually year-round. Some recreation and parks councils have extremely popular cheerleading and dance programs that use indoor facilities either year-round or seasonally. Tot centers and camps also often utilize indoor recreation space. In many communities there is insufficient indoor recreation space to meet all recreational demands.

The County continues to invest in indoor facilities in an effort to better meet the needs of the recreation councils and the general public. DRP often participates in the funding of new public school construction, often investing a larger amount of funding to allow for recreational enhancements such as the construction of a middle school-sized gymnasium at new elementary school recreation centers (in lieu of a smaller and less usable elementary school-sized gym). Numerous older and somewhat defunct community buildings, some of which were formerly schools, have been replaced with new community centers with more and/or better-configured recreation space. New community centers have been constructed, some of which are much larger than typical, and feature special facilities such as theaters or technology labs.

Other indoor facility types are also provided by the County, including interpretive centers, arts buildings, and a number of historical structures. Since the writing of the prior LPPRP, the County’s first regional indoor recreation facilities with indoor multi-purpose fields have been established at three sites—the Southeast Regional Recreation Center, the Northeast Regional Recreation Center, and the Reisterstown SportsPlex (which also features a Baltimore County Revenue Authority-operated indoor ice rink). Indoor swimming pools, operated by the YMCA, were provided at the Dundalk Community Center and Randallstown Community Center. Baltimore County is the primary provider of public indoor recreational facilities throughout the County.

- **Picnic Facilities:** Baltimore County offers designated picnic areas at dozens of parks throughout the County, each featuring a collection of picnic tables and grills, and some also including picnic pavilions/shelters. These areas are available for reservations through various DRP offices from spring through fall. Additionally, one or more picnic table(s) are provided at well over 100 sites for informal, unscheduled picnicking. Picnic pavilions are in

great demand during “picnicking season,” with weekend reservation schedules filling up quickly each year. Picnic areas provide excellent venues for gatherings of friends, families and groups, offering an opportunity to cook out and enjoy a day in a park. Where possible, pavilions are constructed at parks with other recreational amenities so as to offer additional recreational opportunities. Both Baltimore County and Maryland DNR serve as the main providers of picnic facilities.

- **Playgrounds:** “Playground” is the term used to describe areas with apparatus such as swings, climbers, spring-toys and slides. These areas are sometimes called “tot lots,” but are designed for a number of different youth age groups. Playgrounds are available at more than 240 sites countywide, constructed and managed by both DRP and Baltimore County Public Schools. The County has developed a comprehensive playground renovation program that has resulted in the replacement of hundreds of outdated systems, and which has a regular inspection process to ensure the safety of all playground equipment. Playgrounds are situated in virtually all types of parks, including small neighborhood “walk to” sites that do not offer on-site parking. In some cases multiple playgrounds are situated at the same site, often targeted to different age groups. Significant efforts and resources have been invested into making playgrounds more accessible, and in providing support amenities such as park benches. Baltimore County is the primary provider of playgrounds within the County.
- **Trails and Paths:** An assortment of trails and paths may be found at parks throughout the County. Trail and path surfaces vary, and include natural and unimproved; semi-pervious woodchip, stone and stonedust; and paved. The types of activities that are permitted or are appropriate also vary, and generally depend upon the type of surface and character of the trail or path. Uses could include walking, jogging, hiking, roller skating/blading, skateboarding, bicycling, horseback riding, and wheelchair riding. Motorized vehicles are prohibited, and some of the listed activities are not allowed on certain trails. The County is making a concerted effort to develop paths and trails in new park development and park improvement projects, seeking to meet expanding demand for many linear-based forms of recreation. The County’s paths and trails supplement the far more extensive path and trail networks provided at the City-owned reservoirs and within state parks and the Soldiers Delight Natural Environment Area.
- **Waterfront Facilities:** Baltimore County offers numerous waterfront facilities that take advantage of the County’s water resources, both on the Bay and its tributaries, and on the reservoirs. These include boat ramps, fishing piers, canoe launches, and public beaches. Additionally, miles of shoreline are available for fishing, viewing waterfowl and other wildlife, or the simple enjoyment of waterfront vistas. The Marshy Point Nature Center and Park utilizes its coastal location as the central theme in educating the public about the Chesapeake Bay and its ecosystem. Waterfront parks and facilities form one of the centerpieces of the County’s park system, and efforts continue to provide additional waterfront recreation opportunities. Baltimore County is the leading provider of free public waterfront access in the County. Many private marinas provide assorted boating services for a fee, and thousands of piers and docks are situated on private properties. The State also offers the Dundee Creek Marina in eastern Baltimore County. The County operates the Loch Raven Fishing Center at Loch Raven Reservoir through a lease with the landowner,

Baltimore City. Public swimming beaches are provided by both DNR (Hammerman Area of Gunpowder Falls State Park) and the County (Oregon Ridge Park lake and Rocky Point Park).

- **Swimming Pools:** At present DRP does not provide outdoors swimming pools, though County-owned indoor pools run by the YMCA have been established at the Dundalk Community Center and at Randallstown Community Center. Public swimming programs are, however, offered by a few recreation councils, and hosted at community colleges. Other opportunities for pool swimming are provided by YMCA's and private swim clubs, and many citizens have constructed pools on their own property. The private sector and citizens are considered to be the primary providers of swimming pools, with the County's two indoor pools and those at the community colleges providing access to the general public.
- **Golf Courses:** Public golf courses with driving ranges are provided for County citizens by the Baltimore County Revenue Authority, a quasi-public entity. The Baltimore City-owned Pine Ridge Golf Course at Loch Raven Reservoir is also a public course. These public courses supplement the golfing opportunities provided by private courses and driving ranges, which are the primary providers of golf within the County. It should be noted that a number of courses, both public and private, have been closed. The former Bonnie View Golf Course (private) was closed and redeveloped with a mixture of land uses, while the former Gunpowder Falls Golf Course (Baltimore County Revenue Authority) was closed and transferred to the County to serve as a public park. This reflects a national trend, as significant numbers of golf courses are being closed for reasons ranging from economic difficulties to reduced demand to prospects to sell courses for redevelopment.
- **Other Facilities:** A variety of other facilities that provide recreational opportunities are provided within Baltimore County recreation sites and parks, including:
 - Amphitheaters
 - Community Gardens
 - Disc Golf Courses
 - Dog Parks
 - Horseshoe Pits
 - Historical and Interpretive Areas
 - Model Aircraft/Car Facilities
 - Fishing Ponds
 - Jogging Tracks
 - Sand Volleyball Courts

In addition to recreational facilities, a wide range of support amenities are constructed at parks, including: access roads and parking lots; park benches, bleachers, and other types of seating; comfort stations, concessions and storage buildings; drinking and ornamental fountains; fencing; security lighting; trash receptacles; and landscaped areas.

The following table displays the supply of various types of facilities by each of the County's four recreation regions (revised from six recreation areas that existed as of the prior LPPRP).

	Region 1	Region 2	Region 3	Region 4	Total
Ball Diamonds	193	128	115	174	610
Athletic Fields	110	117	99	113	439
Tennis Courts	83	69	51	67	270
Multi-Purpose Courts	69	45	39	67	220
Picnic Pavilions	12	17	18	37	84
Playground Sites	76	46	52	67	241
Paths and Trails (miles)	11.0	11.7	21.3	9.0	53.0
Boat Ramps	1	1	0	8	10
Fishing Piers	2	0	1	17	20

Notes regarding facility counts: The above counts include facilities on County-owned parklands (including school recreation centers) and leased recreation sites. Facilities within non-leased portions of state parks, within the reservoir properties, or situated on privately owned open spaces are not counted. For the sake of simplicity, those facilities situated at countywide parks are tabulated in the matrix by the region in which the parks are geographically situated, and those for regional parks are assigned to the region the park primarily serves. The numbers of ball diamonds and athletic fields are the raw quantities of these facilities regardless of usability factors-- size, configuration (stand-alone or overlay), surface type, lighted/not lighted. The number of multi-purpose courts reflects the quantity of hard surface multi-use courts, regardless of their size or the number of intact/usable basketball goals. The quantities for playgrounds are the number of sites with one or more grouping of playground/tot lot apparatus. It is difficult to accurately enumerate the exact *number* of playgrounds, as they vary widely in size, layout, appropriate age ranges for use, etc. The listed trail lengths are rough estimations, as not all trails and path systems within the County have been precisely measured via the use of geographic positioning systems (GPS) technology. The majority of trails are of a natural surface and have not been formally mapped or delineated. The trail counts include various types of trails, ranging from natural/unimproved, to surfaces such as mulch or stone, to paved paths. The quantity of boat ramps is actually the number of individual ramp locations, some of which have been constructed with more than one lane.

Recreational Demand

The second factor utilized in completing the recreational facility needs analysis most commonly utilized by counties throughout Maryland is “recreational demand.” This term refers to an estimation of the public’s need for various types of recreational facilities, and is often calculated through the use of a “recreation demand survey.” The most recent statewide recreation demand survey, titled “Participation in Local Park and Recreation Activities in Maryland,” was conducted in January of 2003 by Mason-Dixon Polling and Research, Inc. The polling company utilized a survey instrument designed by the University of Maryland, Baltimore County’s (UMBC’s) Maryland Institute for Policy Analysis and Research (MIPAR) and Center for Urban Environmental Research and Education, in consultation with MDP, DNR, and a committee of park planners from throughout the State.

The Survey: A total of 2800 households were surveyed, with an equal sampling from each of seven distinct regions throughout the State. Baltimore County was one of five counties within the “Baltimore Suburbs” region, which also included Anne Arundel, Carroll, Harford and Howard Counties. The central component of the survey was a series of questions that asked Marylanders to indicate whether or not they had participated in various recreational activities over the past year, and how many times they had done so. These questions actually provide an estimate of recreational *participation*, which is used as an approximation of existing recreational demand. While this is an imperfect method for assessing recreational needs, it is widely accepted as the best available methodology.

The two factors that are calculated based on survey responses to the participation questions are “participation rate” and “frequency rate.” Participation rate is the percentage of individuals surveyed that have participated in the given activity at least once in the previous year. Frequency rate is the average (mean) number of *times* or *occasions* that those individuals participated in the activity within a one-year period. For example, if 20 of 100 individuals said they played softball within the past year, the participation rate would be 20% (i.e., 20/100). If those 20 individuals responded that they played softball a total of 200 times combined, the frequency rate would be 10 (i.e., 200 occasions/20 respondents). These factors are then applied to the population being analyzed to estimate the overall recreational demands, which are expressed in “total occasions demanded.” Recreation activities with the largest total occasions demanded would be considered to be the most popular recreational pursuits. The total occasions demanded is also used within the supply-demand analysis to estimate how many additional facilities may be needed to satisfy demand.

The table titled “Top 50 Recreational Activities” on the following page presents the fifty most “popular” activities (based upon total occasions demanded) listed in the prior LPPRP. This table applies the Baltimore Suburbs Region’s participation and frequency rates derived from the January **2003** statewide survey to the County’s estimated 2010 population of 816,547. It is important to note that recreational demand and participation varies not only by county, but also from community to community.

TOP 50 RECREATIONAL ACTIVITIES
(based on total occasions demanded)

Rank	Recreational Activity	Participation Rate	Frequency Rate	Total Occasions Demanded- 2005*
1	Walking	44.8%	22.31	8,161,289
2	Swimming (at pool)	45.8%	11.57	4,326,932
3	Jogging	12.3%	28.14	2,826,249
4	Dog Exercising	17.2%	18.80	2,640,386
5	Running	9.2%	32.33	2,428,705
6	Swimming (at beach/river/lake)	49.6%	5.57	2,255,891
7	Visiting playgrounds	29.3%	9.06	2,167,589
8	Soccer	13.0%	19.93	2,115,592
9	Basketball	11.3%	19.60	1,808,488
10	Hiking	29.2%	6.62	1,578,418
11	Pleasure/Recreational biking	16.8%	11.23	1,540,530
12	Weight training	7.1%	24.19	1,402,411
13	Aerobics/Fitness classes	5.4%	30.47	1,343,530
14	Golf	13.0%	12.25	1,300,351
15	Nature/gardening programs	12.2%	13.10	1,305,005
16	Skate boarding	7.0%	22.16	1,266,628
17	Lacrosse	6.9%	22.15	1,247,970
18	In-Line skating	8.4%	17.17	1,177,689
19	Softball	6.5%	21.16	1,123,079
20	Picnicking	36.6%	3.72	1,111,745
21	Tennis	10.3%	13.11	1,102,608
22	Attending fairs or festivals	52.4%	2.53	1,082,513
23	Baseball	7.1%	18.11	1,049,924
24	Power boating	14.5%	7.09	839,451
25	Football	6.3%	13.96	718,137
26	Fishing (from boat)	12.4%	7.08	716,863
27	Attending outdoor concerts	25.0%	3.29	671,610
28	Fishing (from shore/bank)	12.6%	6.13	630,685
29	Volleyball	4.8%	15.82	620,053
30	Ice skating	11.6%	5.48	519,063
31	Mountain biking	4.4%	11.92	428,263
32	Birdwatching	3.9%	12.49	397,748
33	Field hockey	1.8%	27.85	409,335
34	Sailing	4.7%	10.02	384,545
35	Fishing (from pier)	5.0%	9.12	372,345
36	Camping (in tent)	14.5%	3.08	364,670
37	Target shooting	5.3%	8.42	364,392
38	Canoeing	5.9%	6.81	328,080
39	Hunting	4.8%	8.15	319,433
40	Horseshoes	5.3%	7.26	314,191
41	Ice hockey	1.8%	20.10	295,427
42	Downhill skiing	8.2%	4.05	271,175
43	Nature walks	3.7%	8.55	258,315
44	Other fitness activities	1.8%	17.90	263,091
45	Skeet or trap shooting	2.8%	10.47	239,379
46	Yoga	0.8%	32.11	209,755
47	Kayaking	3.7%	6.48	195,775
48	Horseback riding (on trails)	2.6%	7.97	169,205
49	Snow boarding	3.6%	4.80	141,099
50	Bicycle touring	1.1%	15.92	142,994

*. Occasions demanded calculated by multiplying population (in this case the estimated 2010 population of 816,547) by the participation rate, then multiplying the frequency rate.

Data Sources: Participation and frequency rates from MDP corrections to survey data presented in "Participation in Local Park and Recreation Activities in Maryland." 2005 population from Baltimore County Office of Planning projections (February 2011).

The table of top recreational activities is intended to serve as a guide to the general recreational preferences of the population. Not all of these activities would take place within Baltimore County (downhill skiing, for instance), and all or some of the occasions demanded are typically provided outside the County, or at non-County facilities. Some of the activities are clearly facility or resource-dependent (e.g., swimming at beach/river/lake, golf, baseball), while others could take place within or outside of parks and recreation sites (e.g., walking, dog exercising, skate boarding, attending fairs and festivals). The vast majority of these activities are, however, supported by County and State parklands and facilities, and the programs of the local recreation councils.

The following section, “Needs Analysis,” will provide a detailed assessment of the need for various types of recreational facilities that are most often provided at the local level (that is, by Baltimore County).

Needs Analyses

Detailed assessments of the estimated “need” for additional parklands and recreational facilities are presented herein. Data is provided for both the County as a whole, and for each of Recreation and Parks’ four recreation regions (as configured as of March, 2012).

Parkland Acreage Needs Analysis: This section provides an estimation of parkland acreage needs based on the projected 2010, 2015, 2020 and 2025 County population, and the State goal of 30 acres of parkland per thousand population. This data is based upon population projections prepared by the Baltimore County Department of Planning in February of 2011, extracted from the Baltimore Metropolitan Council’s (BMC) Round 7C population forecasts. The following is the population breakdown for each of the four recreation regions, and for the County as a whole. See the recreation councils and regions map on page 10 for a depiction of how the regions are configured.

	2010 Pop	2015 Pop	2020 Pop	2025 Pop
Region 1	292,360	298,306	302,213	305,844
Region 2	194,283	199,990	203,164	205,562
Region 3	168,062	171,508	174,467	176,517
Region 4	161,842	164,815	167,133	169,015
Totals:	816,547	834,618	846,977	856,938

The table on the following page summarizes the supply and demand for parkland, based upon the goal of 30 acres of parkland per thousand citizens. The acreage numbers provided reflect the amount of creditable acreage within each classification of parkland. The method for presentation of the acreage analysis figures varies from the 2005-2006 LPPRP, in that local acreage is presented by region, but regional and countywide acreage is presented for the County as a whole. *Appendix D* outlines the full process for calculating the creditable parkland acreage.

PARKLAND ACREAGE NEEDS ANALYSIS

	Region 1	Region 2	Region 3	Region 4	TOTAL
1. LOCAL ACREAGE					
Neighborhood & Community Park Acreage	1,066.2	489.8	590.6	974.6	3,121.1
School Recreation Site Acreage	793.6	488.6	394.1	497.0	2,173.2
Open Space/Nat'l. Resource Acreage-Local	388.3	283.1	311.8	128.6	1,111.8
Private Open Space Acreage-Local	100.4	108.1	77.6	42.1	328.2
TOTALS:	2,348.4	1,369.6	1,374.1	1,642.2	6,734.3
2010 Local Acreage per 1,000 population	8.0	7.0	8.2	10.1	8.2
2015 Local Acreage per 1,000 population	7.9	6.8	8.0	10.0	8.1
2020 Local Acreage per 1,000 population	7.8	6.7	7.9	9.8	8.0
2025 Local Acreage per 1,000 population	7.7	6.7	7.8	9.7	7.9
2. REGIONAL & COUNTYWIDE ACREAGE					
Regional Park Acreage	N/A	N/A	N/A	N/A	975.6
Countywide Park Acreage	N/A	N/A	N/A	N/A	3,879.1
Countywide Nat'l. Res./Open Space Acreage	N/A	N/A	N/A	N/A	5,037.2
TOTAL:	N/A	N/A	N/A	N/A	9,891.9
2010 Reg'l. & Countywide Acre per 1,000 pop.	N/A	N/A	N/A	N/A	12.1
2015 Reg'l. & Countywide Acre per 1,000 pop.	N/A	N/A	N/A	N/A	11.9
2020 Reg'l. & Countywide Acre per 1,000 pop.	N/A	N/A	N/A	N/A	11.7
2025 Reg'l. & Countywide Acre per 1,000 pop.	N/A	N/A	N/A	N/A	11.5
3. CUMULATIVE ACRES & AC./1,000 POP.					
Cumulative Parkland Acreage	N/A	N/A	N/A	N/A	16,626.2
2010 Cumulative Acres per 1,000 population	N/A	N/A	N/A	N/A	20.4
2015 Cumulative Acres per 1,000 population	N/A	N/A	N/A	N/A	19.9
2020 Cumulative Acres per 1,000 population	N/A	N/A	N/A	N/A	19.6
2025 Cumulative Acres per 1,000 population	N/A	N/A	N/A	N/A	19.4
4. PARKLAND ACREAGE DEFICIT					
2010 Cumulative Parkland Acreage Deficit	N/A	N/A	N/A	N/A	7,870
2015 Cumulative Parkland Acreage Deficit	N/A	N/A	N/A	N/A	8,412
2020 Cumulative Parkland Acreage Deficit	N/A	N/A	N/A	N/A	8,783
2025 Cumulative Parkland Acreage Deficit	N/A	N/A	N/A	N/A	9,082

NOTES PERTAINING TO PARKLAND ACREAGE NEEDS ANALYSIS TABLE

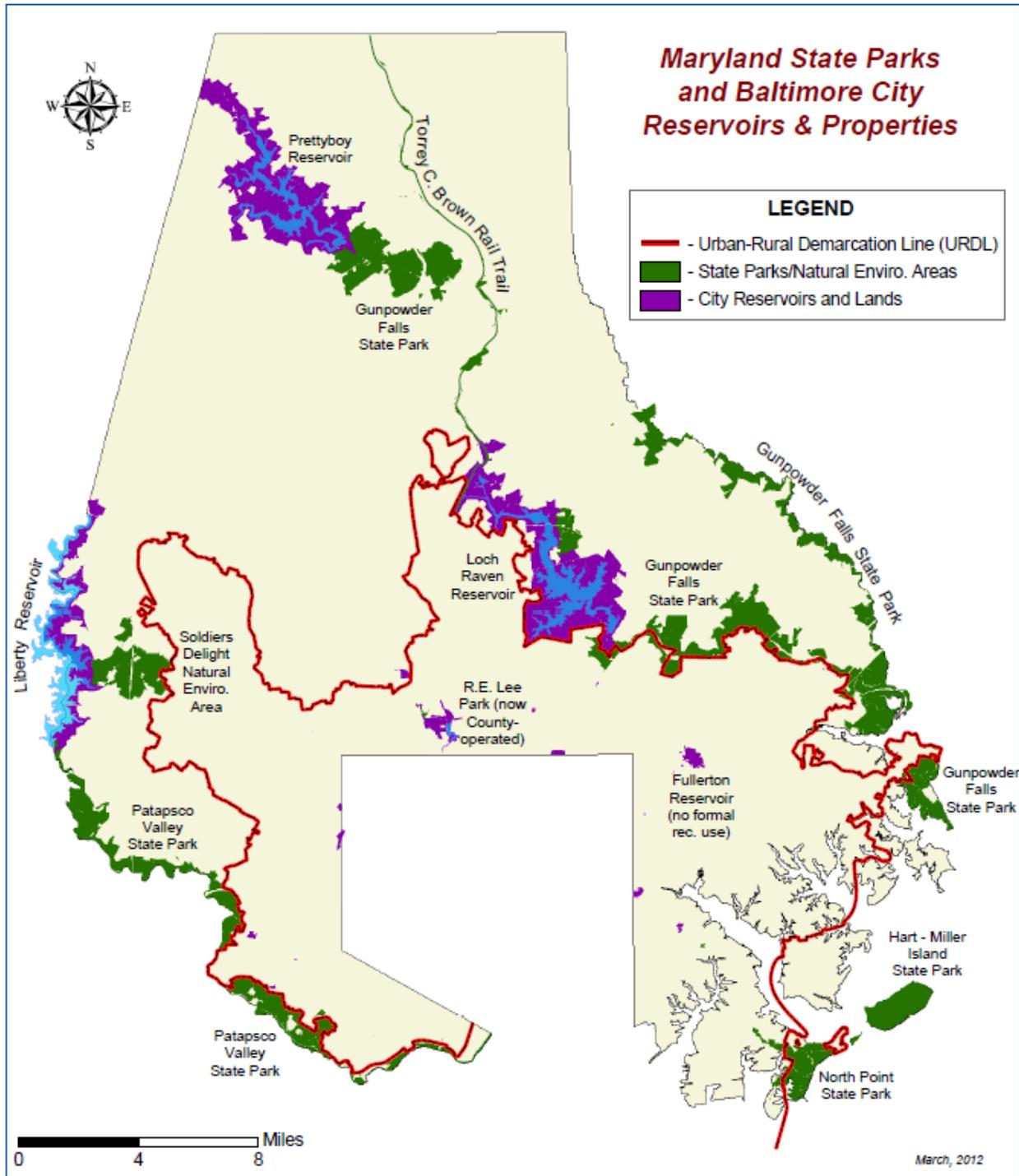
- All acreage listed under parts 1 and 2 of the table are the amount of “creditable acreage” for the various classes of parklands. 100% of the acreage of neighborhood, community, regional and countywide parks is credited towards the parkland acreage goal; 60% of school recreation center acreage is creditable; and only one-third of open space/natural resource lands (whether County-owned, private, or countywide) are creditable.
- Creditable parkland acreage per thousand population is listed regionally for local parkland acreage only. Regional and countywide acreage is not summarized/split by region.
- The parkland acreage per thousand population and the acreage deficit figures are based on the current amounts of parkland, and do not assume, estimate or count potential future parkland acquisitions.
- Neither State Parks and Natural Environment Areas nor lands preserved for agricultural purposes may be counted within the above analysis, and are thus excluded. The portions of the Baltimore City-owned reservoir properties within Baltimore County are included as countywide natural resource/open space acreage.
- The acres per thousand population figures are rounded within each section of the table, so that the cumulative figures may not match the sum of local and countywide acres per thousand.

Parts three and four of the table on the preceding page provide the most generalized data on the overall parkland acreage needs for the years 2010, 2015, 2020 and 2025 based on the standardized analysis methodology associated with the 30 acres of parkland per thousand population goal. Since this methodology is a population-based formula, the overall parkland acreage goal expands as the population increases. The County's overall parkland acreage per thousand population has increased since the 2005-2006 LPPRP, from a level of 19.0 acres per thousand to the year 2010 amount of 20.4 acres per thousand. Some of this change is attributable to continued refinements to the parkland acreage classification methodology used to calculate creditable parkland (see "site classification changes and notes" on page 84 for details). However, parkland acquisitions since the prior plan have likewise helped to achieve the increase, particularly the addition of three park sites that were each 100 or more acres in size—the Baltimore County Center for Maryland Agriculture and Farm Park, Robert E. Lee Park (previously counted as open space prior to being operated by the County, but now classified as a park for acreage needs assessment purposes), and the BeeTree Preserve Conservation and Public Recreation Access Easement.

Part four of the table shows the amount of acreage that would need to be added to meet the acreage goal based on population data and projections. It is important to recognize that the indicated amounts (e.g., 7,870 acres as of 2010) are the *creditable* acreage that would be needed to achieve the goal, and that only parks or sites intended to be developed as parks may be counted at a rate of 100% of their acreage. Making progress towards the goal via the acquisition of additional unimproved open space is a slower process, as open space/natural resource lands may only be counted at a rate of one-third of their acreage towards the goal. There are multiple means for increasing parkland acreage to reduce the parkland acreage deficit. The first is property acquisition via purchase, donation, or some other means. The second is by improving (where suitable) sites presently classified as open space/natural resource lands with recreational facilities, thereby changing their classification to parks and reaping a higher acreage credit benefit. A recent example of this took place at the site now named Red Run Greenway Park and Trail in Owings Mills-Reisterstown, where ten previously unimproved greenway parcels totaling ~180 acres were improved with a variety of trails, interpretive signs, a parking area and other facilities that made it logical to combine the parcels into a single park entity. Thus, the parkland acreage credit was tripled from 60 acres (one-third of 180 acres) to 180 acres.

There are numerous challenges faced by Baltimore County in its efforts to achieve the standardized 30 acres of parkland per 1,000 population goal. First, the urban portion of the County, within the URDL, is heavily developed and offers only limited opportunities for the acquisition of large land parcels that could be transformed into parks to make substantial strides towards the goal. Such sizeable tracts of land are often prohibitively expensive and also often represent the County's present growth management solution, with many such areas being targeted for higher-density mixed-use development. Meanwhile, the rural part of the County outside of the URDL is an area where investment in public infrastructure is intended to be somewhat limited as a result of the much lower population density and widespread distribution of the rural populace. Further, the County is nationally recognized for the vast portions of the rural area that have already been protected within agricultural land preservation and other conservation programs. Such lands may not be counted towards the parkland acreage goal. Finally, there are vast land areas and resources, as well as substantial recreational facilities, at the

state parks and reservoirs within the County. Most such lands and facilities are easily accessible to the more densely populated urban areas, and clearly contribute an abundance of recreational opportunities that complement those provided at County parks and facilities (see following map).



Only a few of the State and City properties displayed on the map are counted towards the County’s parkland acreage goal. Robert E. Lee Park, now operated by the County under a long-

term lease, is counted as parkland. The Liberty, Loch Raven and Prettyboy Reservoir properties, meanwhile, are presently counted as open space/natural resource land (at a rate of one-third of their acreage).

A strategic approach to future park site selection is the analysis of the distribution/availability of local and regional parks. Part one of the table on page 95 provides data on the supply of local parkland acreage, along with the applicable amount of local acreage per thousand population within each of the County’s four recreation regions. The local parkland acreage per thousand population for 2010 ranges from a low of 7.0 (Region Two) to a high of 10.1 (Region Four), with an overall average (mean) of 8.2 acres of local parklands per 1,000 population. These figures could be translated to mean that Regions One and Three have about an average amount of local parkland in comparison to the County as a whole, while Region Two has a measurably smaller amount and Region Four has a demonstrably larger amount. However, the *size* of the local parks, school recreation centers and open spaces can have a large impact that may provide a skewed impression of the overall access to local parklands. For example, the 92.8-acre Fort Howard Park in Region Four and the 230-acre Southwest Area Park in Region One are both classified as community parks based on their present use, yet other smaller community parks may offer a larger number of recreational opportunities each year based on the facilities that are present and the nature of facility use.

Another option for gaining a rough indication of the relative need for additional local parks is to analyze the overall population that is served per local site, accomplished by dividing the regional population by the number (quantity) of local sites. Being that most recent acquisition projects have been initiated to acquire lands that will be improved and utilized as parks, and that the majority of open spaces are provided in conjunction with the County development process (i.e., are not purchased), it is most logical to base the count of facilities on local parks and school recreation centers only, and exclude unimproved open spaces within this particular analysis process.

POPULATION SERVED PER LOCAL PARKS AND SCHOOL REC. CENTERS					
	REG.1	REG.2	REG.3	REG.4	TOTAL
Population per neighb. & community park	5,967	5,887	4,202	2,790	4,536
Population per school rec center	5,129	5,887	6,002	3,764	5,072
Population per local park & src (combined)	2,758	2,944	2,472	1,602	2,395

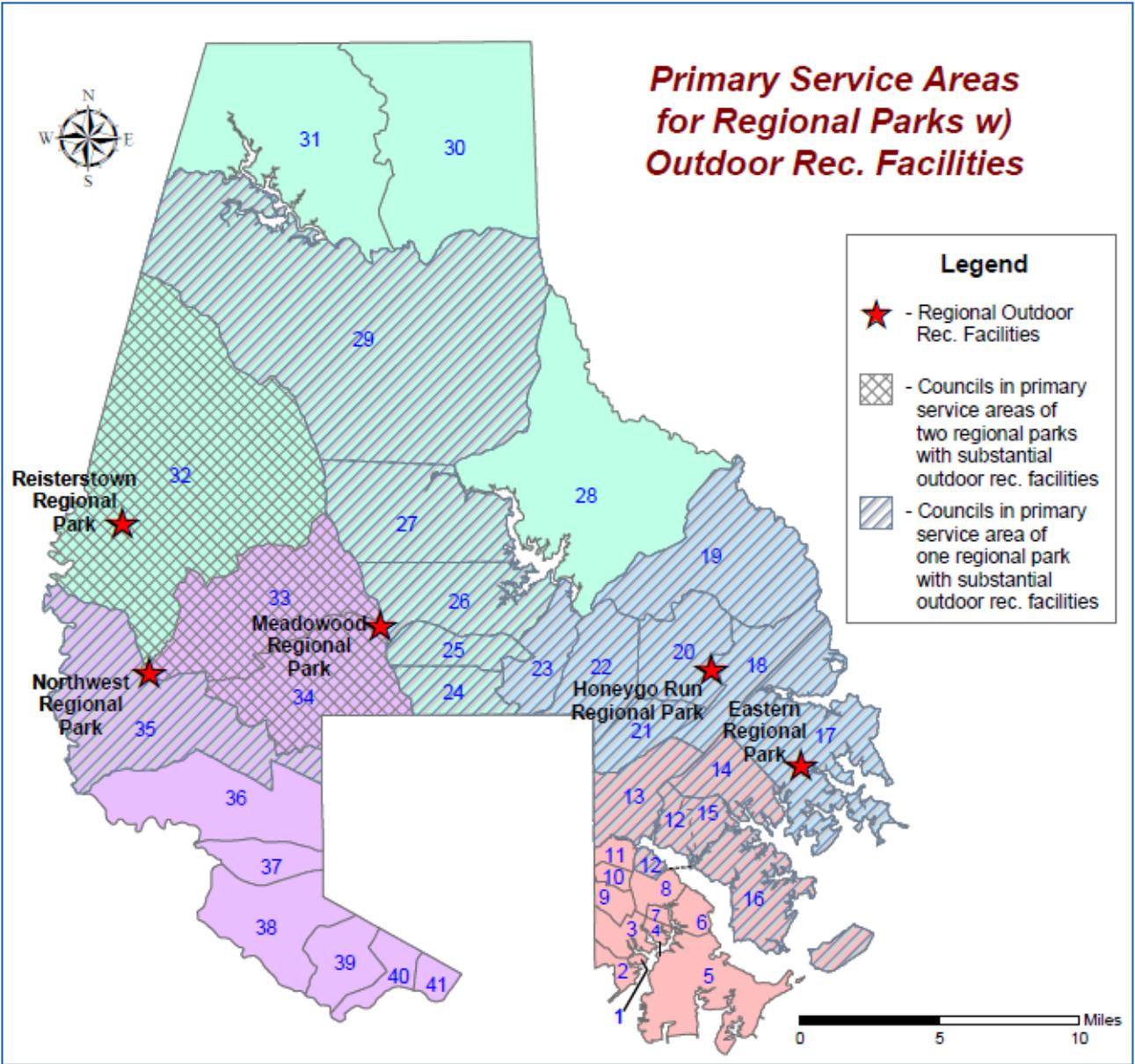
The table above shows - by region and countywide - the population served per neighborhood and community park, per public school recreation center (SRC), and per local parks and SRC’s combined. The smaller the number, the better served the region is in terms of local sites. The figures for the combined sites reinforce that Region Four is the best served of the four regions in terms of local parks and recreation sites (last row on table)-- one site per 1,602 population, compared to the countywide average of 2,395 population served per site. It likewise validates that Region Two has the lowest quantitative supply of local sites, which combined with the results of the local acres per thousand evaluation shows that the region is least served in terms of local parks. Meanwhile, Region Three is supplied with local sites at a rate very near the countywide average, and Region One trails only Region Two as the least served by local parks and SRC’s.

Based solely on the local parklands acreage per thousand population and the amount of population served by site (both of which are quantitative analyses) the regional priority for additional local parks and recreation sites would appear to be Region Two, followed by Regions One and Three, with Region Four having the least need in terms of these two quantitative assessments. However, there are other factors that may impact the need for additional local parks, including:

- The need for additional recreational facilities to meet local recreation demands, and ability/inability of existing local parks or undeveloped sites to support those needed facilities;
- Related to the prior bullet, the nature of existing local parks—their size, the number and types of facilities, etc. (some communities may have numerous small neighborhood parks with facilities such as playgrounds, but be lacking in community parks with a larger number and diversity of recreational facilities);
- The geographic distribution of the existing local sites, whereby some communities and recreation councils have numerous local parks and recreation sites, while other communities/councils have very few;
- Projected population growth, particularly if a given area within a region will be impacted by significant population growth as a result of a large planned unit development (PUD) or community enhancement area (CEA) that has a substantial residential component;
- A County-promoted initiative such as community revitalization or the expansion of waterfront recreation opportunities;
- The presence of and local proximity to regional parks (as explained below)

The last bullet mentions that regional parks may have an impact upon the need for local parks and recreation facilities. Regional parks and facilities each feature some form of major outdoor and/or indoor recreation facilities intended to offer intensive use to geographic areas that each include “primary service areas.” As an example, Meadowood Regional Park features numerous outdoor recreation facilities whose primary service area encompasses the bounds of the Towson, Towsontowne, Lutherville-Timonium, Cockeysville, Pikesville and Owings Mills Recreation and Parks Councils. Since the service areas cross regional boundaries, the acreage of the regional parks is not included within any given region, but instead grouped with countywide parks for basic park acreage needs assessments. It is nonetheless helpful to consider the presence and service areas of regional parks and facilities when seeking to strategically target where additional regional and local park sites are needed and should be acquired.

The maps displayed within the next few pages display the primary service areas designated to regional parks throughout Baltimore County. As mentioned previously, the service areas are recreation and parks council-based and cross regional boundaries. The first map shows which councils are served by regional parks with significant numbers of outdoor facilities such as ball diamonds and athletic fields. The second map shows which councils are served by regional indoor recreation facilities (which does not count standard community centers that happen to be situated at regional parks, as is the case at Honeygo Run and Eastern Regional Parks).



**Primary Service Areas
for Regional Parks w)
Outdoor Rec. Facilities**

Legend

- ★ - Regional Outdoor Rec. Facilities
- ▨ - Councils in primary service areas of two regional parks with substantial outdoor rec. facilities
- ▧ - Councils in primary service area of one regional park with substantial outdoor rec. facilities

- REGION 4
 - REGION 3
 - REGION 2
 - REGION 1

- 1. Watersedge
- 2. Turner Station
- 3. Dundalk-Eastfield
- 4. West Inverness
- 5. Edgemere-Sparrows Point
- 6. North Point Village
- 7. Bear Creek
- 8. Gray Charles
- 9. Patapsco Neck-Norwood
- 10. Berkshire-Eastwood
- 11. Colgate-Eastpoint
- 12. Essex
- 13. Rosedale
- 14. Middle River
- 15. Stembridge
- 16. Back River

- 17. Bengies-Chase
- 18. White Marsh
- 19. Kingsville
- 20. Perry Hall
- 21. Overlea-Fullerton
- 22. Parkville
- 23. Greater Loch Raven

- 24. Towsontowne
- 25. Towson
- 26. Lutherville-Timonium
- 27. Cockeysville
- 28. Carroll Manor
- 29. Hereford Zone
- 30. Seventh District
- 31. Prettyboy
- 32. Reisterstown

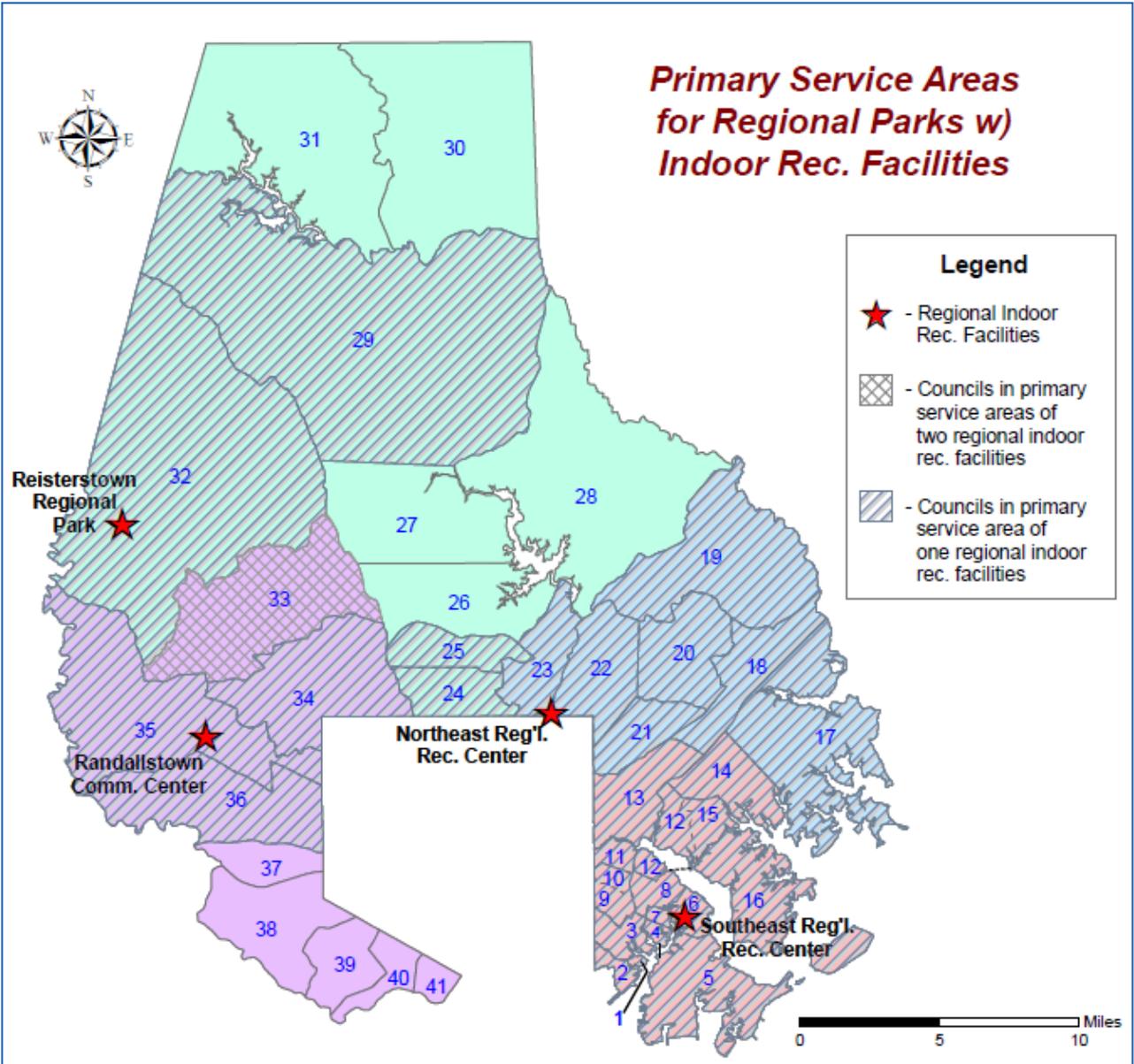
- 33. Owings Mills
- 34. Greater Pikesville
- 35. Liberty Road
- 36. Woodlawn
- 37. Edmondson-Westview
- 38. Catonsville
- 39. Arbutus
- 40. Lansdowne-Riverview
- 41. Baltimore Highlands

March, 2012

Referring to the first map of the primary service areas for regional parks with significant outdoor recreation facilities, the Reisterstown, Owings Mills and Pikesville Recreation Councils, which are situated along the border between Regions One and Two, are each within the primary service areas of two regional parks. Reisterstown, Northwest and Reisterstown Regional Parks thus help to make up for some of the relative lack of local parks and facilities in parts of Regions One and Two. Conversely, much of Region Four is not presently served by a regional park with major outdoor facilities, but the relative abundance of local parks and facilities may diminish the need for a regional park. Three of the rural recreation councils (Carroll Manor, Seventh District and Prettyboy) are likewise outside of the primary service areas of the existing regional parks. Some conclusions that may be drawn from the map, combined with the prior analysis of local parks and recreation sites, are:

- The southern portion of Region One (from Woodlawn southwards) should be a priority area for the procurement and development of a regional park with outdoor facilities.
- While much of Region Four is presently outside of the primary service areas of regional parks with outdoor facilities, the need for a regional park in that area is not pressing since that region is presently the best served/supplied in terms of local parks and recreation sites.
- The other two councils not presently within a regional park's primary service area, Seventh District and Prettyboy, are rural and not heavily populated, and thus may not appear to merit a need for a large regional park. However, since Region Two is the least served in terms of local parks and recreation sites, and there are recognized unmet recreational needs in the rural recreation councils of northern Baltimore County, the Department of Recreation and Parks continues explore options for acquiring and developing one or more park sites to help serve that area. It is envisioned that a well-sited park of either large community park scale or small regional park scale could provide sufficient facilities to meet area needs.

The second map (on the following page), displays the primary service areas of regional indoor recreation facilities, including facilities that are either within or separate of a regional park with outdoor recreation facilities. For instance, the Reisterstown Sportsplex is a regional indoor recreation facility within Reisterstown Regional Park, whereas the Northeast and Southeast Regional Recreation Centers are stand-alone facilities. Some of the presently un-served councils and areas on this map are also outside the service areas of regional parks with outdoor facilities, as shown on the first map.



**Primary Service Areas
for Regional Parks w/
Indoor Rec. Facilities**

Legend

- ★ - Regional Indoor Rec. Facilities
- ▨ - Councils in primary service areas of two regional indoor rec. facilities
- ▧ - Councils in primary service area of one regional indoor rec. facilities

- REGION 4
 - REGION 3
 - REGION 2
 - REGION 1

- 1. Watersedge
- 2. Turner Station
- 3. Dundalk-Eastfield
- 4. West Inverness
- 5. Edgemere-Sparrows Point
- 6. North Point Village
- 7. Bear Creek
- 8. Gray Charles
- 9. Patapsco Neck-Norwood
- 10. Berkshire-Eastwood
- 11. Colgate-Eastpoint
- 12. Essex
- 13. Rosedale
- 14. Middle River
- 15. Stembridge
- 16. Back River

- 17. Bengies-Chase
- 18. White Marsh
- 19. Kingsville
- 20. Perry Hall
- 21. Overlea-Fullerton
- 22. Parkville
- 23. Greater Loch Raven

- 24. Towsontowne
- 25. Towson
- 26. Lutherville-Timonium
- 27. Cockeysville
- 28. Carroll Manor
- 29. Hereford Zone
- 30. Seventh District
- 31. Prettyboy
- 32. Reisterstown

- 33. Owings Mills
- 34. Greater Pikesville
- 35. Liberty Road
- 36. Woodlawn
- 37. Edmondson-Westview
- 38. Catonsville
- 39. Arbutus
- 40. Lansdowne-Riverview
- 41. Baltimore Highlands

March, 2012

Some conclusions that may be drawn from the service area map for regional indoor facilities include:

- The southern portion of Region One, which was identified as a priority area for a future regional park site with outdoor facilities, is likewise not served by a regional indoor recreation facility. It is thus sound to conclude that the acquisition of a property capable of supporting both indoor and outdoor regional facilities would represent a good solution for meeting area needs. In the event that is not possible, multiple region-serving sites may be necessary.
- The procurement/provision of a regional indoor recreation facility in the Cockeysville or Lutherville-Timonium area could help serve those communities and Carroll Manor, as well as providing additional indoor recreation opportunities for other nearby densely populated and growing communities/councils such as Towson and Towsontowne (each of which has little suitable land inventory available to serve as local park sites).
- The nature/type of indoor recreation facilities will have an impact upon the need for additional regional indoor facilities. The Reisterstown, Northeast and Southeast facilities each feature at least one indoor sports field, whereas the Randallstown Community Center is something of a hybrid facility that features a large gymnasium with encircling walking track, Olympic-size swimming pool, technology lab, and activity/meeting rooms. Thus, that facility's primary service area (the Liberty Road, Woodlawn, Owings Mills and Pikeville councils/communities) and the other councils in southwest Baltimore County do not have priority access to an indoor sports field.

In summary, there are many factors that must be considered when selecting and prioritizing prospective park acquisitions. The previously presented analysis should be used as a tool to guide the County's future park acquisition efforts, with the end objective being a relatively equitable distribution of parklands countywide based on the guiding goal of 30 acres of creditable parkland per thousand citizens.

Recreational Facility Needs Analysis

This section provides an analysis of the need for a variety of recreational facilities. This analysis utilizes a traditional “supply and demand” needs estimation methodology (see *Appendix B*) to develop baseline needs figures for ten select types of recreational facilities that were specified within the plan guidelines for the 2005-2006 LPPRP. These baseline figures provide a starting point for a more qualitative assessment of actual needs based upon local conditions and experience, and are not a literal indication of need.

The first table, Table B-1: Supply Report, is presented on the following two pages. This table provides “supply-side” figures for the ten facility types to which the supply-demand methodology is being applied, as was presented in the prior LPPRP, but organized by the revised regional structure of DRP’s Recreation Services Section. The numeric factors used for “season length” and “daily capacity per facility” generally reflect local facility use patterns and management practices. The numeric factors utilized by other suburban Baltimore jurisdictions (Anne Arundel, Carroll, Harford, and Howard Counties), as well as those applied within the State of Maryland’s 1993 Land Preservation and Recreation Plan, were utilized to help establish these figures. Important notes are inserted for certain types of facilities to better describe contributing factors that impact the actual need for such facilities. Definitions of the terms featured within Table B-1 are as follows.

Activity: Types of recreational activities supported by the recreational facility type.
Facility Type: Recreational facility on which the listed recreational activities would normally take place.
Facility Quantity: Quantity of the given type of recreational facility within the County (listed as “total”) and the four recreation regions. In general, only County-owned or leased facilities are counted.
Season Length: The approximate number of days each year that the given type of recreational facility would be utilized. Weather, seasonal recreational demand patterns, facility layout and other factors impact this figure. The season length is that utilized in the 2005-2006 LPPRP.
Daily Capacity per Facility: The average number of uses the given type of recreational facility would support on a given day (note that one person playing two games on a facility would be considered *two* uses). The amount of use provided varies from day to day, with weekends assumed to offer extended use. This factor would thus represent the average (mean) number of uses provided per day over the period of a week. For sports-related facilities such as ball diamonds and athletic fields, this factor assumes that facilities are not *always* being utilized to their maximum capacity (e.g., when used for practice these facilities often serve a single team). The daily carrying capacity is that utilized in the 2005-2006 LPPRP.
Annual Capacity per Facility: This factor is simply the facility’s season length times its daily capacity.
Total Supply- All Facilities: This factor is the annual capacity per facility multiplied by the facility quantity.

TABLE B-1: SUPPLY REPORT

Activity	Facility Type	Facility Quantity	Season Length	Daily Capacity per Facility	Annual Capacity per Facility	Total Supply-All Facilities
Field Sports	Athletic Fields					
Region 1		110	160	54	8,640	950,400
Region 2		117	160	54	8,640	1,010,880
Region 3		99	160	54	8,640	855,360
Region 4		113	160	54	8,640	976,320
Total:		439	160	54	8,640	3,792,960
"Field Sports" include survey activities of: soccer, lacrosse, football, field hockey, and "other field sports." The facility quantity is for outdoor fields only.						
Diamond Sports	Ball Diamonds					
Region 1		193	84	40	3,360	648,480
Region 2		128	84	40	3,360	430,080
Region 3		115	84	40	3,360	386,400
Region 4		174	84	40	3,360	584,640
Total:		610	84	40	3,360	2,049,600
"Diamond Sports" include survey activities of: softball, baseball, and t-ball.						
Tennis	Tennis Courts					
Region 1		83	210	19	3,990	331,170
Region 2		69	210	19	3,990	275,310
Region 3		51	210	19	3,990	203,490
Region 4		67	210	19	3,990	267,330
Total:		270	210	19	3,990	1,077,300
The facility quantity is for outdoor courts only.						
Basketball	Multi-Purpose Courts					
Region 1		69	210	37	7,770	536,130
Region 2		45	210	37	7,770	349,650
Region 3		39	210	37	7,770	303,030
Region 4		67	210	37	7,770	520,590
Total:		220	210	37	7,770	1,709,400
The facility quantity is for outdoor courts only. It is important to note that many outdoor multi-purpose courts no longer have basketball goals in place, and that the figures for this facility type are not realistic (the 2005-06 LPPRP guidelines required calculation of multi-purpose court supply and demand, however).						
Picnicking	Picnic Pavilions					
Region 1		12	180	14	2,520	30,240
Region 2		17	180	14	2,520	42,840
Region 3		18	180	14	2,520	45,360
Region 4		37	180	14	2,520	93,240
Total:		84	180	14	2,520	211,680
Pavilion size (and thus carrying capacity) varies widely. Additional factors pertaining to picnicking supply and demand are outlined later in this section.						

TABLE B-1: SUPPLY REPORT

Activity	Facility Type	Facility Quantity	Season Length	Daily Capacity per Facility	Annual Capacity per Facility	Total Supply-All Facilities
Swimming (Pool)	Swimming Pools					
Region 1		0	90	900	81,000	0
Region 2		0	90	900	81,000	0
Region 3		0	90	900	81,000	0
Region 4		0	90	900	81,000	0
	Total:	0	90	900	81,000	0
Above figures pertain to outdoor pools only, of which the County owns and operates none.						
Trail/Path Activities	Trails & Paths (miles)					
Region 1		11.0	270	100	27,000	297,000
Region 2		11.7	270	100	27,000	315,900
Region 3		21.3	270	100	27,000	575,100
Region 4		9.0	270	100	27,000	243,000
	Total:	53.0	270	100	27,000	1,431,000
Includes the survey activities of: walking, jogging, dog exercising, running, hiking, pleasure/recreational bicycling, in-line skating, mountain biking, nature walks, trail riding (horseback), roller skating and backpacking.						
Visiting Playgrounds	Playgrounds					
Region 1		76	210	68	14,280	1,085,280
Region 2		46	210	68	14,280	656,880
Region 3		52	210	68	14,280	742,560
Region 4		67	210	68	14,280	956,760
	Total:	241	210	68	14,280	3,441,480
The facility quantity is the actual number of sites with one or more grouping of playground equipment. The size, type and carrying capacity of playgrounds varies widely.						
Boating Activities	Boat Ramps					
Region 1		0	198	70	13,860	0
Region 2		0	198	70	13,860	0
Region 3		0	198	70	13,860	0
Region 4		0	198	70	13,860	0
	Total:	10	198	70	13,860	138,600
Includes the survey activities of: power boating, fishing from boat, and water skiing. Note: Boat ramps are considered countywide facilities, and are not listed by recreation area.						
Golf	Golf Courses (18-hole)					
Region 1			233	300	69,900	0
Region 2			233	300	69,900	0
Region 3			233	300	69,900	0
Region 4			233	300	69,900	0
	Total:	6	233	300	69,900	419,400
Golf courses are considered countywide facilities, and are not listed by recreation area. Facility count includes the six public golf courses operated by the Baltimore County Revenue Authority, and the City's Pine Ridge Golf Course.						

The data from table B-1 is later used as part of a “needs report” in which it is compared with the demand data provided in Table B-2: Demand Report (next four pages). The Demand Report table utilizes an assortment of information extrapolated from the January 2003 statewide recreation survey, and applies it to Baltimore County population projections for the 2010, 2015, 2020 and 2025. The results (2010 Demand, 2015 Demand, etc.) are the estimated total number of individual occasions demanded for each given activity, meaning one individual participating on a single occurrence, whether playing one game of an organized sport, or visiting a facility for some length of time for unscheduled recreational use.

The demand figures used in Table B-2 and in the following Table B-3: Needs Report, are based on the May 2003 report titled “Participation in Local Park and Recreation Activities in Maryland,” by Don Norris of the University of Maryland, Baltimore County’s (UMBC’s) Maryland Institute for Policy Analysis and Research (MIPAR), and Royce Hanson (with the assistance of Stephen Coleman) of UMBC’s Center for Urban Environmental Research and Education. The Table B-2 terms “participation rate” and “frequency rate” are described in detail on page 92.

TABLE B-2: DEMAND REPORT

Activity	2010 Population	Participation Rate	Frequency Rate	2010 Demand	2015 Demand	2020 Demand	2025 Demand
Field Sports (total)	816,547			4,538,932	4,639,383	4,708,083	4,763,453
<i>Soccer (total)</i>	816,547	13.0%	19.93	2,115,592	2,162,412	2,194,433	2,220,241
Region 1	292,360	13.0%	19.93	757,476	772,881	783,004	792,411
Region 2	194,283	13.0%	19.93	503,368	518,154	526,378	532,591
Region 3	168,062	13.0%	19.93	435,432	444,360	452,027	457,338
Region 4	161,842	13.0%	19.93	419,316	427,019	433,025	437,901
<i>Lacrosse (total)</i>	816,547	6.9%	22.15	1,247,970	1,275,588	1,294,477	1,309,701
Southwest	292,360	6.9%	22.15	446,828	455,916	461,887	467,437
Northwest	194,283	6.9%	22.15	296,932	305,655	310,506	314,171
North	168,062	6.9%	22.15	256,858	262,124	266,647	269,780
Northeast	161,842	6.9%	22.15	247,351	251,895	255,438	258,314
<i>Football (total)</i>	816,547	6.3%	13.96	718,137	734,030	744,899	753,660
Region 1	292,360	6.3%	13.96	257,125	262,354	265,790	268,984
Region 2	194,283	6.3%	13.96	170,868	175,887	178,679	180,788
Region 3	168,062	6.3%	13.96	147,807	150,838	153,440	155,243
Region 4	161,842	6.3%	13.96	142,337	144,951	146,990	148,645
<i>Field Hockey (total)</i>	816,547	1.8%	27.85	409,335	418,394	424,590	429,583
Region 1	292,360	1.8%	27.85	146,560	149,541	151,499	153,320
Region 2	194,283	1.8%	27.85	97,394	100,255	101,846	103,048
Region 3	168,062	1.8%	27.85	84,249	85,977	87,460	88,488
Region 4	161,842	1.8%	27.85	81,131	82,622	83,784	84,727
<i>Other Field Sports (total)</i>	816,547	0.7%	8.38	47,899	48,959	49,684	50,268
Region 1	292,360	0.7%	8.38	17,150	17,499	17,728	17,941
Region 2	194,283	0.7%	8.38	11,397	11,731	11,918	12,058
Region 3	168,062	0.7%	8.38	9,859	10,061	10,234	10,354
Region 4	161,842	0.7%	8.38	9,494	9,668	9,804	9,914

Diamond Sports (total)	816,547			2,193,417	2,241,959	2,275,158	2,301,915
<i>Softball (total)</i>	816,547	6.5%	21.16	1,123,079	1,147,934	1,164,932	1,178,633
Region 1	292,360	6.5%	21.16	402,112	410,290	415,664	420,658
Region 2	194,283	6.5%	21.16	267,217	275,066	279,432	282,730
Region 3	168,062	6.5%	21.16	231,152	235,892	239,962	242,781
Region 4	161,842	6.5%	21.16	222,597	226,687	229,875	232,463
<i>Baseball (total)</i>	816,547	7.1%	18.11	1,049,924	1,073,160	1,089,051	1,101,859
Region 1	292,360	7.1%	18.11	375,919	383,565	388,588	393,257
Region 2	194,283	7.1%	18.11	249,811	257,149	261,230	264,314
Region 3	168,062	7.1%	18.11	216,096	220,527	224,331	226,967
Region 4	161,842	7.1%	18.11	208,098	211,921	214,901	217,321
<i>T-Ball (total)</i>	816,547	0.1%	25.00	20,414	20,865	21,174	21,423
Region 1	292,360	0.1%	25.00	7,309	7,458	7,555	7,646
Region 2	194,283	0.1%	25.00	4,857	5,000	5,079	5,139
Region 3	168,062	0.1%	25.00	4,202	4,288	4,362	4,413
Region 4	161,842	0.1%	25.00	4,046	4,120	4,178	4,225

TABLE B-2: DEMAND REPORT

Activity	2010 Population	Participation Rate	Frequency Rate	2010 Demand	2015 Demand	2020 Demand	2025 Demand
Tennis (total)	816,547	10.3%	13.11	1,102,608	1,127,010	1,143,698	1,157,149
Region 1	292,360	10.3%	13.11	394,782	402,812	408,087	412,990
Region 2	194,283	10.3%	13.11	262,346	270,052	274,338	277,577
Region 3	168,062	10.3%	13.11	226,939	231,592	235,588	238,356
Region 4	161,842	10.3%	13.11	218,540	222,555	225,685	228,226

Basketball (total)	816,547	11.3%	19.60	1,808,488	1,848,512	1,875,885	1,897,946
Region 1	292,360	11.3%	19.60	647,519	660,688	669,341	677,383
Region 2	194,283	11.3%	19.60	430,298	442,938	449,968	455,279
Region 3	168,062	11.3%	19.60	372,224	379,856	386,410	390,950
Region 4	161,842	11.3%	19.60	358,448	365,032	370,166	374,334

Picnicking (total)	816,547	36.6%	3.72	1,111,745	1,136,349	1,153,176	1,166,738
Region 1	292,360	36.6%	3.72	398,054	406,150	411,469	416,413
Region 2	194,283	36.6%	3.72	264,520	272,290	276,612	279,877
Region 3	168,062	36.6%	3.72	228,820	233,512	237,540	240,331
Region 4	161,842	36.6%	3.72	220,351	224,399	227,555	230,117

Swimming-Pool (total)	816,547	45.8%	11.57	4,326,932	4,422,691	4,488,182	4,540,966
Region 1	292,360	45.8%	11.57	1,549,233	1,580,741	1,601,445	1,620,686
Region 2	194,283	45.8%	11.57	1,029,517	1,059,759	1,076,578	1,089,285
Region 3	168,062	45.8%	11.57	890,571	908,831	924,511	935,374
Region 4	161,842	45.8%	11.57	857,610	873,365	885,648	895,621

Trail/Path Activ. (total)	816,547			21,309,786	21,781,393	22,103,931	22,363,888
Walking (total)	816,547	44.8%	22.31	8,161,289	8,341,907	8,465,433	8,564,992
Region 1	292,360	44.8%	22.31	2,922,103	2,981,533	3,020,583	3,056,874
Region 2	194,283	44.8%	22.31	1,941,835	1,998,876	2,030,600	2,054,568
Region 3	168,062	44.8%	22.31	1,679,760	1,714,202	1,743,777	1,764,266
Region 4	161,842	44.8%	22.31	1,617,591	1,647,306	1,670,474	1,689,285
Jogging (total)	816,547	12.3%	28.14	2,826,249	2,888,797	2,931,574	2,966,051
Region 1	292,360	12.3%	28.14	1,011,922	1,032,503	1,046,026	1,058,593
Region 2	194,283	12.3%	28.14	672,456	692,209	703,195	711,495
Region 3	168,062	12.3%	28.14	581,700	593,627	603,869	610,964
Region 4	161,842	12.3%	28.14	560,171	570,461	578,484	584,998
Dog Exercising (total)	816,547	17.2%	18.80	2,640,386	2,698,821	2,738,785	2,770,995
Region 1	292,360	17.2%	18.80	945,375	964,602	977,236	988,977
Region 2	194,283	17.2%	18.80	628,234	646,688	656,951	664,705
Region 3	168,062	17.2%	18.80	543,445	554,588	564,156	570,785
Region 4	161,842	17.2%	18.80	523,332	532,946	540,441	546,527
Running (total)	816,547	9.2%	32.33	2,428,705	2,482,454	2,519,215	2,548,842
Region 1	292,360	9.2%	32.33	869,584	887,269	898,890	909,690
Region 2	194,283	9.2%	32.33	577,868	594,842	604,283	611,415
Region 3	168,062	9.2%	32.33	499,877	510,127	518,928	525,025
Region 4	161,842	9.2%	32.33	481,376	490,219	497,114	502,711

TABLE B-2: DEMAND REPORT

Activity	2010 Population	Participation Rate	Frequency Rate	2010 Demand	2015 Demand	2020 Demand	2025 Demand
Trail/Path Activ. (ctd.)							
<i>Hiking (total)</i>	816,547	29.2%	6.62	1,578,418	1,613,350	1,637,240	1,656,495
Region 1	292,360	29.2%	6.62	565,144	576,637	584,190	591,209
Region 2	194,283	29.2%	6.62	375,557	386,589	392,724	397,360
Region 3	168,062	29.2%	6.62	324,871	331,532	337,252	341,214
Region 4	161,842	29.2%	6.62	312,847	318,594	323,075	326,713
<i>Pleasure/rec Biking (total)</i>	816,547	16.8%	11.23	1,540,530	1,574,624	1,597,941	1,616,734
Region 1	292,360	16.8%	11.23	551,578	562,796	570,167	577,018
Region 2	194,283	16.8%	11.23	366,542	377,309	383,297	387,821
Region 3	168,062	16.8%	11.23	317,072	323,574	329,156	333,024
Region 4	161,842	16.8%	11.23	305,338	310,947	315,320	318,870
<i>In-Line Skating (total)</i>	816,547	8.4%	17.17	1,177,689	1,203,753	1,221,578	1,235,945
Region 1	292,360	8.4%	17.17	421,665	430,241	435,876	441,113
Region 2	194,283	8.4%	17.17	280,210	288,442	293,019	296,478
Region 3	168,062	8.4%	17.17	242,392	247,363	251,630	254,587
Region 4	161,842	8.4%	17.17	233,421	237,709	241,053	243,767
<i>Mountain Biking (total)</i>	816,547	4.4%	11.92	428,263	437,740	444,222	449,447
Region 1	292,360	4.4%	11.92	153,337	156,456	158,505	160,409
Region 2	194,283	4.4%	11.92	101,898	104,891	106,555	107,813
Region 3	168,062	4.4%	11.92	88,145	89,953	91,504	92,580
Region 4	161,842	4.4%	11.92	84,883	86,442	87,658	88,645
<i>Nature Walks (total)</i>	816,547	3.7%	8.55	258,315	264,031	267,941	271,092
Region 1	292,360	3.7%	8.55	92,488	94,369	95,605	96,754
Region 2	194,283	3.7%	8.55	61,461	63,267	64,271	65,030
Region 3	168,062	3.7%	8.55	53,166	54,257	55,193	55,841
Region 4	161,842	3.7%	8.55	51,199	52,139	52,873	53,468
<i>Trail Riding-horse (total)</i>	816,547	2.6%	7.97	169,205	172,950	175,511	177,575
Region 1	292,360	2.6%	7.97	60,583	61,815	62,625	63,377
Region 2	194,283	2.6%	7.97	40,259	41,442	42,100	42,597
Region 3	168,062	2.6%	7.97	34,826	35,540	36,153	36,578
Region 4	161,842	2.6%	7.97	33,537	34,153	34,633	35,023
<i>Roller Skating (total)</i>	816,547	2.8%	3.84	87,795	89,738	91,067	92,138
Region 1	292,360	2.8%	3.84	31,435	32,074	32,494	32,884
Region 2	194,283	2.8%	3.84	20,889	21,503	21,844	22,102
Region 3	168,062	2.8%	3.84	18,070	18,441	18,759	18,979
Region 4	161,842	2.8%	3.84	17,401	17,721	17,970	18,172
<i>Backpacking (total)</i>	816,547	0.5%	3.17	12,942	13,229	13,425	13,582
Region 1	292,360	0.5%	3.17	4,634	4,728	4,790	4,848
Region 2	194,283	0.5%	3.17	3,079	3,170	3,220	3,258
Region 3	168,062	0.5%	3.17	2,664	2,718	2,765	2,798
Region 4	161,842	0.5%	3.17	2,565	2,612	2,649	2,679
<i>Visit. Playgrounds (total)</i>	816,547	29.3%	9.06	2,167,589	2,215,560	2,248,368	2,274,810
Region 1	292,360	29.3%	9.06	776,093	791,877	802,249	811,887
Region 2	194,283	29.3%	9.06	515,740	530,889	539,315	545,681
Region 3	168,062	29.3%	9.06	446,134	455,282	463,137	468,578
Region 4	161,842	29.3%	9.06	429,623	437,515	443,668	448,664

TABLE B-2: DEMAND REPORT

Activity	2010 Population	Participation Rate	Frequency Rate	2010 Demand	2015 Demand	2020 Demand	2025 Demand
Boating Activities (total)	816,547			1,676,559	1,713,663	1,739,039	1,759,491
<i>Power Boating (total)</i>	816,547	14.5%	7.09	839,451	858,029	870,735	880,975
Region 1							
Region 2	Boat ramps are assumed to have a countywide service area. As such, supply and demand are measured at County level only.						
Region 3							
Region 4							
<i>Fishing from Boat (total)</i>	816,547	12.4%	7.08	716,863	732,728	743,578	752,323
Region 1							
Region 2	Boat ramps are assumed to have a countywide service area. As such, supply and demand are measured at County level only.						
Region 3							
Region 4							
<i>Water Skiing (total)</i>	816,547	3.7%	3.98	120,245	122,906	124,726	126,193
Region 1							
Region 2	Boat ramps are assumed to have a countywide service area. As such, supply and demand are measured at County level only.						
Region 3							
Region 4							
Golf (total)	816,547	13.0%	12.25	1,300,351	1,329,129	1,348,811	1,364,674
Region 1							
Region 2	Golf courses are assumed to have a countywide service area. As such, supply and demand are measured at County level only.						
Region 3							
Region 4							

It is important to remember that the participation and frequency rates listed in Table B-2 are for the “Suburban Baltimore” region as a whole (defined within the survey report as Baltimore County and Anne Arundel, Carroll, Harford and Howard Counties), and to understand that there are substantial localized variations in recreational demand. Additionally, as noted previously, these are raw estimates of recreational demands that may be satisfied at County facilities, by facilities offered by the State or private entities, or at facilities outside of the County.

The next three pages present Table B-3: Needs Report. The needs report assimilate tables B-1 and B-2, with the end result being an estimation of the need for the ten types of recreational facilities featured in the supply-demand analysis. Positive numbers in the “unmet demand” columns indicate there is a level of need/demand that exceeds the supply of recreational opportunities provided by existing County facilities. Numbers in parenthesis (#) mean that there is an estimated excess of that type of recreational facility based on the demand formula. All needs figures are based upon the *present* supply of recreational facilities.

TABLE B-3: NEEDS REPORT

Rec. Reg.	2010 Supply (occasions)	Annual Carrying Capacity	2010 Demand (occasions)	2010 Unmet Demand (occasions)	2010 Unmet Need*	2015 Unmet Need*	2020 Unmet Need*	2025 Unmet Need*
Athletic Fields								
Region 1	950,400	8,640	1,625,139	674,739	78	82	84	87
Region 2	1,010,880	8,640	1,079,959	69,079	8	12	14	15
Region 3	855,360	8,640	934,205	78,845	9	11	13	15
Region 4	978,320	8,640	899,630	(76,690)	(9)	(7)	(5)	(4)
total:	3,792,960	8,640	4,538,932	745,972	88	98	106	112
Ball Diamonds								
Region 1	648,480	3,360	785,340	136,860	41	45	49	52
Region 2	430,080	3,360	521,885	91,805	27	32	34	36
Region 3	388,400	3,360	451,450	65,050	19	22	24	26
Region 4	584,640	3,360	434,742	(149,898)	(45)	(42)	(40)	(39)
total:	2,049,600	3,360	2,193,417	143,817	43	57	67	75
Tennis Courts								
Region 1	331,170	3,990	394,782	63,612	16	18	19	21
Region 2	275,310	3,990	262,346	(12,964)	(3)	(1)	(0)	1
Region 3	203,490	3,990	226,939	23,449	6	7	8	9
Region 4	287,330	3,990	218,540	(48,790)	(12)	(11)	(10)	(10)
total:	1,077,300	3,990	1,102,608	25,308	6	12	17	20
Multi-Purpose Courts								
Region 1	536,130	7,770	647,519	111,389	14	16	17	18
Region 2	349,650	7,770	430,298	80,648	10	12	13	14
Region 3	303,030	7,770	372,224	69,194	9	10	11	11
Region 4	520,590	7,770	358,448	(162,142)	(21)	(20)	(19)	(19)
total:	1,709,400	7,770	1,808,488	99,088	13	18	21	24
Picnic Pavilions								
Region 1	30,240	2,520	398,054	367,814	146	149	151	153
Region 2	42,840	2,520	264,520	221,680	88	91	93	94
Region 3	45,360	2,520	228,820	183,460	73	75	76	77
Region 4	93,240	2,520	220,351	127,111	50	52	53	54
total:	211,680	2,520	1,111,745	900,065	357	367	374	379
Swimming Pools (outdoor)								
Region 1	0	81,000	1,549,233	1,549,233	19	20	20	20
Region 2	0	81,000	1,029,517	1,029,517	13	13	13	13
Region 3	0	81,000	890,571	890,571	11	11	11	12
Region 4	0	81,000	857,610	857,610	11	11	11	11
total:	0	81,000	4,326,932	4,326,932	53	55	55	56
Trails and Paths (miles)								
Region 1	297,000	27,000	7,629,848	7,332,848	272	277	281	285
Region 2	315,900	27,000	5,070,289	4,754,389	176	182	185	187
Region 3	575,100	27,000	4,385,988	3,810,888	141	144	147	149
Region 4	243,000	27,000	4,223,662	3,980,662	147	150	153	154
total:	1,431,000	27,000	21,309,787	19,878,787	736	754	766	775

*- Unmet need is expressed by quantity of the individual facility types. A figure in parenthesis indicates that there is an excess of that facility type based on the standardized formula.

TABLE B-3: NEEDS REPORT

Rec. Reg.	2010 Supply (occasions)	Annual Carrying Capacity	2010 Demand (occasions)	2010 Unmet Demand (occasions)	2010 Unmet Need*	2015 Unmet Need*	2020 Unmet Need*	2025 Unmet Need*
Playgrounds/Tot Lots								
Region 1	1,085,280	14,280	778,093	(309,187)	(22)	(21)	(20)	(19)
Region 2	658,880	14,280	515,740	(141,140)	(10)	(9)	(8)	(8)
Region 3	742,560	14,280	446,134	(296,426)	(21)	(20)	(20)	(19)
Region 4	956,760	14,280	429,623	(527,137)	(37)	(36)	(36)	(36)
total:	3,441,480	14,280	2,167,589	(1,273,891)	(89)	(86)	(84)	(82)
Boat Ramps								
Region 1								
Region 2	Boat ramps are assumed to have a countywide service area. As such, supply and demand are measured at County level only.							
Region 3								
Region 4								
total:	138,600	13,860	1,676,559	1,537,959	111	114	115	117
Golf Courses (18-hole)								
Region 1								
Region 2	Golf courses are assumed to have a countywide service area. As such, supply and demand are measured at County level only.							
Region 3								
Region 4								
total:	419,400	69,900	1,300,351	880,951	13	13	13	14

*- Unmet need is expressed by quantity of the individual facility types. A figure in parenthesis indicates that there is an excess of that facility type based on the standardized formula.

The following are more thorough assessments of the County’s recreational needs by facility type. These assessments present both quantitative and qualitative analysis of facility needs, applying other information such as staff input and associated County goals, where appropriate, to the numeric analysis from Table B-3. Further, one additional numeric analysis is applied for certain types of facilities—the population served per facility (the lower the number, the stronger the supply), which provides a snapshot view of the relative quantity of facilities by region. The population served by facility may represent an easier way to understand the relative need for additional facilities, reinforcing the numeric analysis presented in Table B-3 on the prior pages.

- **Athletic Fields:** The physical manner in which athletic fields and ball diamonds are typically configured played a major role in defining the season length for these facilities. The vast majority of ball diamonds and athletic fields in Baltimore County are overlaid upon each other, so that only diamond sports or field sports may be played at any given time. As the previously reported recreation demand numbers indicate, field sports are now approximately twice as popular as diamond sports. To reflect the usual overlay configuration of fields and diamonds, and the greater demand for field sports, two-thirds of the estimated number of days in which field and diamond-based activities take place were assigned as the season length figure for athletic fields, and one-third to the season length for ball diamonds. While doing so may seem arbitrary, this reflects the fact that overlay fields do provide the benefit of being able to change use from diamond sports to field sports, and vice-versa, depending upon need. For example, an overlay ball diamond that was previously used in spring for baseball might no longer be utilized as a result of diminished demand, but the athletic field which overlays the diamond (and which was unavailable for field sport use in prior years while the diamond was in use) could be put to use to accommodate expanded field sports demand.

Activity	Facility Type	Facility Quantity	2010 Population	Population per Facility
Field Sports	Athletic Fields			
Region 1		110	292,360	2,658
Region 2		117	194,283	1,661
Region 3		99	168,062	1,698
Region 4		113	161,842	1,432
	Total:	439	816,547	1,860

"Field Sports" include survey activities of: soccer, lacrosse, football, field hockey, and "other field sports." The facility quantity is for outdoor fields only.

Table B-3 shows that there is a quite substantial need for additional athletic fields in Region 1, a moderate need in Regions 2 and 3, and a minor surplus of fields in Region 4. This is reinforced by the population served per facility figures above, which show that Region 1’s fields serve about 1,000 greater population each that the other three regions. Region 1 had the largest number of athletic field related project requests (additional athletic fields, field lighting, and/or field conversion to artificial turf) of any region within the LPPRP formulation process, though it is believed that a comparably lower demand level for certain field sports – lacrosse perhaps the foremost – greatly reduces the overall need for additional fields. Within that region alone there were four requests for artificial turf fields, two requests

for the addition of field lighting at existing sites, one request for additional fields at the community level, and requests for the establishment of a regional park that would feature athletic fields and other recreational facilities. Field related requests from the other three regions were largely related to providing additional field use capacity in specific communities, including Towson/Towsontowne, Cockeysville, and Northern Baltimore County (all Region 2); Perry Hall and Parkville (Region 3); and Edgemere-Sparrows Point, Rosedale (Region 4) and Region 4 itself. These requests involved a combination of additional fields and the addition of field lighting and/or artificial turf.

All told, there were a total of eight requests for the conversion of existing grass fields to artificial turf. The installation of artificial turf can be a highly desirable option for expanding field access, particularly in areas of the County where there are poor prospects for the acquisition of additional suitable park sites. Other requests submitted for consideration by staff and the public pertained to large scale field maintenance needs, including field surface refurbishment and irrigation systems.



Many athletic fields become worn as a result of heavy use and a lack of irrigation. It is difficult to rest such fields if there are insufficient local facilities to which programs may be relocated.

- **Ball Diamonds:** As indicated previously, numerous ball diamonds that are constructed in an overlay configuration are no longer being utilized as a result of the greater need for athletic fields in many locales. It is also important to note that a large number of ball diamonds were constructed in a manner in which their outfields merge, and that in many such cases one or more of the diamonds may not be used at the same time as the other-- adjacent diamonds are sometimes so close together that they may be simultaneously utilized by only the youngest of age groups.

The following table shows the population served by ball diamond for each of the four recreation regions.

Activity	Facility Type	Facility Quantity	2010 Population	Population per Facility
Diamond Sports	Ball Diamonds			
Region 1		193	292,360	1,515
Region 2		128	194,283	1,518
Region 3		115	168,062	1,461
Region 4		174	161,842	930
Total:		610	816,547	1,339

"Diamond Sports" include survey activities of: softball, baseball, and t-ball.

Regions 1, 2 and 3 have remarkably similar levels of population served per ball diamond, while Region 4's much smaller figure reinforces Table B-3's figures that show the region as the only area of the County that – based on the supply and demand methodology – has an excess of ball diamonds.

There were approximately two-thirds less staff and public requests for ball diamonds within the LPPRP process than for athletic fields, again reinforcing the relative dominance of field sports that persists, and indicating that the number of diamonds needed as per Table B-3 is likely excessive. The majority of the diamond related requests involved the conversion of existing smaller diamonds to 90' ball diamonds capable of supporting use by adult baseball leagues. In such cases one or more existing diamond would be retrofitted, if space allows, to create the larger diamond, which has a substantially larger space requirement. The only requests for additional ball diamonds were for the Catonsville, Northern Baltimore County, and Rosedale areas, as well as Region 1 (as part of the desired regional park).

- **Tennis Courts:** Overall the activity of tennis has been in decline within Baltimore County. The facility needs figures in Table B-3 show a small surplus of courts in Regions 2 and 4, a moderate shortage in Region 1, and a small shortage in Region 3. Only one specific request for courts was made as part of the LPPRP process, but was rejected as a result of the desired site being incapable of supporting such use. Few public requests for additional tennis courts have been voiced when DRP hosted public input meetings prior to park design and development projects over the past ten years. Future tennis court construction will continue to be limited, with courts being provided at new parks only when the community desires, and/or in conjunction with school recreation center construction.
- **Multi-Purpose Courts:** The figures presented in the needs report table show relative substantial needs in all but Region 4. It is important to understand, however, that these figures are based on the recreation demand statistics associated with the sport of basketball, and that this activity is predominantly supported in Baltimore County via basketball courts within gymnasiums (of which there are nearly 190 countywide). Thus, the figures pertaining to the need for multi-purpose courts to support basketball are not reliable and do not represent an accurate assessment of facility need. This dynamic is reinforced by the very small number of multi-purpose court requests that were received, versus a substantial number

of indoor recreation facility requests, within the LPPRP input process. There were, however, numerous requests pertaining to the need for renovations at existing multi-purpose courts, whether equipped with basketball goals or not.

The actual “need” for multi-purpose courts remains a difficult matter to accurately display and resolve. Those outdoor courts where basketball goals remain in place and nearby citizens and site administrators support that use provide valuable opportunities for general public use on an unscheduled, non-programmed basis. Even in cases where basketball apparatus has been removed, the courts are frequently utilized for a variety of recreational opportunities, many of which keep children out of the street and in a safer environment. As decades have passed and recreational interests have diversified, the multi-functional aspect of these courts has become more commonplace and defined. Baltimore County will continue to renovate its existing multi-purpose courts, in some case converting them to different configurations and uses to meet changing public demands. Similar to tennis courts, new multi-purpose courts will be provided at new parks only when the community desires, and/or in conjunction with school recreation center construction.

- **Picnic Pavilions:** At first glance, the needs table seems to indicate that there is a substantial inadequacy of picnicking opportunity within the County. The demand figures, however, are for *all* picnicking demand, not just that associated with pavilions. There are literally thousands of picnic tables provided in the County’s parks, both within picnic pavilions, and out in the open. Additionally, the Maryland state parks within the County have sizeable picnic areas with dozens of pavilions (these are not counted in the needs report, which features only the facilities on County-owned or leased sites). The additional State and County picnic areas and tables thus help to provide significant opportunities for picnicking. Regardless of whether the overall demand for picnicking is being met, there is an obvious demand for additional picnic pavilions. The majority of the County’s pavilions are fully booked/reserved on weekends throughout the “picnicking season,” and citizens must often be turned away in their efforts to secure a pavilion during the peak weekend demand period.

The following table displays the population served per picnic pavilion by region, allowing for a convenient comparative analysis of the supply of pavilions.

Activity	Facility Type	Facility Quantity	2010 Population	Population per Facility
Picnicking	Picnic Pavilions			
Region 1		12	292,360	24,363
Region 2		17	194,283	11,428
Region 3		18	168,062	9,337
Region 4		37	161,842	4,374
	Total:	84	816,547	9,721

Pavilion size (and thus carrying capacity) varies widely.

This table shows that there is a wide variability in the supply of pavilions within Baltimore County parks, with Region 4 having the most plentiful supply in comparison to population, and the Region 1 the least. There are a number of important factors that impact upon the

actual need for additional pavilions, however. One such factor that helps to explain Region 4's relative wealth of pavilions is the presence of waterfront. The waterfront parks tend to be exceedingly popular picnic destinations, and the vast majority of Region 4's pavilions are situated at waterfront parks (many of which feature two or more pavilions). Thus, the greater supply helps meet the greater localized demand. Another very large factor is the presence and nature of Maryland State Parks in the region. Patapsco Valley State Park, part of which is situated within Region 1's boundaries, features nearly 50 picnic pavilions of varying sizes. Gunpowder Falls State Park's Hammerman Area in Region 3 features four large pavilions, each with a capacity of 100 people. North Point State Park's (Region 4) single pavilion can serve up to 300 people. Finally, the size of the County's pavilions varies widely, with some only large enough for two picnic tables, to others that have capacities well over 100.

A dozen requests for picnic pavilions were made via the LPPRP input process. Five were for Region 1, including a desire to have one or more pavilions provided as part of the much demanded future regional park site. Region 4 likewise had five requests, three of which were for waterfront parks. Regions two and three had two pavilion requests each, including a recommendation that pavilions be constructed at Mount Vista Park, which functions as a local park at present, but could be improved to regional park level in the future.

- **Swimming Pools:** Swimming in pools was the second most popular activity in the "Suburban Baltimore" region, as reported in the summary of the statewide recreation demand survey. The figures within the needs report show the great demand for this activity. DRP does not currently operate any outdoor public swimming pools. Instead, limited public use is available (primarily through programs) at the swimming pools of the Community Colleges of Baltimore County and at the State's Rosewood Center. More recently, a partnership was established with the YMCA of Central Maryland to operate County pools at Randallstown Community Center and the Dundalk Center. The vast majority of outdoor pool swimming opportunities are provided by swim clubs, and within pools at private residences. No requests for additional pools were made within the LPPRP input process.
- **Trails and Paths:** The figures pertaining to demand for linear-based forms of recreation are staggering, and include more than half of the top 11 most demanded activities within the region. Much of the participation within many of these activities takes place along public roads and sidewalks. Trails and paths, however, generally provide the safest, most functional, and most attractive venues for a wide range of linear-based recreation. These facilities provide excellent recreation options for individuals that prefer more individual forms of recreation, don't have time to commit to formal recreation programs, or wish to recreate at their own convenience.

Baltimore County continues to make efforts to respond to the great demand for trails and paths, all the while understanding that the State Parks and reservoir properties offer the majority of the best options and opportunities for sizeable park-based trail networks (as an example, the 170 miles of trails at Patapsco State Park are more than three times the length of all paths and trails within Baltimore County's parks). The two bicycle and pedestrian access plans conducted by the County have established strategies to expand access for both recreational and transportation purposes, with the County's associated advisory committee

charged with setting priorities so as to best utilize the limited funding resources available. Approximately one dozen trail projects were requested through the LPPRP input process.

- **Playgrounds/Tot Lots:** As displayed in Table B-3, based on supply and demand analysis methodology there are sufficient playgrounds in place within all four recreation regions. Playground maintenance remains a high priority, as there are more than 240 playground sites countywide (owned and managed by both DRP and BCPS). At present DRP sees little need for additional playgrounds, though new playgrounds could be established as part of site development projects at new parks or school recreation centers. Additionally, citizens in some communities/neighborhoods where the only nearby playgrounds are situated at school recreation centers sometimes wish to have playgrounds constructed at parks, which are not restricted from public use during the school day. Only a handful of playground requests were received through the LPPRP input process.
- **Boat Ramps:** The needs report indicates that many more boat ramps would be needed to meet the projected demand for boating-related activities. However, the majority of boating opportunity is accommodated through private boating facilities such as marinas, and through piers/docks at private residences. The County's aim is to provide sufficient public boat ramps that are well distributed geographically, to help serve citizens that do not own their own pier/dock or may not be able to afford fees. The only present geographic area within which a site for a future public boat ramp continues to be explored is the North Point peninsula in Region 4.
- **Golf Courses:** The golfing opportunities offered at the Baltimore County Revenue Authority's courses, and at the City's Pine Ridge Golf Course, provide quality diverse golfing opportunities to the public. Numerous private courses throughout the County also provide for demand in golf. This plan has no golf-related recommendations, as the quasi-public Revenue Authority is responsible for providing public golf facilities.

The following facilities were not included in the supply-demand tables.

- **Gymnasiums and Other Indoor Recreation Facilities:** Demand for year-round recreation continues to increase, and competition for the available space provided by existing gymnasiums, activity rooms, and other indoor recreation facilities is fierce in many communities.
- **Arts Facilities:** The need for additional arts facilities has been expressed by both the general public and recreation councils. Auditoriums and combination cafeteria-auditoriums within school recreation centers are sometimes available for the use of recreation council programs, but can have use limitations and conflicts similar to those that impact school-based recreational facilities. Several arts related project requests were made as part of the LPPRP input process, including a proposed dedicated arts center for the greater Pikesville community, and suggestion for multi-function community centers that include areas for arts programs and recitals.

- **Interpretive Facilities and Natural Area:** There are no supply and demand factors that measure the number of interpretive facilities or acres of natural lands and areas that should be provided to meet public needs. Instead, the County has provided geographically dispersed interpretive centers, and has preserved sizeable natural areas within a large number of its parks. The LPPRP input process produced several requests relating to the need for additional, expanded, or renovated interpretive facilities, as well as a recommendation that more land should be acquired for general natural resource preservation and left undeveloped.
- **Miscellaneous Recreational Facilities:** An assortment of other recreational facilities are provided to meet the wide variety of recreational demands possessed by County citizens. This could include additional facilities such as dog parks, skate parks, sand volleyball courts, and specialized facilities for seniors and individuals with disabilities. Some such facilities are intended to respond to a direct need, while others are seen as amenities that can be provided to expand the recreational diversity of a park. Additionally, there are many recommendations for miscellaneous site improvements that would expand the functionality and integrity of existing parks and school recreation centers. These include such amenities as comfort stations, fencing, parking areas, storage buildings, seating and security lighting.

County Objectives and Priorities for Land Acquisition, Facility Development, and Rehabilitation

The “Updated County Goals and Objectives for Recreation, Parks and Open Space” starting on page 49, and deriving predominantly from the prior LPPRP and refined within the recently adopted Baltimore County Master Plan 2020, remain in place for this LPPRP.

Summary of Recreation, Parks and Open Space Priorities

Appendix C – Acquisition, Development, and Rehabilitation Priorities provides a matrix of recreation and parks capital projects that have been identified as priorities by the public through the plan input process and other platforms for public input, and by County staff. A range of specific projects are presented, as are “general projects” that would provide capital resources for projects not envisioned or specifically identified at present. A number of the general capital projects are rehabilitation programs that allow the County to renovate or repair outdated or worn recreational facilities, while others provide for miscellaneous park improvements that are too numerous to comprehensively list within this document. Project recommendations are typically less specific in the later two time periods, mid-range and long-range.

The “general parkland acquisition” project provides funding that should be strategically utilized to acquire additional lands not specifically identified, but which are key to achieving one or more acquisition related goal or objective (e.g., acquisition of additional waterfront parkland). The types of projects presented in the priorities matrix are summarized below, sorted by funding type (acquisition, development, rehabilitation). The dollar figures in parenthesis are the total amounts

of the given funding types within the matrix. A sum total of just under \$285 million in project costs for a 20-year time period are listed, an average of \$14.25 million per year. This is substantially less than the ~\$815 million included within the 2005-06 LPPRP, and represents a more realistic approach that acknowledges that not all needs may be fully addressed within the twenty year period that follows this plan. The general development and rehabilitation categories in particular feature funding amounts that are more representative of the traditionally available budgetary allocations.

- Parkland Acquisition (\$64.4 million, average of \$3.22 million per year): The capital projects priorities matrix features specific and general acquisition projects that, if accomplished, would result in the procurement of an approximately 1,560 acres of parkland over a 20-year period, an average of 78 acres per year. The estimated project cost varies for individually listed projects, based upon location and size and type of property required. The estimated costs for general acquisition projects is based on an average of \$46,000 per acre of land, which is the average (mean) cost per acre of land acquired for park purposes in Baltimore County since fiscal year 1996. Acquiring only 78 acres of parkland per year would achieve only slow progress towards the County's parkland acreage goal. The only realistic opportunity to achieve a stronger level of park acquisition is through a greater number of low/no cost acquisitions and increased levels of acquisition funding. The most likely means for securing the latter is through larger annual allocations of POS funding, via transfer tax growth and an absence of associated diversions.
- Park Development (~\$143 million): The capital development projects listed in the matrix feature a wide range of facilities needed to meet existing and projected recreational needs and public demands. Many of the projects involve the development of a certain type of park, and may include a number of specific facility types that the public or staff persons have requested. The demand for indoor recreation facilities, in the form of community centers and regional indoor sports complexes, continues to be very strong. This reflects numerous trends, including growing demand for year-round recreation, overall population growth, and competition for existing indoor recreation space—particularly at public school recreation centers.

New park development projects are typically among the most costly project types, almost always involving the expenditure of several million dollars or more, depending upon size and scope. Such projects sometimes involve both indoor and outdoor recreation facilities. Three general project categories are included within the park development section of the matrix. These include:

1. Regional Park Development, which involves the construction of region serving indoor and outdoor facilities, which help meet the recreational needs of multiple communities.
2. Community and Neighborhood Park Development, which involves the construction of indoor and outdoor facilities that help to meet the recreational needs of a community or neighborhood. Community parks tend to feature recreational facilities used by the local recreation and parks council, or some specialized facility that draws visitors from outside the immediate neighborhood. Neighborhood parks tend to have

very limited facilities, with the most frequently found amenity being playground equipment.

3. Path, Trail and Sidewalk Construction and Renovations, which provide facilities to help meet the strong demand for linear forms of recreation such as walking, jogging, hiking, cycling, and dog walking. This general project type involves both new facility development and existing facility renovation, and is listed under construction since the majority of the funding would likely be used for new path, trail and sidewalk construction.

The identified park and recreation facility development projects would require an average of approximately \$7 million in funding per year over the 20-year planning period. The most recent capital improvement program (CIP) has dedicated about \$9 million to the three primary park development general projects for FY'16, and such funding levels have been experienced regularly in the past.

- Park and Facility Rehabilitation (~\$77.2 million): As the County's park system has grown and aged, the perpetual need for park and facility rehabilitation has become more apparent. Park and facility rehabilitation projects within the priorities matrix include a number of specific sites, as well as general programs. The single largest rehabilitation project listed is the ongoing adaptation of the former Sollers Point High School Recreation Center property in the Turner Station community, which is being transformed into a public park and community/multi-purpose center.

Three general project categories are included within the park development section of the matrix. These include:

1. Recreation Facility Improvements and Renovations, which provides funding for a wide range of park improvements and renovations. This use of funding from this general project has been split variably from year to year between facility renovations or replacement and park improvements. Typical renovations include the refurbishment of sports courts, entry roads and parking lots, fencing and players benches, and miscellaneous buildings and structure. However, as is the case with a number of the specific projects listed in the matrix, larger scale and much more costly projects likewise take place. Some examples of park improvements include picnic pavilions, storage buildings, skate parks, and dog parks.
2. Field Renovations and Enhancements, Including Lighting, help the County and DRP to maintain and improve ball diamonds and athletic fields and their associated lighting systems, which are among the most heavily utilized recreational facilities across the County. The sports fields are especially essential to the programs of the local recreation and parks councils. Larger scale renovations often take place within this project, with current plans being in place for a comprehensive field renovation program that would result in major rehabilitation work at numerous sites each year. Large scale lighting renovations are also sometimes needed to comply with revised field lighting standards.

3. Playground/Tot Lot Renovations and Enhancements funding ensures that the County's tot lots and playgrounds remain safe for use, and is utilized for both the playground equipment and surfaces. The vast majority of funding in this project is used for rehabilitation of the 160+ County-maintained playgrounds countywide, and relatively few new playgrounds have been constructed since the time of the prior LPPRP. The majority of new playgrounds are constructed as part of larger park development projects, and are thereby funded as part of those park development projects.

Approximately \$3.9 million per year is proposed for rehabilitation projects. Public safety will remain the prime consideration in any and all prioritization processes, with other considerations including existing facility condition and use, and local recreation demand trends.

PUBLIC PARTICIPATION

The input of Baltimore County citizens is essential to the planning process utilized by DRP, both within this plan, and on a regular, everyday basis. Whenever a new park is to be developed, or a major park renovation or redesign project is to occur, a series public meetings are held so that local citizens may provide input regarding site design and potential recreational facilities. This process results in the formulation of park concept plans, which are then used as the foundation for park design and construction. Regular public input that impacts the delivery of recreational opportunities comes from a wide range of other sources. The recreation councils voice their needs through the agency's community staff and through meetings with County administrators. The general public submits requests, recommendations and input directly to the agency, or through their local County Council representative or other elected officials.

The public participation process utilized to formulate this plan was as follows:

1. The public was notified of an input meeting and subsequent input process for the LPPRP. A press release about the meeting and input process was circulated, and further information was made available on DRP's web pages.
2. The LPPRP public input meeting was held on November 21, 2011 in Towson, with eleven individuals giving verbal testimony and more than that number attending offering written input, electing to do so at a later date, or simply listening.
3. Further input was accepted in the form of letters, input forms and e-mail through December, 2011.
4. The draft LPPRP is to be made publicly available, with citizens that offered input directly notified of its availability. The plan will be posted in pdf format on the County' web site, and made available in other hard copy and electronic format upon request. Public comment on the draft shall be accepted during the same time period as State and administrative review of the draft.
5. Once revisions are made to the plan, the proposed final version of the LPPRP shall be posted on the County's web site, and the plan adoption process will be initiated.

6. As the first step in plan adoption, the LPPRP will be brought before the County Planning Board, which shall host a public hearing as part of the adoption process.
7. Once approved by the Planning Board, the LPPRP will be brought before the Baltimore County Council for approval. This step also includes a public input component.

CHAPTER THREE: AGRICULTURAL LAND PRESERVATION AND OTHER LAND PRESERVATION PROGRAMS

The 2005-2006 Baltimore County LPPRP included an extensive section on agricultural land preservation, as was required for the first time within the plan guidelines. The new LPPRP guidelines do not require comprehensive information of this nature. Following is updated information pertaining to the County's agricultural land preservation efforts and achievements and goals.

The following excerpt from Baltimore County Master Plan 2020 provides a brief synopsis of Baltimore County's agricultural land preservation program:

The protection of land for agriculture has been a key component of rural growth management in the County for over 40 years. Significant public funds have been invested in the permanent protection of cropland, pasture and woodland to maintain and foster a viable agricultural industry. This forward-looking effort by the County has become more important with the national attention on issues such as energy conservation, sustainability, and national security. Promotion of local farms can improve the quality and security of the local food supply and play a role in solving other environmental problems.

The 1989 Master Plan first designated "Agricultural Preservation Area" boundaries (now called Agricultural Priority Preservation Areas, or APPA's). These areas have been reconfirmed in subsequent plans. APPA's are based on their capability for agricultural production and the existence of agricultural operations and preserved lands.

From 1980 through 2009, more than 55,200 acres have been preserved, including 21,675 acres under the Maryland Agricultural Land Preservation Foundation Program, 4,351 acres under the Baltimore County program, 25,250 acres under the Maryland Environmental Trust, private land trusts, and Rural Legacy programs, and 3,929 acres in R.C.4 cluster conservancy areas. This cumulative preservation achievement represents about 24% of the total land area outside the URDL. Based on a 2006 study by The Conservation Fund, an additional 50,300 undeveloped, unprotected acres met agricultural program criteria. The protection of an additional 30,800 acres will be needed to meet the County's ultimate preservation goal, and the County must seek adequate funding, explore innovative purchase techniques, refine programs, and increase the acreage of donated easements. Based on preservation of 2,100 acres and loss or conversion of 870 acres per year, it is projected that the 80,000-acre goal will be met by the year 2022.

Pages 110-127 of the 2005 Baltimore County LPPRP summarized the County's agricultural land preservation goals, implementation program, and program development strategy. The LPPRP also pointed to the County's Agricultural Land Preservation Certification Report, which provides more extensive information on the County's agricultural land preservation program and continues to be the primary resource for such materials.

ACHIEVEMENT OF AGRICULTURAL LAND PRESERVATION GOALS

State Goals

The State of Maryland has established a goal of preserving 1,030,000 acres of productive agricultural land statewide by 2022. This principal goal is supported by the following additional statewide goals:

- Permanently preserve agricultural land capable of supporting a diversity of agricultural production.
- Protect natural, forestry, and historic resources and the rural character of the landscape associated with Maryland's farmland.
- To the greatest degree possible, concentrate preserved land in large, relatively contiguous blocks to effectively support long-term protection of resources and resource-based industries.
- Limit the intrusion of development and its impacts on rural resources and resource-based industries.
- Ensure good return on public investment by concentrating State agricultural land preservation funds in areas where the investment is reasonably well supported by both local investment and land use management programs.
- Work with local governments to:
 - Establish preservation areas, goals, and strategies through local comprehensive planning processes that address and complement State goals;
 - In each area designated for preservation, develop a shared understanding of goals and the strategy to achieve them among rural landowners, the public at large, and State and local government officials;
 - Protect the equity interests of rural landowners in preservation areas by ensuring sufficient public commitment and investment in preservation through easement acquisition and incentive programs;
 - Use local land use management authority effectively to protect public investment in preservation by managing development in rural preservation areas; and
 - Establish effective measures to support profitable agriculture, including assistance in production, marketing, and the practice of stewardship, so that farming remains a desirable way of life for both the farmer and the public.

County Goals

The 2005 County LPPRP emphasized the primary goal, set within the Baltimore County 2010 Master Plan, of protecting 80,000 acres of agricultural lands. The LPPRP also identified six additional "major strategies" from the County's Agricultural Land Preservation Certification Report, as follows:

- Preserve sufficient land to protect agricultural resources for future generations,
- Incorporate stewardship into all aspects of the land preservation programs,
- Use land management tools to ensure temporary protection of lands not under permanent protection,
- Foster the agricultural industry,
- Foster regional cooperation to foster agriculture.

- Perform a study to analyze the 80,000 goal and identify strategies to reach the goal.

STATE GOALS PROGRESS

- The State of Maryland has established a goal of preserving 1,030,000 acres of productive agricultural land statewide by 2022.

County Progress: According to “Agriculture in Maryland Summary for 2009, MDA” (most recent data available) the total acreage of farms in State of Maryland is 2,050,000. The same report indicates that Baltimore County has just less than 80,000 acres of land in farms. The County’s own assessment of the amount of County agricultural land that includes small accessory agricultural activities is closer to 100,000 acres. Assuming the State goal is to be met proportionally by each County, each county would be required to preserve 50% of its agricultural land by 2022. Under this formula, Baltimore County having preserved nearly 60,000 acres has already exceeded the overall State Goal.

- Permanently preserve agricultural land capable of supporting a diversity of agricultural production.

County Progress: The preserved land is nearly equally divided between cropland, pastureland and forest land. The preservation easements also include a range of size of protected land in farms from as small as 14 acres to in excess of 300 acres. All farms preserved through the State and County Agricultural programs also meet or exceed the minimum productive soil requirements of the Maryland Agricultural Land Preservation Foundation program. Also as indicated below the County has preserved large blocks of farmland. All these features should support the continuation of the diversity of agriculture found in the County.

- Protect natural, forestry, and historic resources and the rural character of the landscape associated with Maryland’s farmland.

County Progress: As part of the selection factors for ranking easement applications for agricultural preservation programs, the County includes points for historic features, scenic attributes and natural resources. Rural Legacy and Maryland Environmental Trust easement programs place an even greater emphasis on these features.

- To the greatest degree possible, concentrate preserved land in large, relatively contiguous blocks to effectively support long-term protection of resources and resource-based industries.

County Progress: Baltimore County is a leader in this regard. The largest preservation block is 14,964 acres in the Upperco/Western Run portion of the County. Most of this area is within the Piney Run Rural Legacy Area. Other preserved clusters include: White Hall with 7,000 contiguous acres; Manor Area with 2,719 contiguous acres; Caves Valley with 1,738 acres; Long Green Valley with 1,654 acres; and 1,500 acres in the Coastal Rural Legacy Area. These areas include the major agricultural industry in the county, surround the

County's watershed forest area, and lastly protect woodlands adjacent to the Chesapeake Bay.

- Limit the intrusion of development and its impact on rural resources and resource-based industries.

County Progress: From 1980 to 2007 the average annual occupancy permits issued for inside the Agricultural Preservation Protection Areas (APPA) was 128. This compares to an average of 2,832 permits countywide or 4.5% of all permits are for within the APPA (Baltimore County Office of Planning, 2010). The APPA is approximately 141,000 or 36% of the County. During the past five years there has been a conversion of a 100 plus acre farm to a recreational use and one conversion of an approximately 200 acre farm to a College retreat center.

- Ensure good return on public investment by concentrating State agricultural land preservation funds in areas where the investment is reasonably well supported by both local investment and land use management programs.

County Progress: Over 95% of all easements are within the APPA and a similar proportion of State purchased agricultural easements are within the APPA.

- Establish preservation areas, goals and strategies through local comprehensive planning processes that address and complement State goals.

County Progress: Areas, goals and strategies for agricultural land preservation have been established in the County's Master Plan and in periodic Certification Reports.

- In each area designated for preservation, develop a shared understanding of goals and the strategy to achieve them among rural landowners, the public at large, and State and local government officials.

County Progress: Education opportunities through farm meeting, community meetings and other programs such as open houses are conducted. In July 2011 an educational meeting was held to introduce new local governmental officials to easement programs.

- Protect the equity interests of rural landowners in preservation areas by ensuring sufficient public commitment and investment in preservation through easement acquisition and incentive programs.

County Progress: County, State and Federal funds are used for the preservation of land in Baltimore County. In addition, landowners can also make a donation of development rights and qualify for a charitable deduction from their Federal Income taxes. The State has provided significant funding of preservation in Baltimore County through MALPF and the Rural Legacy Program. In recent years the County has been funding the majority of the preservation funds spent on lands within the County.

- Use local land use management authority effectively to protect public investment in preservation by managing development in rural preservation areas.

County Progress: Baltimore County has one of the strictest zoning ordinances. The County zoning permits only 1 house per 50 acres.

- Establish effective measures to support profitable agriculture, including assistance in production, marketing, and the practice of stewardship, so that farming remains a desirable way of life for both the farmer and the public.

County Progress: County has constructed and supports its \$10 million dollar Baltimore County Center for Maryland Agriculture. The Center provides for the support of agriculture through the provision of centralized services, demonstration areas, mentoring program for new farmers, educational events and much more.

COUNTY GOALS PROGRESS

Strategy 1 - Preserve sufficient land to protect agricultural resources for future generations

Progress:

Acreage Reported in 2005 LPRP (FY03)	Acreage Preserved in 2010 LPRP (FY11)	Accomplishment
41,979	59,753	17,774 ac/8 years- 2,221.75/year

Commentary: The County has continued to progress towards its goal of preserving at least 80,000 acres. The rate of preservation fell below the goal stated in 2005 LPRP of 3,000 acres a year. This was primarily due to the significant drop off of State funding for Rural Legacy and MALPF. The rate of preservation of County easements increased over this period.

Strategy 2 - Incorporate stewardship into all aspects of the land preservation programs

Progress: The County and MALPF increased their stewardship activities over this period. MALPF hired an employee to oversee inspections statewide and assisted Baltimore County with its inspections. Similarly Baltimore County dedicated the efforts of a full time staff person during part of this period to stewardship of easements. The County worked with the Baltimore County Soil Conservation District to assure that farms had and implemented Best Management Plans as required by their easements.

Strategy 3 - Use land management tools to ensure temporary protection of lands not under permanent protection

Progress:

Single Family Occupancy Permits within APPA 2008 to 2011	Single Family Occupancy Permits Outside APPA 2008 to 2011	Percentage of Single Family Permits Outside APPA 2008 to 2011
141	698	6%

Commentary: The APPA is approximately 141,480 acres within the 2/3 of the County that is outside the PFAs (URDL). If this area was to receive its “fair” share of single family dwelling as determined strictly by percentage of the County it would have had 38% of Occupancy Permits. The 6% while reflecting continued development clearly shows that the County’s land management tools are directing single family dwellings out of the APPAs.

Strategy 4: Foster the agricultural industry

Progress: The County completed construction of the Baltimore County Center for Maryland Agriculture (Agricultural Center) which serves to provide at one location the institutions providing services to agriculture and to foster agriculture through a citizen board. The County’s Economic Development Commission continued its commitment to the Agricultural economy through maintaining a full time position to assist agriculture and the provision of loans/grants to farms.

Strategy 5. Foster regional cooperation to foster agriculture

Progress: Efforts continued to work with land preservation administrators in Carroll and Harford County to preserve properties that were adjacent to those counties.

Strategy 6. Perform a study to analyze the 80,000 goal and identify strategies to reach the goal

Progress: Study was complete and project reports are available detailing the results of the study. The principal finding, however, was that the investigators concluded there was more than enough qualifying farmland available for the County to meet its goal of 80,000 acres. The main result of the study was the development of a optimization tool that has since been used effectively to purchase better quality acres of easement land at less price.

AGRICULTURAL LAND PRESERVATION IN MASTER PLAN 2020

The Baltimore County Master Plan 2020 provides updated information on the County’s agricultural land preservation efforts and vision for the future. The pertinent sections of the Master Plan include pages 91-94, 142-144, 158-159, and 165-169. Following are excerpts of the policies and actions identified within those sections of the plan:

Policy: Manage land development to limit conflicts with the agricultural industry to safeguard lands preserved through easements.

Actions:

- (1) Continue to enforce local policies, ordinances, regulations and procedures that stabilize the agricultural and forest land base.
- (2) Review and, if necessary, revise zoning and development standards to promote conditions suitable for production, processing and sale of agricultural products.

- (3) Include prime and productive soil standards and a maximum lot size to ensure that large parcels are not split to create large residential lots.
- (4) Evaluate increasing the minimum acreage for subdivisions in the RC 2 zone to reduce environmental impacts and development pressure on agricultural resources.
- (5) Evaluate regulations to eliminate resubdivision of lots created between 1975 and 1979 in the RC 2 zone.
- (6) Require that placement of State agricultural or conservation easements shall not result in an increase in density over that permitted without the easements.
- (7) Monitor development within the APPA's to ensure that residential and non-agricultural uses protect the resources and do not overwhelm the operation of agricultural businesses.
- (8) In general, zoning changes made in the agricultural priority preservation areas should protect the County's agricultural industry.
- (9) Consider adding criteria to the Baltimore County Zoning Regulations (BCZR) to require the evaluation of proposed development impacts on agricultural uses located on prime and productive soils.
- (10) Assure that development will have limited impact on active agricultural operations by reviewing, and, if necessary, revising setback requirements.
- (11) Review uses permitted by right and special exception in the RC 2 zone to determine whether any uses that are inconsistent with the purpose of the zone should be removed and consider additional performance standards, which will mitigate the impact of the proposed uses on the adjacent farm or easement property.
- (12) Enact "Right to Farm" legislation and institute a nuisance mediation board for farm operations.
- (13) Consider whether certain institutional uses now permitted in the RC 2, RC 7 and RC8 zones should be eliminated. Establish performance standards for institutions that are found to not have significant negative impacts if limited by the standards.

Policy: Foster a sustainable agricultural industry.

Actions:

- (1) Continue to offer loans and economic support for sustainable agricultural operations.
- (2) Consult the Rural Baltimore County Agricultural Profitability Study and Action Plan" (2009), and implement appropriate actions such as mentoring programs for new farmers and agricultural tourism activities on farms.
- (3) Review County Zoning and Development regulations to provide for farm production and processing.
- (4) Support the Baltimore County Center for Maryland Agriculture, which will promote a sustainable agricultural industry by providing educational and recreational opportunities for the public, and encouraging "agro-tourism". The Center will also serve as an "incubator" for new ideas to help sustain agriculture in many aspects, including protective measures such as "best management practices".
- (5) Facilitate discussions with the agricultural community and surrounding neighbors regarding the new agricultural economies (i.e. sell what you grow, farm markets) and potential impacts on quality of life.
- (6) Permit ancillary activities that allow farmers to sell products grown on the farm directly to customers, and promote certain farms as a destination stop for tourists and visitors.

- (7) Ensure that County regulations provide flexibility in agricultural operations and enable them to adapt to changing economic conditions.
- (8) Work with the Maryland Department of Agriculture (MDA), the University of Maryland Extension (UME), and the County Department of Economic Development to assist farm businesses in marketing to new local, national, and international consumers.
- (9) Support Farm Bureau educational activities such as the “Agriculture in the Classroom” program at Hereford Middle and High Schools, and a new mobile agricultural classroom.
- (10) Support the Farm Bureau program that identifies agricultural products produced in the County, which assists in the marketing of locally produced goods.
- (11) Establish a program to assist young farmers in accessing capital to purchase farmland.
- (12) Continue to foster and monitor the relationship between large-scale producers and landowners that lease land.
- (13) Actively seek to solicit new agricultural operations.
- (14) Encourage sustainable farming practices.

Policy: Limit suburban development in rural areas.

Actions:

- (1) Conduct detailed land use studies to determine: 1) buildable areas, 2) agricultural areas, and 3) environmentally sensitive areas.
- (2) Recommend that the County Council consider rezoning requests for additional office, business or industrial zoning in rural residential areas, in conjunction with the recommendations of any approved plan for the area.
- (3) Adopt County standards appropriate for rural residential areas that include open space, architecture, site layout, lighting, bicycles, and pedestrians.
- (4) Adapt cluster principles to maintain adjacent forests and open space, which help retain rural character.
- (5) Provide effective buffers between development projects to maintain rural character.
- (6) Preserve and connect open spaces through cluster development and open space acquisition.

Policy: Work with landowners and service agencies to implement Best Management Practices for agriculture.

Actions:

- (1) Require landowners who participate in land preservation programs to implement soil conservation and water quality plans.
- (2) By 2011, investigate developing a BMP implementation monitoring system with the Baltimore County Soil Conservation District.
- (3) Continue to provide support to the farm agencies including UME.
- (4) Provide information on research for new technologies to assist landowners with the implementation of BMPs.
- (5) Investigate setting minimum water quality standards for plans written for farms in County land preservation programs, in conjunction with cost-share programs to offset the expenses incurred by landowners.
- (6) Investigate innovative strategies, approaches, and incentives to encourage landowners to protect resources and overcome disincentives.

Policy: Permanently preserve at least 80,000 acres of agricultural and natural resource lands through Conservation Easements and other similar legal instruments.

Actions:

- (1) Continue to seek and encourage the donation and sale of easements through the various land preservation programs.
- (2) Conduct landowner outreach and public education to increase awareness of these conservation programs and garner interest in land protection.
- (3) Identify and preserve parcels large enough to support normal agricultural and forestry activities.
- (4) Fairly compensate farmers for loss of development rights.
- (5) Monitor the Agricultural Priority Preservation Areas to ensure that at least 80% of the remaining undeveloped land is either under easement or temporarily protected by restrictive zoning (such as RC 2).
- (6) Work with state and local partners to monitor and steward existing conservation easements to ensure compliance with agreements to protect the County's investments in agricultural land preservation.
- (7) Continue to seek adequate funding to acquire easements on at least 2500 acres per year.
- (8) As part of any update to this section of the Master Plan the County will:
 - Determine progress towards meeting the goals of the MALPF;
 - Evaluate any shortcomings in the County's ability to achieve the goals of MALPF;
 - Determine and implement actions to correct identified shortcomings.

Policy: Manage growth within the designated Rural Legacy Areas and seek permanent preservation of undeveloped properties through easement programs.

Actions:

- (1) Work with local land trusts to monitor goals and accomplishments of Rural Legacy Areas.
- (2) Work with local land trusts to integrate comprehensive resource protection elements in Rural Legacy areas, including forest buffers, Chesapeake Bay shorelines, forest habitat, endangered species, and planning measures that reduce sprawl.
- (3) Continue financial partnership with the State for preserving properties within Rural Legacy areas.
- (4) Encourage donation of conservation easements to supplement purchased easements.

CHAPTER FOUR: NATURAL RESOURCE CONSERVATION

As was the case with the Agricultural Land Preservation chapter, the 2005-2006 LPPRP was the first version of the LPPRP to require substantial content specifically dedicated to natural resource conservation, over and above traditional content that outlined the roles and relationships associated with recreation, parks and natural resource conservation. The present version of the LPPRP is not required to include that same level of detail, and so the following is an excerpt from the prior LPPRP, followed by an assessment of progress made in various areas of natural resource conservation. The primary natural resource conservation content from Baltimore County Master Plan 2020 is presented thereafter.

--- START OF EXCERPT ---

Baltimore County utilizes a wide range of laws, regulations, and programs to conserve, enhance, and perpetuate its valuable natural resources.

The overall goal of the County is to provide “a safe, prosperous, and diverse urban and rural community promoting education and responsibility, spanning generations, and evoking pride in those who live and work here”. (Master Plan 2010, Vision Statement)

NATURAL RESOURCE CONSERVATION GOALS

The County’s *Master Plan 2010* establishes the following major environmental goals for Baltimore County:

- Protect the County’s remaining natural resources and promote the conservation of biological diversity,
- Restore lost or degraded ecosystem functions, particularly those related to watersheds and reservoirs,
- Foster environmental stewardship among county residents, and within the region.

These policies are implemented through programs that the Department of Environmental Protection and Resource Management (DEPRM) manages. These are discussed in depth in this chapter.

The County’s policies meet or exceed the State goals for natural resource land conservation as provided in the guidelines for this document. The state goals are listed below and will be addressed throughout this chapter.

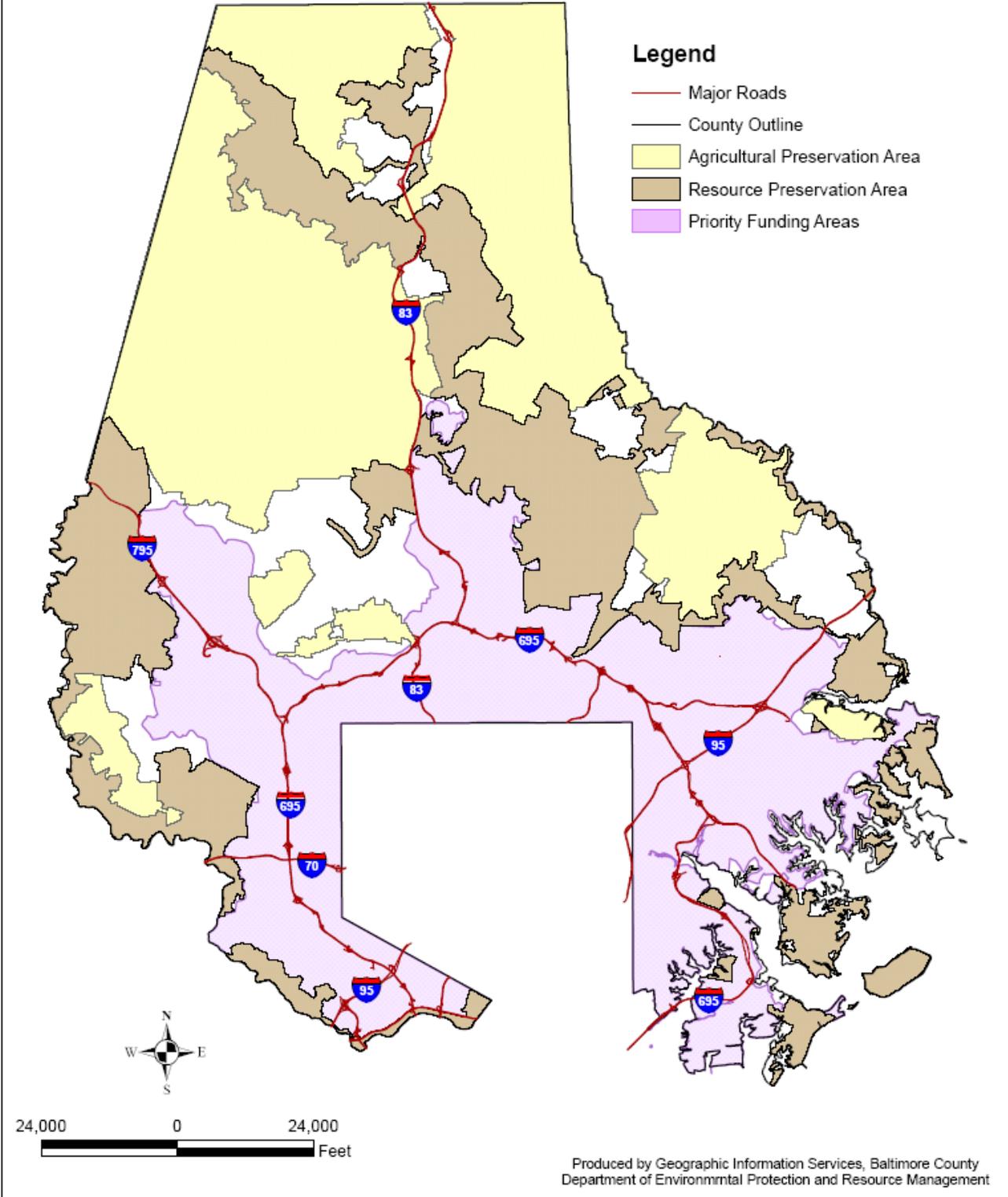
- Identify, protect, and restore lands and waterways that support important natural resources and ecological functions,
- Focus conservation and restoration activities on priority areas within the statewide green infrastructure,

- Assess the combined ability of State and local programs to:
 - Expand and connect forest, farmlands, and other natural lands as a network of contiguous green infrastructure,
 - Protect critical terrestrial and aquatic habitats, biological communities, and populations,
 - Manage watersheds in ways that protect, conserve, and restore stream corridors, riparian buffers, wetlands, floodplains, and aquatic recharge areas and their associated hydrologic and water quality functions,
 - Support a productive forestland base and forest resource industry, emphasizing economic viability of privately owned forestland,
- Establish measurable objectives for natural resource conservation and integrated State/Local strategy to achieve them through State and local implementation programs,
- Preserve the cultural and public value of natural resource lands,
- Encourage private and public economic activities, such as eco-tourism and natural resource-based outdoor recreation, to support long-term conservation objectives.

Comprehensive Planning Context and Map

For complete discussion of County’s plan for the protection and restoration of natural resources, refer to the Baltimore County Master Plan 2010. The Master Plan provides a map of the “Priority Funding Areas” and indicates how this designation is consistent with the existing County growth management strategies. The Master Plan also indicates the different preservation areas in the County. These include agricultural land preservation, rural legacy, scenic, historic, and cultural protection areas. The Master Plan establishes in great depth the extensive natural resource protection strategies of the County.

PRIORITY FUNDING AREAS



The County has extensive maps and inventories on the dedicated conservation areas and natural resources of the County. These are further explained in this section, and are likewise available through the County's geographic information system.

CURRENT IMPLEMENTATION PROGRAM

Baltimore County's Approach to Creating/Maintaining Green Infrastructure

The County has a comprehensive program to protect its green infrastructure. The program includes a greenprint element, greenway elements, and the recreational acquisition element. The recreational element is covered in the recreation portion of this plan.

The County has utilized the State's Greenprint Program to protect properties identified through the Green Print Mapping Process (See Maryland Atlas of Greenways, Water Trails, and Green infrastructure). The principal mechanisms for the implementation of the State Green Print Plan are either fee simple acquisition, purchase of easements, and forest banks on the properties that contain the identified resources. The Maryland Department of Natural Resources has provided the majority of the funding for the protection of these resources either through outright acquisition, Program Open Space, through easements and acquisitions, or through the Rural Legacy Program. The State has also provided funds to the Maryland Agricultural Land Preservation Foundation (MALPF) for the purchase of agricultural easements on farms that have resources identified as part of the Green Infrastructure. In addition, the County has provided significant funds for the Rural Legacy Programs. The easement acquisition programs are described more fully in chapter five of this Plan.

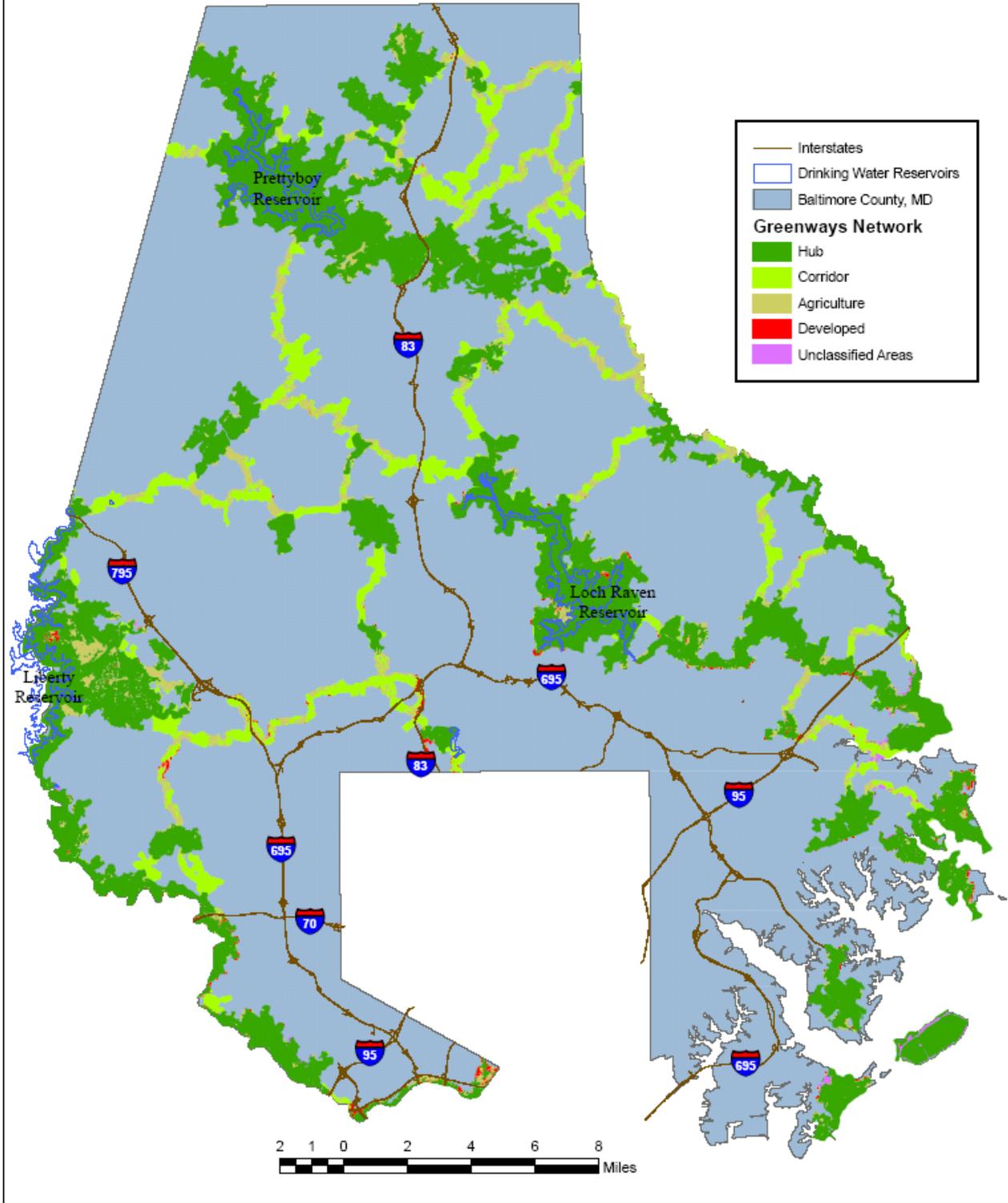
The principal mechanism for the protection of the County Master Plan designated greenways are through regulatory efforts by both the Department of Recreation and Parks and the Department of Environmental Protection and Resource Management. The Department of Environmental Protection and Resource Management seeks to protect the environmental easements through its Forest Buffer and State Forest Conservation Programs that require easements on streams and Forest Conservation Program as part of receiving approval for development plans.

The Department of Recreation and Parks seeks to create the recreational greenways through requirements for easements and reservations during the development plan process. The County's updated Local Open Space Manual includes an expanded section with further greenway related requirements for a development. The requirements include a mandatory dedication of the limits of a greenway on any property regardless of zoning and that easy access be provided for any of the greenways located on the property.

Green infrastructure's Role in the County Implementation Plan

The County's goals stated in the Master Plan 2010 are to protect the County's remaining natural resources, promote the conservation of biological diversity, restore lost or degraded ecosystem functions, and to foster economic stewardship among county residents and within the region. Green infrastructure will promote the completion of these goals by providing significant amounts of preserved land through the County's Greenways. The County's environmental greenways will ensure the protection of any natural resources the region has to offer and will retain any biodiversity by acting as wildlife corridors. Recreational greenways will aid in fostering environmental stewardship among the public by allowing them to use the open land for recreational purposes.

Greenways: Baltimore County's Green Infrastructure



Status/Description of County's Forest and Forest Resource Industry Structure

Protect, Restore, and Manage Forest Resources: There are roughly 132,500 acres of forest cover in Baltimore County, representing approximately one-third of the County's total land cover. Of this forest cover acreage, about 25% is under public ownership. The largest forest blocks are located in the three City-owned drinking water reservoir reservations, the Gunpowder Falls and Patapsco State Parks, Soldiers Delight Natural Environment Area, Robert E. Lee, Oregon Ridge, Dundee Saltpeter Parks, and Back River Neck. The remaining forest acreage is privately owned, with an average forest patch size of 14.6 acres. This is significant from an ecosystem function standpoint because larger forest patches are more resistant to environmental and human-made stresses than smaller forest fragments.

An early historical pattern of clearing forests for agriculture and development, coupled with massive cutting for fuel wood and timber, made significant changes in both the amount of forest cover (from 95% to as low as 15% in the region by 1870) and the health and vigor of the remaining forest patches. Although forest regeneration has increased the overall cover to the present 35% in the county, forest health and the sustainability of ecosystem functions is threatened by a pattern of parcelization of wooded properties and the subsequent fragmentation of the remaining forest patches by new developments and roads.

Forests provide a range of free ecological services and socio-economic benefits. In forested watersheds, trees play a major role in moisture and nutrient recycling, while the entire forest ecosystem controls flooding and soil erosion. These functions, which protect both aquatic and terrestrial habitats for forest-dependent plants and animals from degradation, also maintain water quality and stream stability, as well as the social benefits of peaceful open spaces in which to walk and observe wildlife, and the range of forest products available for the needs of the human community. Forest openings and gaps from early forest fragmentation patterns made conditions favorable for the proliferation of deer and the incursion of exotic, invasive plant species into forest patches. As fragmentation has continued, pressures from now burgeoning deer, exotic plants, and other nuisance animal populations threaten the valuable ecological and social services of the remaining forest patches.

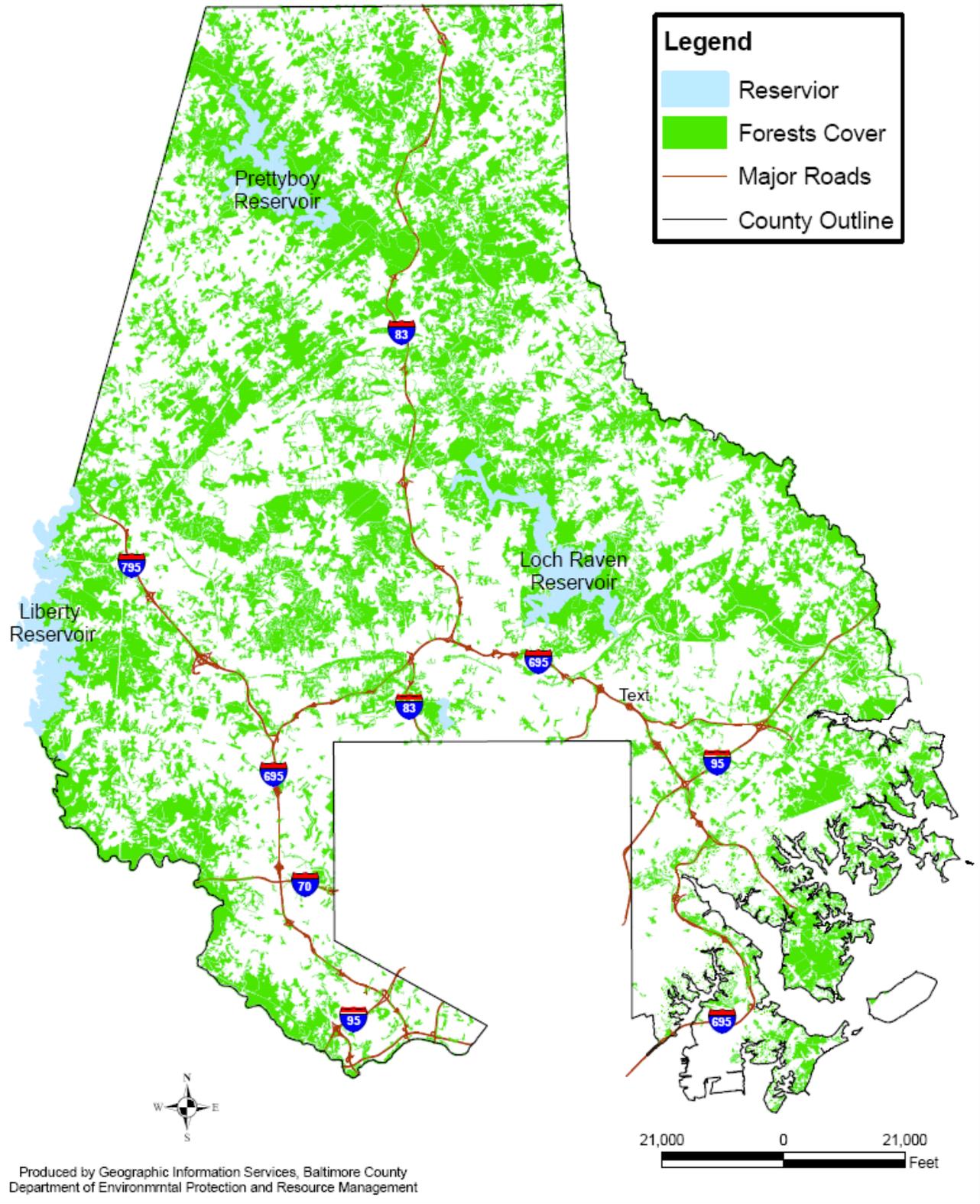
DEPRM recognizes the need to broadly assess the current health and condition of the County's forest patches, to assess the types and degree of stresses on the forests, the necessity of preparing management plans to alleviate pressure from degrading elements, and restore to the greatest extent possible the ecological functions that will allow sustainable forest functions in the future. To that end, DEPRM has entered into co-operative associations and agreements with state and federal agencies and environmental groups.

Summary of Programs:

1. Continue to implement the local Forest Conservation Act as required by the Maryland Forest Conservation Act of 1991, and evaluate its effectiveness,
2. Continue commitment to the "Linking Communities to the Montreal Process Criteria and Indicators" project on forest sustainability issues,

3. Continue the Community Reforestation Program that provides for the reforestation of riparian forest buffers and of other priority forest corridors and gaps through forest banks, development process, land acquisitions, and easements,
4. Continue to provide support for the County Forest Conservancy District Board's programs for education of citizens about forest resource issues,
5. Develop and ensure inclusion of reforestation policies in community plans and community conservation efforts,
6. Continue to promote the Tree-Mendous Maryland Program for community reforestation, including assisting communities with tree orders and delivery'
7. Continue the Rural Residential Stewardship program,
8. Initiate the Growing Home campaign to foster expanded plantings on private and residential properties.

FOREST COVER



Using funds deriving from the fees-in-lieu of mitigation component of the State-managed Forest Conservation Act of 1991, DEPRM is currently managing 95 acres of reforestation projects, which staff has installed in sensitive areas including stream banks and steep slopes on County and State open spaces. DEPRM purchases tree seedlings directly from the State-operated John Ayton Nursery. In a cooperative effort with DEPRM, the Department of Recreation and Parks has provided a one-acre site for a nursery facility, where seedlings are grown out for a range of reforestation projects.

Protecting Plant and Animal Habitats (Biological Diversity)

Many of the issues related to protecting plant and animal habitats have been discussed as important components of stream and forest preservation. Traditionally, another important habitat issue is the protection of rare, threatened, or endangered plant and animal species. DEPRM takes a broad view in habitat protection, including not only the safeguarding of rare or significant species, but also ecological processes and functions that sustain habitats for upland, forest, riparian, wetland and aquatic plants and animals. This broader concept includes all ecosystem processes in the conservation of biological diversity.

DEPRM has worked with the Maryland Department of Natural Resources to verify the presence of the limited number of threatened or endangered species and their habitats that exist in the County. Many of the habitats for these sensitive species are protected through public ownership of wild lands and other environmental management areas such as Soldiers Delight, and through the public drinking water reservoir reservations and large state-owned lands along the Patapsco River and Gunpowder Falls systems. Any threats to sensitive plant or animal species elsewhere from land development are addressed through regulatory protection of the stream systems and priority forest retention areas.

Program actions:

1. Continue to ensure that significant habitats are identified on development plans and continue to seek cooperation in protecting them through modification of site designs.
2. Seek to increase plant and animal habitat in conjunction with capital improvement projects for shore erosion control, stream restoration, wetland creation, and reforestation.
3. Work in cooperation with governmental and non-profit agencies to assess, protect, restore, and create habitats.

Protecting, Restoring, and Managing Watersheds

Managing Baltimore County's Watersheds: A watershed is an area of land from which water drains to a stream, lake, or other water body. Watersheds are a useful framework for resource management because individual resource elements such as streams and forests are linked through ecosystem processes that operate to maintain the stability of the system. Baltimore County contains 14 major watersheds, which are identified on the basis of local stream systems and drinking water reservoirs. Seven are part of the Gunpowder River basin and six comprise the Patapsco River basin.

Land use activities within watersheds impact the water quality of the streams associated with the watershed and the water bodies downstream. For example, the clearing of forests increases the amount of runoff from storm water to streams, causing an increase in the sediments, nutrients, and toxins carried to the streams, and erosion of stream channels. Changes in sediment and nutrient levels can degrade the habitat quality of the stream for both plants and animals. Land preservation programs that place environmentally sensitive land in permanent easements assist in the protection of watersheds and their interrelated systems.

The County's watershed program consists of characterizing and prioritizing watersheds, preparing management plans, and evaluating resource systems and functions at varying scales; from a Countywide level to individual properties. Assessments of pollutant loads, stream stability, and forest community structure provide the framework for the preparation of implementation plans for capital projects, maintenance, education, and cooperative citizen actions.

The County's Department of Environmental Protection and Resource Management (DEPRM) is the agency with primarily responsibility for the management of Baltimore County's programs for the natural environment. DEPRM has developed an integrated watershed management program that addresses federal pollution control mandates, State of Maryland initiatives for restoration of the Chesapeake Bay, and local priorities and needs. The County's watershed approach also integrates the following functional components:

- National Pollutant Discharge Elimination System (NPDES) – Municipal Separate Storm Sewer System Permit is issued to the County for five years by the Maryland Department of the Environment pursuant to Section 402(p) of the federal Clean Water Act, for non-point pollution control of storm water runoff. The latest permit was issued June 15, 2005.
- Tributary Strategies Partnership Agreements of 1993 and 1994 - agreement with the State of Maryland and neighboring counties for nutrient reduction and nutrient loading caps in the Upper Western Shore (Gunpowder River) and Patapsco/Back River tributaries.
- Reservoir Watershed Management Agreement Reaffirmed in 2005 by Baltimore County, City, and adjacent Counties, Reaffirmation of 1984, and annual Action Strategies for reduction of sediment and phosphorus in the metropolitan drinking water reservoirs and other water quality protection actions.
- Maryland Economic Growth, Resource Protection, and Planning Act of 1992 (the "Planning Act") requirements for sensitive area protection and incorporation of the Bay Program's seven "Visions" into County Master Plans.
- Coastal Non-Point Pollution Control Program management measures required by the Maryland Department of Natural Resources pursuant to Section 6217 of the federal Coastal Zone Management Act, for control of urban, agricultural, forestry, and marine sources of pollution.
- Watershed-based Total Maximum Daily Load (TMDL) pollutant limits under development by the State of Maryland, pursuant to Section 303(d) of the federal Clean Water Act, for the elimination of impaired waters.

- The Baltimore Watershed Agreement of 2002 - A Memorandum of Understanding (MOU) between Baltimore County and the Mayor and City Council of Baltimore, for watershed management and the cooperative inter-agency management of environmental resources. The agreement initiated quarterly meetings with local watershed associations and an annual State of Our Watershed Conference. The function of the agreement and working with the local watershed associations is to promote coordinated restoration efforts of our shared watersheds.
- Monitoring- Ambient water quality dry weather flow monitoring is conducted at more than 100 sites throughout the County, alternating years with the Gunpowder River Basin monitored in even years and Patapsco/Back River Basin monitored in odd years. Biological monitoring using random site selection is conducted at 100 sites annually for benthic macro invertebrates using the same basin cycle as for dry weather monitoring. Stream stability studies are conducted throughout the County as needed. Scotts Level Branch and Powder Mill Run are monitored as paired watersheds for chemistry, biology and stream stability.
- Watershed Planning: DEPRM also manages the preparation of watershed management plans for the County's major watersheds. These plans include the characterization of existing watershed conditions, establishment of restoration objectives, identification of restoration options, and evaluation of implementation feasibility. Specific characterization studies include pollutant loading analyses for existing and future land uses based on the Storm Water Management Model (SWMM) and stream stability analyses based on Rosgen stream classification methods. Plans completed or scheduled in the current program include Bird River (1995), Loch Raven Reservoir, Jones Falls, and Back River (1997), Patapsco River (1999), Lower Gunpowder Falls (1999), Middle River (2001), Baltimore Harbor (2001), Little Gunpowder Falls (2002), and Gwynns Falls (2004). DEPRM manages contracts with environmental consulting firms for each plan, with a cost of up to \$326,000. Restoration projects recommended in the plans are prioritized for design and construction through the Capital Improvement Program (CIP). To date, watershed management plans have been prepared for all 10 watersheds (Bird River, Jones Falls, Loch Raven Reservoir, Back River, Lower Gunpowder, and Patapsco River, Gwynns Falls, Little Gunpowder Falls, Baltimore Harbor, and Middle River) at a total cost in excess of \$2 million.
- State Water Quality Advisory Committee (SWQAC): Provides guidance to the Secretary of the Department of the Environment for water quality programs.

Status/Description of Other Regulatory/Management Strategies

Protection of Forest Buffers: One of the County's most important regulatory programs is the comprehensive stream buffer regulation. Baltimore County's stream buffer requirements date back to the Water Quality Policy of 1986, which required 50-foot stream buffers. More protective buffers were recommended by the County's Water Quality Steering Committee in 1988. In June 1989, an Executive Order was issued that began a pilot for the revised buffer code that was adopted by the County Council in 1991. The County's regulations have been cited by the State of Maryland and the Chesapeake Bay Program as a model for local stream protection. Features of the stream buffer regulations include that they (1) apply to all land development

projects; (2) apply to all perennial and intermittent streams (field determined stream limits); (3) have variable widths, including minimum 75' for non-trout waters and 100' for trout streams, or 25' beyond greater extent of 100-year floodplains, non-tidal wetlands, or steep/erodible slopes within 150' of the stream; (4) are surveyed and recorded on Record Plats; and (5) require restrictive covenants designed to prevent disturbance of vegetation.

Protecting The Reservoirs: The regional reservoir system, including the Prettyboy, Liberty, and Loch Raven Reservoirs, provides a large and dependable drinking water supply for the 1.8 million people in the Baltimore metropolitan region. A new multi-jurisdictional watershed agreement was signed in 2005. Although Baltimore City owns and maintains the reservoirs and drinking water system, Baltimore County has a special responsibility for the protection of the reservoir watersheds, two-thirds of which are located in Baltimore County.

Baltimore City manages 17,200 acres of land surrounding the reservoirs, but this land comprises only 6% of the total reservoir watershed. Protection of drinking water quality is the primary purpose of these publicly-owned reservations; however, limited active recreational use is also accommodated, including fishing, boating, golf, a shooting range, and hiking/biking. Public concern about impacts of recreational use on water quality have resulted in the formation of public and citizen advisory groups and revised regulations governing recreational use. Careful management of the entire watershed area for the three reservoirs is important for maintaining the water quality of the reservoirs.

The continuing water quality monitoring program conducted by the City of Baltimore since 1985 indicates that the reservoirs continue to be impacted by nutrient over-enrichment. In particular, phosphorus from sewage treatment plants, agriculture, and urban development is contributing to the excessive growth of nuisance algae. The County participates in the Reservoir Technical Group of the Baltimore Metropolitan Council to provide technical oversight and tracking for the implementation of water quality programs to control phosphorus and sediment loading to the reservoirs. These activities are part of an adopted Action Strategy developed in conjunction with the 1984 Reservoir Watershed Management Agreement. Substantial progress has been made to protect the regional reservoirs, as documented in the 1998 Action Report. The Agreement also contains several zoning policies to maintain agricultural and conservation zoning and to not increase urban development zoning in the reservoir watersheds. Baltimore County has continued to honor its commitments to the Agreement, especially during the quadrennial Comprehensive Zoning Map Process, wherein zoning changes can be proposed by citizens.

Program Actions:

1. Continue to participate with other area jurisdictions in the cooperative regional Reservoir Watershed Management Program, including participation in the Reservoir Technical Group for coordination of program implementation under the adopted Action Strategies and preparation of progress reports.
2. Continue commitments to restrict development in the reservoir watersheds.
3. Continue to implement non-point pollution control, stream restoration projects, and sewerage improvements.

4. Continue to prioritize implementation of projects to establish riparian forest buffers along stream systems in the reservoir watersheds in cooperation with private organizations and other public agencies.
5. Continue to participate in the Comprehensive Gunpowder River Watershed Study and work to address watershed management issues arising from the study.
6. In cooperation with citizen organizations, continue to implement the ambient biological stream-monitoring program in order to provide information about the impacts of land use activities on reservoir stream quality, and to assist in the evaluation and implementation of management programs.

Implementing Agricultural Best Management Practices: Although agricultural use of the land is clearly better for the environment than paving it for development, farmers must be good environmental stewards. It is critical that farmers implement best management practices (BMP's) on all the lands they farm, whether owned or leased. Through the use of these (BMP's) they can reduce soil erosion and protect the water quality of the County's streams and groundwater. The County will continue to assist the agricultural industry through the Baltimore County Soil Conservation District in implementing soil conservation, water quality, and nutrient management plans that protect the soil and water resources of the County. All farms in the County that meet certain acreage and animal unit thresholds must have a Nutrient Management Plan. Participants in land preservation programs that have agricultural land must have a conservation plan that includes BMP's.

Chesapeake and Atlantic Coastal Bays Program: Land development proposals are reviewed for compliance with the Chesapeake and Atlantic Coastal Bays Program. Baltimore County's program was enacted in 1988, following the passage of the Maryland Chesapeake Bay Critical Area Act in 1984 and the publishing of the regulations in 1986. This program encompasses all of the land within 1,000 feet of tidal waters and all of the southeastern peninsulas. Redevelopment of properties within these areas is limited in the amount of impervious surface on the site, the amount of trees and forest on the property, and the controls on storm water runoff. Tidal and nontidal wetlands are required to have naturally vegetated buffers, which filter the sediments and nutrients in runoff. A Buffer Management Program adopted by the County allows the continuation of maintenance activities and limited home improvements within the first 100 feet of shoreline, known as the Critical Area Buffer. This has relieved homeowners of the burden of obtaining variances from the Critical Area criteria for many small additions.

Storm Drain Inlet Cleaning: DEPRM, with assistance from the Department of Public Works, conducts storm drain inlet cleaning across the urbanized areas of the County. This is accomplished with the use of three large-capacity vacuum trucks that have been in service since 1992. DEPRM determines the amount of metals and petroleum hydrocarbons removed through this maintenance. Because road surfaces typically contain the highest concentrations of water pollutants, the program contributes significantly to water quality, which is important to aesthetic and recreation uses of streams.

Storm Water Management Facilities: There are more than 2,880 stormwater facilities in Baltimore County, including 1,088 publicly-owned facilities. DEPRM established a four-person operations crew in 1997, and increased the crew to six staff in 2005, to accelerate the

maintenance of the publicly owned facilities. The maintenance crew helps to ensure that the facilities are functioning as designed.

Illicit Connections: DEPRM conducts annual screening-level monitoring of 200 storm drain outfalls for illicit connections, or dry weather discharge from storm drains. A geo-referenced database of inspections is maintained by watershed. DEPRM conducts investigations to identify sources of illicit discharges and coordinates County's enforcement/correction actions.

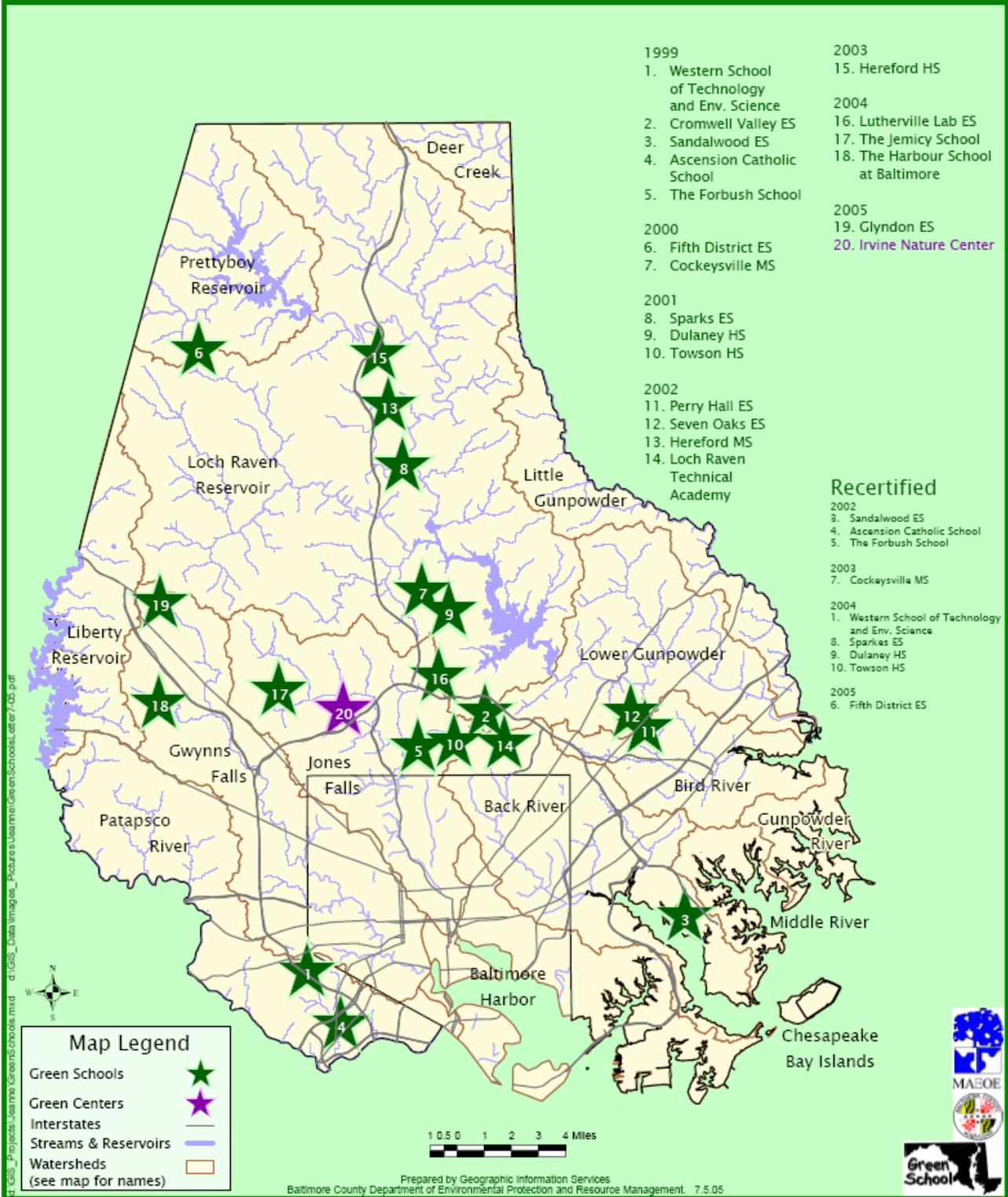
V.B.2.i. Status/Description of Education and Citizen Participation Program

DEPRM has developed several education programs for water pollution control and has worked with non-profit organizations, schools, and watershed associations to foster environmental stewardship and involve citizens in restoration activities.

“Let's Be Partners/Getting Greener Schools.”: As part of its NPDES Municipal Storm Water Permit, DEPRM launched an environmental education program in 1995, titled *“Let's Be Partners ...Water Pollution: What We Can Do To Reduce and Prevent It.”* A program called *“Getting Greener Schools”* has since been added to reach out to local public and private schools through the *Maryland Green School Award Program*. Baltimore County leads Maryland having 16 schools operating as Maryland Green Schools. The program includes community presentations on conservation, best management practices (BMPS), pollution prevention, interactive program stewardship for public and private schools, and displays for community festivals, all of which promote individual and community pollution prevention actions. This program was recognized by the National Association of Counties (NACo) in 1997 and is incorporated into the Chesapeake Bay Program's Local Government Advisory Committee (LGAC) *Pollution Prevention Toolkit* for local jurisdictions. DEPRM coordinates planning for this statewide program through participation on the Board of Directors of the Maryland Association for Environmental and Outdoor Education (MAEOE).

“Tree-Mendous Maryland”: DEPRM actively promotes this State-sponsored program for planting trees on community open spaces by offering technical support and coordinating the free delivery of purchased trees to participating communities in Baltimore County. Since program inception in 1990, DEPRM has delivered over 11,000 trees to 440 planting projects.

Baltimore County's Green Schools and Green Centers 1999 to 2005



Forestry Board: The County's Forestry Board, assisted through an annual operating grant from DEPRM, provides assistance to communities for reforestation projects, including the establishment of "Greening Committees." The Board also provides for teacher training and works with schools on projects through its *Schoolyard Reforestation and Habitat Program*. A brief summary of Forestry Board activities includes the following:

- Promotion of and support for community "greening," and for the State-sponsored *Tree-Mendous Maryland Program*.
- Maintaining a website that provides a range of information on tree and forest topics.
- Administering the *Schoolyard Reforestation Wildlife Habitat Program*.
- Conducting environmental education training workshops for teachers.
- Providing *Camp Hickory* scholarship opportunities for high school students interested in natural resource management careers.
- Conducting tree farm tours highlighting good forest management practices for timber harvesting, sediment and erosion control for water quality maintenance, wildlife habitat enhancements, and reforestation.
- Providing environmental exhibits at community festivals and events.

Further information on education and citizen participation programs is available within the County's *National Pollutant Discharge Elimination System (NPDES) 2005 Annual Report*.

Maryland Water Monitoring Council: Serves as a statewide collaborative body for public agencies and private sector organizations to help achieve effective collection, interpretation, and dissemination of environmental data related to issues, policies, and resource management involving physical, chemical, and biological water monitoring.

Informational Outreach: The Department has developed a set of brochures for education of the public about environmental and natural resource protection. One of the most recent brochures is "*From my Backyard to Our Bay*." It provides helpful advice for landowners on actions that they can take to foster better protection of water quality and natural resources

Restoration of the Chesapeake Bay, Tidal Wetlands, and Rivers

Baltimore County contains approximately 182 miles of Chesapeake Bay shoreline. The bay and its tidal tributaries (the Patapsco, Back, Middle, and Gunpowder Rivers) are a unique natural resource. The intertidal zone, where land and water meet, is essential for providing protection and food for waterfowl and aquatic life. Its health is fundamental to restoring the Chesapeake Bay, yet this area is threatened as a result of natural erosion and human activities.

There are numerous recreational and business opportunities related to the Bay, such as boating, sail boarding, swimming, water skiing, fishing, crabbing, and bird-watching. Healthy swimming beaches and aquatic populations are essential to Bay-related recreational and economic activities. Tidal waters which support a healthy submerged aquatic vegetation (SAV) community will most likely support the citizens' recreational and economic needs. The amount, type, and location of the SAV community are one indicator of the overall health of the tidal waters. These plants provide oxygen to the water and nesting sites for aquatic life.

Baltimore County continues to implement the Waterway Improvement Program, an initiative to enhance the resource quality of the shoreline communities. One component is a dredging program for the maintenance of existing boat channels in creeks and boat access “spurs” from these channels to individual waterfront properties. The dredging permits require that the County implement controls to help prevent future runoff of sediment and nutrients to the dredged channels. Baltimore County collects submerged aquatic vegetation (SAV) data for all creeks that have been or are proposed to be dredged. Submerged aquatic vegetation is considered a key indicator of the general health of a waterway. SAV growth has rebounded in many of the County’s waterways and the County has been documenting and mapping these trends since 1989. This data provides the necessary information to satisfy State and Federal permit requirements and to better understand SAV growth and the limiting factors.

DEPRM's Waterway Improvement Program also includes shore erosion control projects, which have stabilized thousands of feet of steep, eroding shoreline with vegetated beaches and structural protection such as off-shore, gapped breakwaters where needed to control erosive wave energy. With the use of natural vegetation for stabilization, the County is introducing citizens to alternative shoreline protection approaches. These techniques are self-maintaining and therefore provide a much longer-term solution. Shore erosion control projects have been completed for many of the County’s waterfront parks, and an updated project needs inventory has been completed to prioritize additional areas.

Most of the County’s Chesapeake Bay shoreline is privately owned. Some of the County’s oldest communities are located along the shore. Historical patterns of development have resulted in slicing the shoreline into multiple lots. This limits bay access to the individual lot owners and impacts each stretch of shoreline with piers, bulkheads, and other manmade structures. The desire for access to the Bay is continuing and has increased development pressures along the shoreline. Water-access communities and subdivisions are highly desired by homebuyers. Baltimore County encourages the use of group piers as an alternative to private piers. A single point of access to the water can serve multiple households, thereby minimizing disruption of the shoreline. Actions that need to be taken include:

1. Continue to implement the dredging component of the Waterway Improvement Program while protecting submerged aquatic vegetation.
2. Continue efforts to protect shorelines from erosion and improve the water quality and habitat value of tidal wetlands; use nonstructural measures, if appropriate, for shoreline stabilization, and enhance tidal wetlands by increasing the amount of native species.
3. Monitor and control upland sources of sediment and other water pollutants carried to waterways as storm water runoff.
4. Review permits for construction of shoreline structures and only allow structural measures where a nonstructural alternative does not exist.
5. Explore beneficial uses of dredge spoil disposal including shoreline stabilization projects and tidal marsh creation.
6. Improve implementation procedures of the Chesapeake and Atlantic Coastal Bays Program while maintaining the high level of water quality and habitat standards.

Clean Shores Program Capital Program and Operations Section: In May of 2002, the Baltimore County Department of Environmental Protection and Resource Management implemented the “Clean Shores” Program. The program goal is to improve the water quality, aesthetics, and navigational safety of the tidal waterways of Baltimore County.

The County’s waterfront includes several large tributaries to the Chesapeake Bay, including the Patapsco River, Back River, Middle River, Gunpowder River, and Bird River. The County has a well-established program to manage and protect its watersheds, streams, land, and ecological resources. As county resource conservation programs and regulatory controls have begun to take effect to control runoff and siltation of tidal waterways, dredging and restoration of recreational boating access has become a priority.

Recreational boating contributes over \$200 million a year to the County’s economy. The County recognizes the importance of boating and is committed to providing a safe and clean environment. The County’s waterfront includes 26 County waterfront parks and 2 State waterfront parks.

Controlling the sources of debris in the County’s waterways includes community education, enforcement of dumping, maintenance programs, and the installation of debris collection devices. In an attempt to inform the public about the fact that storm drains lead directly to streams and ultimately to the Chesapeake Bay, many storm drains have been painted with the message, “Chesapeake Bay Drainage – DON’T DUMP.”

Baltimore County’s Department of Environmental Protection and Resource Management staff will survey the tidal creeks and rivers of the County and remove hazards to navigation and waterway debris from the shorelines and shallow waters from May to October. The program is funded by a Waterway Improvement Fund Grant from the Maryland Department of Natural Resources. The crew, consisting of a boat operator and 2 technicians will be using the County’s 20’ landing craft, to scoop trash from the shoreline and from the bottom of the County’s waterways.

In addition, County crews utilize 2 all-terrain amphibious vehicles (Argos) to provide access along the shoreline and mud flat areas. The ATV’s are equipped with a track tire system for better traction in muddy conditions. The ATV’s are also equipped with a power winch with a load capability of 2500lbs. Many of the creeks in the County are not accessible from the shoreline due to private ownership. In addition, the substrate in many of the creeks is too soft on which to physically walk.

The Clean Shores Program will have a significant long-term impact on water quality, habitat value, and economic and aesthetic value of the county’s waterways. It will also improve the navigational safety of the waterways for the thousands of County boaters.

Waterway Improvement Program: Since 1987, DEPRM has implemented a “Waterway Improvement Program” for the design and construction of watershed restoration projects including stormwater conversions and retrofits, stream restoration, shore erosion control, waterway dredging, and reforestation. DEPRM’s restoration program is based in large part on

emulating natural ecosystem functions. The program is supported through the Capital Improvement Program and is structured by watershed accounts. Further information is available within the County's *National Pollutant Discharge Elimination System (NPDES) 2005 Annual Report*.

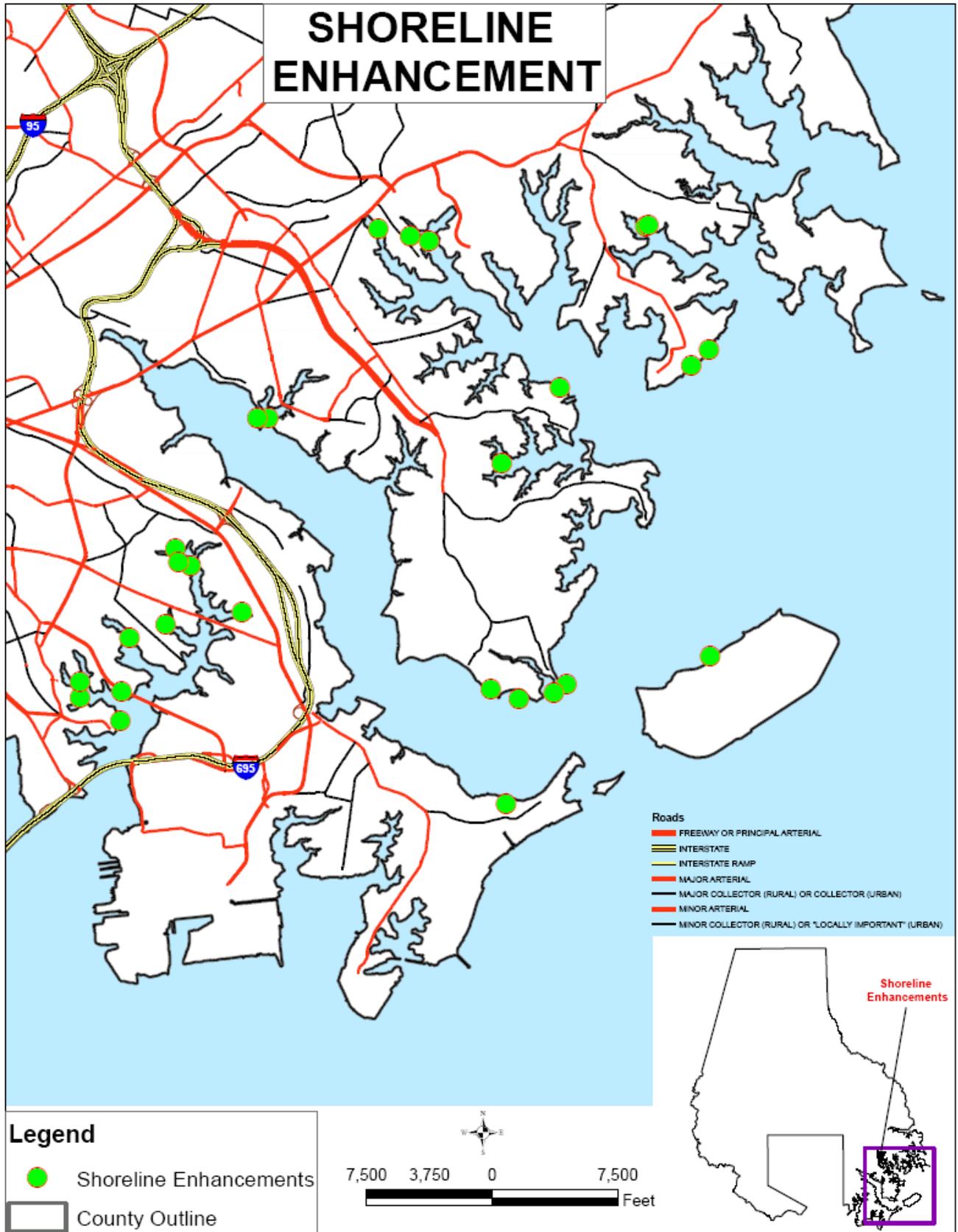
Derelict Boat Removal Program: Using an annual State grant, DEPRM administers a program for the removal of abandoned and derelict boats from non-commercial locations. The boats are retrieved by the County Marine Police or a private contractor, and disposed of in cooperation with the Department of Public Works. Since program inception in 1989, more than 300 derelict boats have been removed from County waterways. The County receives a grant from Maryland Department of Natural Resources for debris and derelict boat removal.

In addition, in support of DEPRM's dredging program, sediment cores have been collected and analyzed in the areas of the proposed dredging. Mapped locations of submerged aquatic vegetation (SAVs) for project areas are also compiled.

Shoreline Feasibility Study Status: A \$300,000 comprehensive shoreline feasibility study for the tidal areas of Baltimore County between Bear Creek and the Gunpowder River was completed in 1998. The study identified beach replenishment and enhancement sites, erosion control needs, and potential sites for island, wetland and shallow water habitat creation. The study included detailed concepts for enhancement projects and evaluated project feasibility. In addition, sediments from numerous tidal waterways were analyzed and a survey of submerged aquatic vegetation was conducted. Projects continue to be implemented. Baltimore County also actively works to coordinate DEPRM's resource management programs with other County agencies, state and federal programs, and other local jurisdictions in the Baltimore region. These coordination efforts also serve to facilitate the involvement of citizens and private sector organizations. Major coordination efforts include:

Coastal and Watershed Resources Advisory Committee (CWRAC): Provides guidance to the Secretary of the Maryland Department of Natural Resources (DNR) for the coastal zone management program and related activities.

Tributary Strategy Implementation Teams: Promotes the public awareness of actions needed for implementation of the 40% nutrient reduction goal for Maryland's commitment to the inter-state Chesapeake Bay Program. The County is within two designated tributary areas, the Baltimore Patapsco/Back River and Upper Wetland Shore.



Restoring Streams And Non-Tidal Wetlands: Baltimore County contains more than 2,100 miles of non-tidal streams and rivers, including more than 1,000 miles of streams that drain to the three drinking water reservoirs. Overall, the County has many miles of good quality streams and rivers. Some, such as the Gunpowder Falls, are recognized as among the highest quality recreational fishery resources in the eastern United States. A stream system consists of a stream and its associated floodplain, wetlands, and springs. Wetland and riparian vegetation play an essential role in the natural functioning of a stream system, including maintaining base flow, controlling water temperature, controlling pollution, and providing habitat. Other recreational uses of stream and wetland systems include nature activities such as camping, hiking, bird watching, collecting, and photography.

Stream quality involves both the flowing water in stream channels and the plant and animal habitat. Flowing water quality is affected by pollutants from urban runoff (non-point sources, particularly from impervious surfaces) and by pollutants discharged directly to streams (point sources). Non-point source types of pollution are varied and include nutrients, sediments, metals, pesticides, oil and grease, salts, and other particulate and dissolved matter. Point-source pollution, such as from wastewater treatment plants, industries, and other sources with a direct, piped discharge, are regulated by the state. Stream-side non-tidal wetlands are important to the maintenance of stream flow, to the removal of pollutants, and to the quality of riparian habitat.

In recent years, increased attention has been directed to the impact of stormwater management on stream systems. Developed initially to protect downstream areas from flooding as a result of upstream runoff, stormwater management can also erode stream channels when the stored runoff volume is discharged at a sustained level. Responses to this problem include: (1) planned revisions to the state's storm water management regulations to manage the discharge of more frequent storm events and provide better protection to stream channels; (2) re-incorporation of the natural flood function into stream restoration projects where access to floodplains for the river are possible and where no downstream areas are susceptible to flooding damage; and (3) "low impact development" approaches wherein development is designed so as to increase the travel time and infiltration of runoff and to reduce the amount of impervious surfaces.

Many County streams have been degraded by channelization, encroachment of development on floodplains, draining and filling of riparian wetlands, removal of riparian vegetation, and development or clearing of steep slopes and erodible soils adjacent to streams. Over the past 15 years, DEPRM's staff has developed expertise in the restoration of destabilized stream channels. Reconstruction of channels employing the concepts of natural channel stability involves using natural materials such as boulders and vegetation in conjunction with reshaping of the stream channels. When properly constructed, these streams are a cost-effective and attractive means to restore physical stability, function, and habitat. The County has completed 35 projects to date and has a defined program for additional projects.

Status/Description of County Groundwater Protection Strategy

Managing Groundwater: In Baltimore County, favorable geological conditions and plentiful precipitation combine to provide a valuable supply of quality groundwater that is used for agricultural, residential, commercial, and industrial uses. About 10% of the County's population

relies on groundwater as the primary source of drinking water. Approximately 30,000 wells are used to withdraw water for this use. In addition, there are currently 16 community well supplies in the County that each serves 25 or more users. The agricultural community also relies heavily on groundwater for domestic, livestock, and irrigation purposes. Industrial and commercial uses depend on groundwater to a more limited extent.

Demand for groundwater by well users occurs mainly in the northern half of the County in areas beyond the service area of the metropolitan water supply system. In order to protect the public health, it is essential to protect groundwater resources from contamination by petroleum products, septic systems, fertilizers, pesticides, road salts, and industrial wastes. Under state regulations, the County is responsible for review of all well permits for residential, commercial and institutional construction. Standards exist to assure that all proposed drinking water wells provide a sufficient quantity of water and are below thresholds for bacterial and nitrate contamination. Proposed on-site sewage disposal systems are regulated to assure that wastes will be adequately remediated in the soil and that they are located at appropriate distances from wells. The current standards for drinking water wells and on-site sewage disposal systems are considered to be effective in protecting public health and groundwater resources. Failing septic systems occur primarily in areas that were developed prior to the establishment of these standards. In such cases, the County conducts sanitary surveys; if community health threats are documented in areas that are accessible to the metropolitan district, extension of public water and/or sewerage is provided on a long-term financing basis. In areas that cannot access the water and sewer service area, problems with private water and sewage disposal in small communities are hard to correct. Many rural areas, including the rural commercial centers of Hereford, Kingsville and Jacksonville, have limitations such as marginal soil conditions, small property sizes, area requirements for stormwater management, and zoning issues that impede improvements of sanitary facilities. In order to address these issues comprehensively, a mechanism such as a rural sanitary district can be established. Other groundwater contamination problems involve specific point sources of contamination, such as petroleum spills from gas stations. Federal regulations have resulted in a program whereby all service stations have replaced older tanks with new tanks that have enhanced protection and containment.

Over the past four years, the County has participated with the Maryland and U.S. Geological Surveys in the first comprehensive study of Piedmont groundwater quality in Baltimore County. The study detected pesticides at 70% of the tested sites, with 75% of the sites containing two or more pesticides. Fortunately, all pesticides were at very low levels and were not considered to preclude any health concerns. Chloride levels in drinking water wells were found to be elevated above background levels in many wells, but were below the secondary maximum contaminant level. Road salt appears to be the primary source of elevated chloride in wells, as evidenced by higher chloride levels in wells located closer to paved roads. Most of the trace elements with known adverse health effects (arsenic, antimony, cadmium, and cyanide) were not detected. Elevated nitrate levels were attributed mostly to agricultural sources such as fertilizers and manure. Elevated levels of naturally occurring radionuclides (primarily radium) above drinking water standards have been detected in approximately 10% of the wells tested in the Baltimore and Setters Gneiss formations. Baltimore County requires that new wells being put into domestic use in these areas be tested for radionuclide.

Program Actions:

1. Evaluate the concept of a rural sanitary district, with appropriate legal authority, financing, and design standards, to provide a mechanism for addressing rural water supply and sewage disposal problems.
2. Continue review of development proposals to assure the proper siting of drinking water wells and the location of on-site sewage disposal systems in accordance with the *Code of Maryland Regulations*.
3. Continue implementation of the 1993 Ground Water Management and Protection Strategy.

EVALUATION OF IMPLEMENTATION PROGRAM

Evaluation of the Green Infrastructure Program

The County's Green Infrastructure program strengths are the comprehensive nature of the planning and implementation strategy. For greenways the Office of Planning provided the planning guidance and the Department of Recreation and Parks and Department of Environmental Protection and Resource Management provide the coordinated implementation. For the acquisition and easement projects the Department of Environmental Protection and Resource Management and the Department of Recreation and Parks coordinate their efforts with Maryland Department of Natural Resources Open Space. One area of weakness that is currently being addressed is to refine the planning documents and regulations to better differentiate the procedures for the protection of environmental greenways versus recreational greenways.

With respect to the acquisition of easements through the Rural Legacy Program and through the Maryland Agricultural Land Preservation Foundation from 1998 to 2002, the State provided significant financial assistance and planning assistance for the implementation of the Green Infrastructure Program. The County provided significant matching funds to the Rural Legacy Program and assistance to the Maryland Agricultural Land Preservation Foundation Program. Four Land Trusts in the County provided hundreds of hours of volunteer time meeting with landowners, recruiting participants and meeting as boards to manage the program. The net result of all these programs was to create significant preservation momentum for the protection of critical natural resources in the County.

After 2002, the State resources for the protection of Green Print resources through the Rural Legacy Program and Maryland Agricultural Land Preservation Foundation Program diminished significantly. The County has maintained its support of these programs, but with dwindling State resources, the momentum has slowed and components of the green infrastructure remain at risk.

To better evaluate the status of the greenways, the Department of Environmental Protection and Resource Management is currently creating a single database to determine the number of easements and locations. From that database the next step will be to map the extent to which the

greenways and forest corridors have been protected. This map can then be integrated with land preservation mapped information to develop a data/map base.

Evaluation of Forest Resources

The County prepares annual reports to the County Council that evaluates the implementation of the Forest Conservation Regulations. Results of the most recently available report for 2003 indicated that in that year for the development projects that involved 666 acres of forest, 65% of the forest was retained and protected in Forest Conservation Easements. In cases where forest was not retained, 41.7 acres of afforestation were required and 21.4 acres of mitigation banking were required. On five developments, fees-in-lieu were required totaling \$232,697.00.

This information and a more extensive examination of the County's Forest Resources were examined and evaluated through the Forest Sustainability Project (See the Forest Sustainability Report).

Evaluation of Watershed Management Strategy

Baltimore County shall continue the systematic assessment of water quality within all of its urban watersheds. As part of this process, Baltimore County shall prioritize restoration projects within watersheds where opportunities for significant water quality improvement exist and prior stormwater management efforts have been insufficient to meet goals established by the County. Projects shall be based on detailed water quality analyses and designed to control stormwater discharges to the maximum extent practicable. The overall goal of the activities listed below is to maximize water quality in selected areas where restoration projects are definable and the effects of which are measurable. The details of this program are contained in the *NPDES-Municipal Stormwater Discharge Permit, 2005 Annual Report; Section 4*

The City of Baltimore and Baltimore County have concentrated cooperative efforts to protect and restore their shared watersheds. This regional approach is an important step forward. Baltimore County has performed the following:

1. Completed the development of watershed management plans for the Gwynns Falls, Baltimore Harbor, Middle River, and the Little Gunpowder River. Additionally, these plans shall be used in conjunction with watershed management plans completed for the Bird River, Back River, Loch Raven, Jones Falls, Patapsco River, and Lower Gunpowder River to prioritize sub-watersheds for restoration projects.
2. Within 12 months, Baltimore County shall develop a pollution reduction-tracking database for recording acres of impervious area addressed by watershed restoration projects. The tracking database shall be updated annually, reflect completed restoration efforts and effectiveness monitoring, and be submitted to MDE with the County's annual reports.
3. Within 18 months, Baltimore County shall select subwatersheds to be restored, which are equal to or greater than 10% of the County's urban impervious cover. As part of this process, Baltimore County shall complete and submit for MDE:

- a. Document those current water quality conditions that will be addressed by each project;
- b. Propose stream restoration goals and corresponding stormwater management projects;
- c. Establish a monitoring plan and surrogate parameters for assessing restoration efforts; and
- d. Provide an estimated cost and a detailed implementation schedule for all restoration projects.

After completing the above assessment and restoration project selection, Baltimore County shall select an additional 10% of its impervious cover for restoration projects by the end of this permit term.

Evaluation of Other Regulatory/ Management Strategies

Protection of Forest Buffers: The County has hired additional staff to dedicate two people to the inspection, management and monitoring of Forest Buffers. The staff is presently organizing the existing data into a database in order to better protect the protected resources. While it is clear that this program is highly successful in keeping development out of the most critical areas adjacent to waterways, better tracking and monitoring of these buffers will provide data to better evaluate the program.

Protecting the Reservoirs: The U.S. Environmental Protection Agency presented the 2005 Source Water Protection award to Baltimore County. The award was for consistently demonstrating commitment to leadership and innovation in drinking water protection. The county's aggressive land preservation programs, restrictive zoning, educational outreach, and water quality monitoring and enforcement programs were all elements in receiving this distinction.

Implementing Agricultural Best Management Practices: The Baltimore County Soil Conservation District in cooperation with Baltimore County is evaluating the effectiveness of its programs in providing conservation planning to the landowners in the County. This effort is ongoing. Preliminary results have indicated a significant backlog in the development and updating of conservation plans, trend for more non-commodity farm operations (small equine operations) with special needs, and reduction in State support for staff positions.

With respect to the evaluation of the implementation of nutrient management plans, private consultants and farm operators primarily develop the plans. This effort is supported by one field person and training assistance from the University of Maryland Cooperative Extension, Baltimore County. Deadlines have been set for either having a plan or having a letter of intent.

Chesapeake and Atlantic Bays Program: The County prepares quarterly reports to the Chesapeake Bay Critical Commission on the evaluation of the Critical Area regulations. These reports are available at DEPRM.

Storm Drain Inlet Cleaning: See NPDES- Municipal Stormwater Discharge Permit, 2005 Annual Report.

Storm Water Management Facilities: See NPDES- Municipal Stormwater Discharge Permit, 2005 Annual Report.

Illicit Connections: See NPDES- Municipal Stormwater Discharge Permit, 2005 Annual Report.

Evaluation of Education and Citizen Participation Program

Baltimore County has fully developed and implemented its extensive and highly successful education programs for reducing the use of pesticides, herbicides and fertilizers, controlling of stormwater pollutants, and disposing of toxic wastes (*See NPDES-Municipal Stormwater Discharge Permit, 2005 Annual Report; Section 6*). Its initiatives and programs are multi-faceted and developed for flexibility so that the message may be easily adapted to a variety of educational settings involving school children, homeowners, community groups, watershed coalitions, faith communities, and businesses in geographic settings around the county and region. A number of important new components and materials have been developed or enhanced in order to better reach certain target audiences. Through the *Jones Falls Institutional Stewardship Initiative*, the *MD Green Schools/Green Centers* initiatives, and the *Security Boulevard/Woodlawn HS initiative*, new emphasis has been placed on institutional landscape design, maintenance, and conservation landscaping concepts such as the benefits of native plants, integrated pest management (IPM), and removal of impervious surfaces. Pet waste, grass clippings, improper application of fertilizer, and other sources of nutrients in urban and suburban neighborhoods have been highlighted.

The County's Green Renaissance and Growing Home initiatives are planned for implementation in 2005. In its broadbased school initiatives, DEPRM has shifted emphasis from hosting individual classroom events to teacher training, outreach to supervisors and facility staff, and working with community coalition groups to foster new partnerships and provide a wider range of services. Partnerships with other county offices and agencies increase effectiveness, avoid duplication of services, and maintain communication. Supporting materials developed by the department and by outside organizations were distributed at educational events, in DEPRM's lobby, through the mail, and increasingly via the county web site. Surveys, questionnaires, feedback, and informal review have been used as assessment tools.

Volunteer citizen participation in pollution prevention was promoted in all components of the program. Through *BayScaping* and *Green School* awards, citizens, organizations, and schools were recognized for committing to actions that will improve water quality. Recommendations for program modification and expansion are being reviewed and the update is ongoing. In 2004, components of the *Let's Be Partners* program were used as a statewide model for program development. Recommendations resulting from the current program assessment will guide future program implementation. Continued expansion of the partnerships involving businesses and schools in the Security Boulevard corridor of the Gwynns Falls and the Jones Falls, Back River and Baltimore Harbor watersheds is planned for 2005. New school populations on the east and west sides of the county will be targeted for increased education and outreach. Targeted outreach to private independent schools will be conducted at presentations at the annual AIMS conference in November 2005.

Evaluation of Restoration of Chesapeake Bay

In 1987 DEPRM initiated the capital program for the assessment and identification of water quality problems and implementation of design and construction of watershed restoration projects, including preparation of watershed management plans, stormwater conversions and retrofits, stream and wetland restoration, shore erosion control, and waterway dredging. From 1988 to 2005, over 42 million dollars has been dedicated to this program in watershed management planning.

Restoration is especially important in communities built prior to environmental regulatory programs. The program goals are to protect, restore, and improve the water resources of the County. The program structure is based on the County's fourteen major watersheds in order to provide a comprehensive framework of protection and restoration of the County's natural resources.

Projects are prioritized in part based on opportunities identified in watershed management plans. Project funding is supported primarily by County General Obligation and Bonds and supplemented by State funds from the Maryland Department of the Environment and Natural Resources through the Storm Water Pollution Control, Small Creeks and Estuaries, and Waterway improvement cost-share programs.

The County's regulatory and preservation program provides for a comprehensive evaluation of the Chesapeake Bay. The programs include the monitoring of the Chesapeake and Atlantic Coastal Bays Protection Program, the County's monitoring of submerged aquatic vegetation (SAV), monitoring of water quality of the coastal beaches and recreational areas and the evaluation of the success of the Coastal Rural Legacy Program.

Evaluation of Stormwater Protection Strategies

Baltimore County operates a comprehensive stormwater management program. DEPRM has always taken a firm stand on requiring water quality treatment even when quantity management was not required. With the implementation of the new stormwater regulations DEPRM continues to require all projects to explore and implement methods for water quality treatment. DEPRM now has the option to accept a fee-in-lieu payment documentation has been developed. It is more fully described and evaluated in the NPDES Municipal Stormwater Discharge Permit, the 2005 Annual Report.

The creation of DEPRM's Capital Programs and Operations Section has greatly increased the success of the stormwater management program. This group has compiled an extensive database of inspections made to the County's publicly owned stormwater facilities. These inspections, and the resulting actions, are improving the overall pollutant reduction efficiency of all public stormwater facilities. All inspections for as built and one-year approvals are completed only by the Stormwater Engineering Section.

Summary of Needed Improvements in the Natural Resource Conservation Program

A. Summary of Needed Improvements to the Green Infrastructure

- Improve the differentiation between the procedures for the protection of environmental greenways versus recreational greenways.
- Review the State Green Infrastructure Plan and identify any deficiencies in the ability of programs and program funding to provide the level of protection sought.
- Determine a system of evaluation for the progress of the program. Consider use of techniques used for evaluating the success of the Agricultural Preservation Program.
- Integration of the data from different programs that protect green infrastructure.
- Review and determine the amount of additional funding needs for the program.

B. Summary of Needed Improvements for Forest Resources

Baltimore County's *Forest Sustainability Strategy* states alternatives, improvements, and new strategies for the future:

- Forest Retention and Restoration:
 - Develop and use appropriate indicators of forest cover loss for ecological and economic sustainability.
 - Select high priority, unprotected private forest lands and evaluate acquisition and/or development easement purchase options, including the use of MD Environmental Trust, Rural Legacy, Program Open Space, and Coastal and Estuarine Land Conservation programs. Concentrate on opportunities to meet mutually shared objectives among State land conservation programs and Baltimore County conservation priorities.
 - Work with the MD DNR to establish the eligibility of Baltimore County under the federal Forest Legacy program.
 - Work with Baltimore City, MD DNR, MD Department of the Environment, private landowners, and watershed associations to increase forest retention as a tool for drinking water source protection.
 - Work with federal and state agencies and utility companies to explore forest retention options associated with carbon market initiatives.
 - Work with the County Office of Planning to evaluate, and modify if appropriate, zoning regulations and guidelines to reduce forest loss.
- Forest Fragmentation:
 - Develop simple, low-cost easement mechanisms for private properties to allow County FCA mitigation funds to be spent on establishing forest corridor connections between high priority forest patches.
 - Require forest sustainability management plans for any private properties (conservation easements) on which public funds are received for forest restoration or multiple use management.
 - Continue DEPRM's Rural Residential Stewardship Initiative program, to assist private citizens in the reforestation of sensitive areas on improved rural residential lots.
 - Work with the Maryland DNR and the County's Forestry Board to incorporate educational materials on the long-term values and benefits of utilizing forest

management techniques for suppressing invasions of exotic species and deer damage for conserving biological diversity into Forest Management Plans.

- Plan another Montreal Process forum focusing on forest fragmentation, its extent across Baltimore County's forests, and the County's commitment, with the MOU signatories, to addressing the problem of fragmentation of forested lands.

C. Summary of Needed Improvements for Watershed Management

- Include the yearly reduction by operational programs such as the storm drain cleaning program and the street sweeping program.
- Pollutant reduction attributable to certain types of restoration (stream channel restoration and buffer planting) must continue to be monitored and assessed.

D. Summary of Needed Improvements to Other Regulatory/Management Programs

Protection of Forest Buffers: In the next years we will need to enhance the tracking and monitoring of these buffers in order to gain a better understanding of the correlation between the amount of forest protected and the quality of the tributaries in the surrounding areas.

Protecting the Reservoirs: We need to maintain the level of protection; this means that we need to stay on target with all of the programs such as the land preservation programs, water quality monitoring, and enforcement programs that contribute to the protection of our reservoirs.

Implementing Agricultural Best Management Practices: Improvements needed for the best management practices are:

- Increase the efforts in developing and updating conservation plans to ensure the effectiveness of the program,
- Modify the program so that it can fulfill the needs of all agricultural land owners,
- Increase the support in the program so that it can be used to aid with the protection of the County's agricultural resources.

E. Summary of Needed Improvements to Education and Citizen Participation Programs

- Increased use of the County's cable channel and website for program promotion such as posting the department's calendar of events, updated *Green School* program information/application, and other information and opportunities should be planned.
- Join with local and regional partners to build on successful initiatives such as the *Security Boulevard/Woodlawn HS* project to target local school populations should be continued even if the efforts do not result in *Green School* applications.

F. Summary of Needed Improvements for Restoration Programs

No improvements identified.

G. Summary of Needed Improvements for Stormwater Management

Improvements are being considered as part of the on-going Builders for the Bay project.

PROGRAM DEVELOPMENT STRATEGY

Program Development Strategy for Green Infrastructure

The County Departments will continue to meet to better coordinate the protection of the recreational and environmental greenways. The County will continue to participate in State programs such as Rural Legacy and Agricultural Land Preservation that provide protection of key links in the Green Infrastructure.

A recent review of the implementation progress under the State's Forest Conservation Act was conducted by the Maryland Department of Natural Resources. This evaluation indicated that Baltimore County was able to retain in permanent easements 68% of the total forest area of development projects subject to review, and that only 25% of the total forests on site were cleared. This implementation record exceeds the state average and is especially high considering that Baltimore County has a significant amount of forest cover in the defined development area.

Information on the County's existing policies, priorities and strategies for managing, protecting and restoring natural resources is available within *Master Plan 2010* and assorted reports available through Baltimore County DEPRM. Following are "issues" and "actions" for resource conservation and agricultural land preservation. These issues and actions appear in *Master Plan 2010*, though a number have been revised or updated.

Program Development Strategy for Forest Resources

Baltimore County has just signed an agreement on November 8, 2005 with the USDA Forest Service, Maryland DNR, and American Forest, a Non-profit organization, which has set the following strategies for the future protection of forest resources:

1. Implement the County's forest sustainability program, including identification and conduct of priority research; collection and analysis of forest assessment and monitoring data; development of implementation programs; identification of potential sources of funding; and documentation and sharing of the County project with other local governments, organizations, and regional and national policymakers as appropriate to demonstrate local approaches to forest sustainability.
2. Prepare a "forest sustainability report" every two years outlining progress and establishing priorities for future actions, in its efforts to incorporate indicators as appropriate to document progress, and to continue to share the lessons learned through regional and national venues including but not limited to the Roundtable on Sustainable Forests.

3. Work with the other parties on communication, education, and implementation activities with landowners and other citizens about forest sustainability and develop partnerships with the City of Baltimore and adjacent counties, citizen-based watershed organizations, community associations and civic organizations, schools and universities, and others.

The agreement also included the Montreal Process, a crucial component of Baltimore County's *Forest Sustainability Plan*. The Montreal Process was developed in June of 1994 to create a criteria and indicators for the conservation and sustainable management of temperate and boreal forest. The Montreal Process evaluates Baltimore County's forest retention strategies under certain criteria, which we plan to improve:

- Forest Cover Lost
- Forest Fragmentation
- Effects of Forest Loss on Water Quality and Quantity and Stream Function
- Conservation of Biological Diversity
- Exotic, Invasive Plant and Animal Species (EIPAS) Invasion
- Maintaining and Increasing Forest Area in Key Sensitive Areas (Riparian Buffers, Recharged Areas, Reservoirs)
- Deer Browsing Threats to Forest Regeneration
- Valuing Forest Ecosystem Services
- Economic Value of Ecosystem Services of Baltimore County Forestland
- Increasing the Contribution of Forests to the Reduction of Greenhouse Gases through Carbon Sequestration Market Mechanisms.
- Landowner Attitudes Toward Forest Management
- Public Education about Forest Sciences
- Cost and Legal Barriers to Sustainable Forest Management
- Strengthening Markets for Local Forest Products Utilization
- Timber Management for Sustainable Forest
- Forest Management Plans for Publicly Owed Forest

Program Development Strategy for Watershed Management

Preparation of watershed management plans is currently conducted by environmental consultants managed by the Department of Environmental Protection and Resource Management (DEPRM). The watershed management plans will be enhanced through the creation of Action Plans that will set restoration goals, identify steps to achieve those goals, provide an implementation schedule and a monitoring plan. The action plans will be prepared with the input from stakeholders within the planning area and identify opportunities for citizen based watershed restoration. The action plans will include the identification of potential stormwater management conversion sites, capital budget as well as citizen based stream restoration opportunities, operational program implementation and an implementation schedule. In 2004, DEPRM hired a consultant to assist in engaging stakeholders in development of the Capital Improvement Program's (CIP) restoration projects.

Although the major focus of the implementation of the watershed management plans centers on capital projects, this component cannot alone satisfy water quality improvement. In Baltimore

County water quality improvement is a multi-faceted effort involving other components such as sediment control, storm drain inlet cleaning, street sweeping, recycling, solid & hazardous waste management, illicit connection reduction, citizen education, sanitary sewer system infiltration/exfiltration reduction and others.

The County's capital budget includes the current budget year and the subsequent 5 years. The capital budget is on a two-year cycle tied to bond referenda. Additional funding for these projects is provided by the Maryland Department of the Environment (MDE) through the Small Creeks and Estuaries and the Stormwater Pollution Control Cost-share Programs, and by the EPA Chesapeake Bay/Habitat Restoration Program.

Program Development Strategy for Other Regulatory/Management Programs

In addition to the individual strategies discussed under program description and evaluation of the different regulatory programs, the County initiated a Builders for the Bay project in 2005. This project brings together, builders, citizens, and county employees to develop a strategy for eliminating obstacles in the development process to better protecting the environment. The project includes the review of storm water management, design of streets and roads, protection of open space, limits on impervious surfaces.

Program Development Strategy for Education and Citizen Participation

DEPRM will identify ways to increase its support of local watershed organizations and recognized *MD Green Schools*. New opportunities to increase awareness, cooperate with school administration at all levels, and affect policy will be pursued. Additional tracking and evaluative strategies will be identified and employed. As stated in the Bay agreement, Chesapeake 2000, the Chesapeake Bay is dependent upon the actions of every citizen in the watershed, both today and in the future. We recognize the cumulative benefit derived from community-based watershed programs is essential for continued progress toward a healthier Chesapeake Bay. Paralleling the tenets of the Bay agreement, Baltimore County continues to:

- Make a significant commitment to education, outreach, and stewardship.
- Provide the information and assistance that citizens need to act at home, at school, at work, and in their local watersheds.
- Use new communication technologies, such as the worldwide web and cable television, provide information for citizens, businesses, and schools.
- Promote and facilitate meaningful outdoor interactive and investigative environmental experiences for young people.
- Provide programmatic models for the state and region.
- Work in partnerships to provide valuable assistance to public and private schools.
- Work towards "government by example," that is, the implementation of conservation design strategies and sustainable landscaping techniques on publicly owned and managed properties to serve as models for the community.

Program Development Strategy for Restoration Programs

In the fiscal years 1988-2005, allotments have totaled to \$42 million, including \$17 million in State cost-share funds. The County is proposing a budget of \$31 million for fiscal years 2005-2010.

Program Development Strategy for Stormwater Programs

The County recognizes its obligation to inspect both public and private stormwater facilities on a three-year basis. This Department has been actively pursuing mechanisms to augment staff to address this important responsibility. The County has approved for our upcoming fiscal year 2006 budget the Department's request for this increase. The Stormwater Engineering Section has gained an additional two engineering associates III and one engineer III. An existing engineering associate IV will supervise the two new engineering associates in the three-year inspection of private ponds.

--- END OF EXCERPT ---

COUNTY NATURAL RESOURCE CONSERVATION GOALS PROGRESS

Following are updates on the progress that has been achieved in the various areas of natural resource conservation. In some instances the goals have been revised to better reflect current policies and practices.

Protecting Plant and Animal Habitats

GOAL: Cooperate with nonprofits and agencies to assess, protect, restore, and create habitats.

PROGRESS: Since adoption of its Policy and Guidelines for Community Tree Planting Projects in fall, 2012, the Sustainability & Forest Management section of EPS worked with citizen organizations to review and approve dozens of proposals for planting trees on County-owned land. The Guidelines help assure that projects are well designed and maintained to assure long-term survival and to provide meaningful ecosystem and community benefits.

GOAL: Identify significant habitats on development plans and protect through modification of site designs.

PROGRESS: This is an ongoing task. The Environmental Impact Review Section continues to evaluate development plans and require modifications, where necessary, to protect significant plant and wildlife habitats.

GOAL: Increase plant and animal habitat in conjunction with capital improvement projects.

PROGRESS: This effort is ongoing.

GOAL: Cooperate with nonprofits and agencies to assess, protect, restore, and create habitats.

PROGRESS: The County has worked with citizen organizations to review and approve dozens of proposals for planting trees on County-owned land to create meaningful ecosystem and community benefits.

Managing Baltimore County's Watersheds

GOAL: Participate in the cooperative regional Reservoir Watershed Management Program that coordinates implementation of the adopted Action Strategies and preparation of progress reports.

PROGRESS: The Dept. of Environmental Protection & Sustainability continued to participate in the regional reservoir protection program. A new Reservoir Watershed Protection Agreement and Action Strategy were approved in 2005 to update water quality issues of concern and to outline actions needed to implement new water quality commitments.

GOAL: Continue commitments to restrict development in the reservoir watersheds.

PROGRESS: Through cooperative review of zoning reclassification petitions for the 2008 and 2012 Comprehensive Zoning Map Process (CZMP), the regional Reservoir Technical Group made recommendations to maintain protective agricultural and conservation zoning to protect water quality in the reservoir watersheds.

GOAL: Continue to implement non-point pollution control, restoration projects, and sewerage improvements.

PROGRESS: The County continues to implement urban non-point controls and restoration projects as reported in the NPDES - MS4 Annual Report. See:

<http://www.baltimorecountymd.gov/Agencies/environment/npdes/>

Agricultural non-point source controls are reported through the State Department of Agriculture. See http://mda.maryland.gov/resource_conservation/Pages/wip.aspx?countystate=Baltimore.

Baltimore County continues to comply with the sanitary sewer Consent Decree. See:

<http://www.baltimorecountymd.gov/Agencies/publicworks/engineering/>

GOAL: Continue to participate in the Comprehensive Gunpowder River Watershed Study and continue to address watershed management issues.

PROGRESS: The Gunpowder River Watershed Study was completed in 2000. The County continues to participate in the Baltimore Metropolitan Council - Reservoir Technical Group (RTG). Currently the County is working with the RTG to develop and implement a comprehensive reservoir watershed monitoring plan. Watershed management issues are addressed through a Small Watershed Action Plan (SWAP) planning process. See: <http://www.baltimorecountymd.gov/Agencies/environment/watersheds/swap.html>

GOAL: Cooperate with citizen organizations to continue to implement an ambient biological stream-monitoring program.

PROGRESS: The citizen based ambient biological stream-monitoring program was suspended in 2000. It has been replaced with a Stream Watch Program that is implemented by local watershed associations supported by grant funding from the County.

GOAL: Develop a pollution reduction-tracking system.

PROGRESS: The County has developed pollution reduction-tracking processes for each of the

pollution reduction types. These are detailed in the annual NPDES - MS4 report in Section 9. The report is on-line at: <http://www.baltimorecountymd.gov/Agencies/environment/npdes/>

GOAL: Develop a database for recording acres of impervious area.

PROGRESS: Acres of impervious area are available through the County GIS. The data layers are updated on a regular schedule.

GOAL: Select subwatersheds to be restored.

PROGRESS: The SWAP planning process prioritizes subwatersheds for restoration in each planning area. See:

<http://www.baltimorecountymd.gov/Agencies/environment/watersheds/swap.html>

GOAL: Monitor and control upland sources of sediment and other water pollutants carried to waterways as storm water runoff.

PROGRESS: Baltimore County maintains a monitoring program to meet compliance with NPDES - MS4 Permit requirements. In addition, stormwater controls are tracking, along with various restoration practices. For Monitoring see Section 10, for SWM practices see Section 3 and for restoration Section 9 of the NPDES - MS4 Annual Report -

<http://www.baltimorecountymd.gov/Agencies/environment/npdes/>

Assist the County Forestry Board

GOALS:

- Promotion of and support for community greening.
- Maintaining a website that provides a range of information on tree and forest topics.
- Administer Schoolyard Reforestation Wildlife Habitat Program.
- Conducting environmental education training workshops for teachers.
- Providing Camp Hickory scholarship opportunities for high school students interested in natural resource management careers.
- Conducting tree farm tours highlighting good forest management practices for timber harvesting, sediment and erosion control, wildlife habitat enhancements, and reforestation.

Due to budget constraints several years ago, Baltimore County has discontinued its annual cash support for the Forestry Board. Following changes by the State to commit that DNR provide matching funding to local Forestry Boards, Baltimore County has offered to provide trees and planting supplies to our local Board as match for State funds and as direct support for reforestation projects. The Board has focused on other priorities in recent years and has not conducted several of the activities listed in the 2005 LPPRP. In addition, the Board has elected to work more independently and no longer maintains a working relationship with the County.

Waterway Improvement and Stream Restoration

GOAL: Continue to use watershed based approach to restore degraded stream systems to improve morphology, ecological function, water quality and aquatic habitat.

PROGRESS: 22 stream restoration projects have been completed to date.

GOAL: Continue efforts to protect shorelines from erosion, improve the water quality and improve habitat value of tidal wetlands.

PROGRESS: 4 shoreline stabilization and enhancement projects have been completed to date.

GOAL: Implement Best Management Practices (BMP) in the County's Watersheds to meet local and Chesapeake Bay TMDLs.

PROGRESS: 10 BMPs have been formulated to date.

GOAL: Initiate condition surveys to monitor the County's navigation channels and apply for dredging grants accordingly.

PROGRESS: 17 waterways have been dredged to date.

GOAL: Continue to monitor submerged aquatic vegetation.

PROGRESS: 30 waterways are surveyed biannually.

GOAL: Implement stormwater management pond conversions, retrofits and repairs to meet local and Chesapeake Bay TMDLs.

PROGRESS: 10 stormwater management ponds have been converted to date.

GOAL: Continue marsh monitoring/maintenance and examine potential tidal marsh restoration/creation projects.

PROGRESS: 3 tidal marshes are monitored and maintained.

GOAL: Explore beneficial uses of dredge spoil disposal including shoreline stabilization projects and tidal marsh creation.

PROGRESS: This effort is ongoing.

GOAL: Improve implementation procedures of the Chesapeake and Atlantic Coastal Bays Program while maintaining the high level of water quality and habitat standards.

PROGRESS: This effort is ongoing.

GOAL: Survey the tidal creeks and rivers of the County and remove hazards to navigation and waterway debris from the shorelines and shallow waters from May to October.

PROGRESS: This effort is ongoing, with removal of hazards and debris when reported or following surveys of the waterways.

GOAL: Remove Derelict Boats.

PROGRESS: Approximately 25 boats removed over this time period.

Managing Groundwater

GOAL: Evaluate the concept of a rural sanitary district.

PROGRESS: The County is no longer pursuing this strategy.

GOAL: Continue review of development proposals to assure the proper siting of drinking water wells and the location of on-site sewage disposal systems.

PROGRESS: Ongoing as part of the County's development review process.

GOAL: Continue implementation of the 1993 Ground Water Management and Protection Strategy.

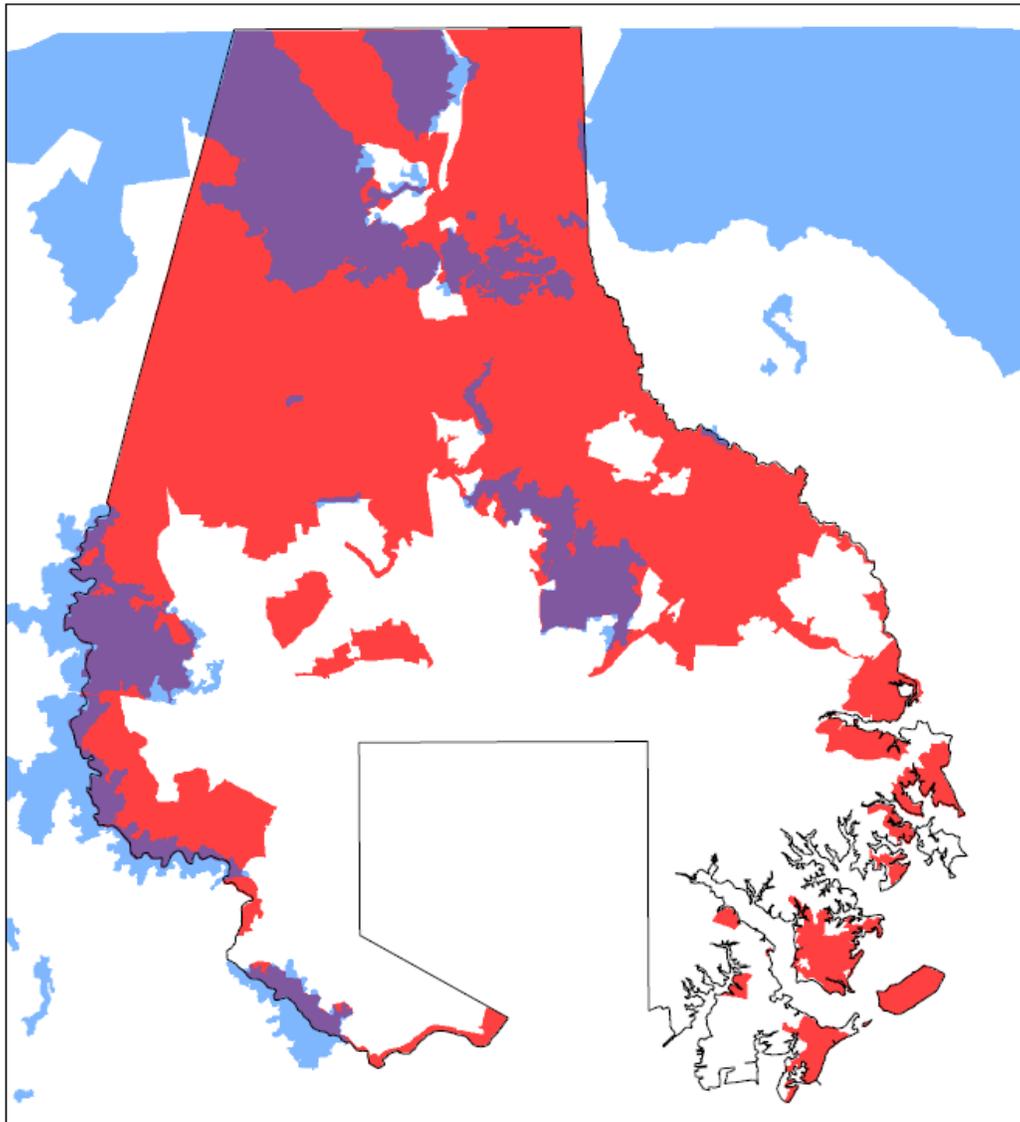
PROGRESS: This effort is ongoing.

GOAL: Administering the BRF grant program to upgrade septic system to BATs and connecting existing houses on septic to sewer when feasible.

PROGRESS: The County has upgraded/connected 50 systems since 2010. Prior to that the State upgraded/connected 150 systems.

PRIORITY PRESERVATION AND CONSERVATION AREAS

Baltimore County has identified a vastly larger geographic area for targeted/priority natural resource preservation and conservation. The map below displays the relationship between Baltimore County’s combined agricultural preservation priority areas (APPAs) and resource preservation areas (RPAs), and the State of Maryland’s designated “GreenPrint” targeted ecological areas (TEAs).



**Baltimore County
Conservation Areas
Compared to
Maryland Greenprint TEAs**

- Master Plan 2020 Land Management Areas
- APPAs & RPAs
- Maryland Greenprint
- Targeted Ecological Areas (TEAs)
- Overlay Comparison
- TEAs protected by APPAs or RPAs
- Baltimore County

5 Miles

The largest areas of overlap (purple shading), which indicates areas which are preservation/conservation priorities to both the County and State, are predominantly in and around the reservoirs and certain state parks. A substantial part of northernmost Baltimore County, which includes lands in and around Prettyboy Reservoir and Gunpowder Falls State Park, as well as prime agricultural lands, is likewise a mutual priority.

Baltimore County has identified extensive priority preservation/conservation areas that are not designated as GreenPrint TEAs. These areas, which are shaded red on the map, include substantial resource conservation (RC) zoned lands outside of the URDL, in the designated rural section of the County. Noteworthy are a number of areas along the coastal portions of the County, including the North Point, Back River Neck, Carroll Island, and other peninsulas. Large portions of these coastal areas have been targeted by the County for preservation and land conservation, including through the Rural Legacy Program. Numerous large county and state parks are situated within those coastal areas, including North Point State Park, portions of Gunpowder Falls State Park, Hart-Miller Island State Park, Marshy Point Park, Rocky Point Park, and Fort Howard Park. While restrictive, low-density zoning is the key mechanism for land conservation in these areas, the County also employs land preservation and conservation through fee-simple and easement acquisition.

The very limited number and extent of GreenPrint TEAs not overlaid by County APPAs and RPAs are shaded light blue on the map. Some such areas are merely a result of mapping scale, as the State's GreenPrint mapping uses larger geographic "blocks" to code land areas. Thus, an area along a stream may inadvertently include areas that are already developed. In some cases the County has not specifically mapped land areas as conservation priorities because they are sufficiently protected under another mechanism that will ensure that they do not get developed. An example of this would be greenways and forest buffers associated with streams. Under the County's development regulations such areas may not be developed, and so the County has not called such lands out within its preservation/conservation priority mapping.

In summary, the County's extensive land conservation approach, which includes zoning, regulatory mechanisms, and targeted land and easement acquisition, goes above and beyond what has been targeted by the State for Baltimore County through the GreenPrint program. This approach has made the County a recognized state and national leader in land conservation.

NATURAL RESOURCE CONSERVATION IN MASTER PLAN 2020

The Baltimore County Master Plan 2020 provides updated information on the County's natural resource conservation efforts and vision for the future. The pertinent sections of the Master Plan include pages 145-164 and 169-176. Following are excerpts of the policies and actions identified within those sections of the plan:

Policy: Continue to adapt to, and mitigate impacts of climate change on the environment.

Actions:

- (1) Implement the recommendations of the County's Sustainability Network for County operations, energy conservation, protection of natural resources, and communities in order to reduce emissions of greenhouse gases and energy consumption.
- (2) Develop appropriate indicators for sustainability actions and commitments in order to summarize sustainability conditions and trends and to provide a basis for evaluation of progress.

Policy: Incorporate environmental justice considerations when developing Small Watershed Action Plans to address water quality protection and restoration.

Actions:

- (1) Review environmental justice indicators developed nationwide and develop a set of indicators for the watershed management planning process.
- (2) Include the environmental justice indicators in the Small Watershed Action Plans for prioritizing water quality improvement projects.

Policy: Promote redevelopment and revitalization inside the URDL to reduce pollutant loads and protect natural resources.

Actions:

- (1) Assure that the countywide redevelopment strategy accommodates population growth, provides maximum pollutant reduction, protects high quality waters, promotes economic vitality, and maintains a high quality of life for Baltimore County residents.
- (2) Include environmental policies and goals in community plans for the preservation and enhancement of functional open spaces such as greenways and wildlife habitat; the reduction of water, air, and toxic pollution and solid wastes; and the promotion of neighborhood environmental stewardship.
- (3) Facilitate the redevelopment of underutilized industrial properties.
- (4) Direct redevelopment efforts along the waterfront into historically disturbed, uncontrolled buffer areas in order to maximize water quality protection.

Policy: Assure protection of Tier II waters and those with known trout resources.

Actions:

- (1) Investigate the development of overlay zones for Tier II waters and those with known trout resources and evaluate the need for additional protection through development regulations.
- (2) Examine the feasibility of an offset program to achieve a no net increase in pollutant loads from new development.

- (3) Continue to protect water quality, streams, wetlands, floodplains, and forests from impacts of new development and redevelopment.
- (4) Implement projects to restore wetlands, reestablish forests, plant stream and shoreline buffers, and stabilize stream channels in impacted watersheds.
- (5) Continue to implement the 2006 Baltimore Watershed Agreement with the City of Baltimore for improved and coordinated efforts for public health, trash, stormwater management, community greening, and redevelopment.

Policy: Continue to protect, enhance, and restore degraded waterways to meet water quality standards and permit requirements.

Actions:

- (1) Continue to enforce development regulations for the protection of water quality, streams, wetlands, and floodplains.
- (2) Continue to prepare and implement Small Watershed Action Plans (SWAPs) and participate in studies to identify needs and opportunities for stream restoration, wetland creation and restoration, and stormwater management.
- (3) Continue to design and construct stream restoration projects using an adaptive natural channel design (NCD) approach.
- (4) Incorporate stream protection policies in community plans.
- (5) Continue to implement biological, chemical, and geomorphological stream monitoring programs in order to measure the long-term trends in stream quality.
- (3) Continue to design and construct stream restoration projects using an adaptive natural channel design (NCD) approach.
- (4) Incorporate stream protection policies in community plans.
- (5) Continue to implement biological, chemical, and geomorphological stream monitoring programs in order to measure the long-term trends in stream quality.
- (6) Identify opportunities for the creation of wetlands as mitigation for County capital projects and other land development impacts.
- (7) Continue environmental education programs for schools, businesses, and homeowners for the reduction of water pollution and toxic and solid wastes.
- (8) Continue to implement environmental inspection and maintenance programs such as storm drain inlet cleaning and maintenance of stormwater management facilities.
- (9) Continue to identify and convert appropriate publicly owned stormwater management facilities to provide for increased water quality function.
- (10) Continue to retrofit older communities to provide for stormwater treatment for improved water quality to the receiving waters.
- (11) Continue to support watershed associations and citizens in stream cleanups, stream and watershed surveys, and other restoration projects.
- (12) Identify impediments to, and opportunities for tree plantings along streams on private properties, and work to plant more trees on private lands.

Policy: Protect and improve water quality through the application of stormwater control measures for new development and redevelopment projects.

Actions:

- (1) Continue to implement state-of-the-art stormwater management techniques, including

ESD as feasible, for new and redevelopment projects.

(2) Provide flexibility for redevelopment to implement innovative solutions to stormwater management.

(3) Ensure the sustainability of stormwater practices including long-term function and maintenance.

Policy: Inspect and enforce compliance with the Baltimore County Code, permits, plans and State specifications as related to erosion and sediment control and grading.

Actions:

(1) Continue to inspect and enforce erosion and sediment control implementation on all active projects for compliance with approved plans.

(2) Continue to investigate complaints pertaining to erosion, sediment control, grading, and surface drainage problems associated with new construction.

(3) Continue to provide responsible personnel training and certification of individuals that oversee installation and maintenance of project controls.

(4) Continue to work in cooperation with the Baltimore County Soil Conservation District to require minimum standards for Soil Conservation and Water Quality Management Plans for conservation easements.

Policy: Continue to manage and protect ground water supplies, particularly in areas where citizens, businesses, industry and agriculture rely solely on wells.

Actions:

(1) Review development proposals and permits to assure the proper siting, design, and construction of drinking water wells and OSDS in accordance with the *Code of Maryland Regulations* and *Code of Baltimore County Regulations*.

(2) Continue to implement the 1993 *Ground Water Management and Protection Strategy*.

(3) Continue to inspect all residential underground storage tank removals to ensure that any detected contamination is investigated and remediated, as necessary.

(4) Continue to collect and maintain the location and construction information for new and existing wells and OSDS.

(5) Continue to educate homeowners concerning the proper management and care of individual well and septic systems, potential contamination from underground storage tanks, and potential radionuclides in aquifers.

(6) Continue to inspect all non-conventional OSDS periodically to ensure proper functioning.

(7) Assess the need to incorporate the use of “well reserve areas” for newly developed lots utilizing individual water supplies.

(8) Evaluate the need to establish well setback restrictions from roads to protect against road salt contamination.

Policy: Continue cooperative efforts to protect the quantity and quality of source water in the County’s three reservoir watersheds.

Actions:

(1) Continue to participate in the regional Reservoir Watershed Management Program, including implementation of commitments in the 2005 Action Strategy.

(2) Continue policy commitments to retain protective Resource Conservation zoning and to restrict creation of new development zoning in the reservoir watersheds.

(3) Continue to implement non-point source pollution control practices for development

and agricultural operations, stream restoration projects, and infrastructure maintenance in the reservoir watersheds.

(4) Continue to establish riparian forest buffers and expand other forest cover in the reservoir watersheds in cooperation with private landowners, other agencies, and watershed organizations.

(5) Continue to implement water quality monitoring programs in order to determine conditions and trends for reservoir quality and to assist in the implementation and evaluation of management programs.

(6) Explore options to meet the need for road de-icing for public safety while reducing impacts on reservoir water quality.

(7) Continue to prepare and implement Small Watershed Action Plans to address TMDLs for phosphorus, sediment, and bacteria.

Policy: Continue to implement water quality improvement measures in and along the waterfront, and continue to enforce water quality, forest, and habitat protection components of the State-mandated Critical Area law.

Actions:

(1) Continue to implement the dredging component of the Waterway Improvement Program by maintaining channels and aids to navigation, while monitoring and protecting submerged aquatic vegetation.

(2) Continue efforts to protect shorelines from erosion and improve the water quality and habitat value of tidal wetlands. Use living shoreline measures, where physically feasible, for shoreline stabilization, and enhance tidal wetlands.

(3) Continue to implement the Clean Shore Program to improve the water quality, aesthetics, and navigational safety of the tidal waterways and increase community participation in waterway clean-ups.

(4) Explore beneficial uses of dredge material disposal including shoreline stabilization projects and tidal marsh creation.

(5) Maintain land use and development standards essential for the protection of the Chesapeake Bay's biological integrity.

(6) Create effective opportunities for recreation, tourism, and rural legacy.

(7) Design and plan projects to promote public access to the water and encourage public access to the water on private waterfront development projects, where appropriate.

(8) Consider steering redevelopment efforts along the waterfront into historically disturbed buffer areas in order to maximize water quality protection and improvement.

(9) Consider steering growth allocations involving conversions to Intensely Developed Areas into priority funding areas.

(10) Educate and provide technical assistance for waterfront property owners about the benefits of living shorelines and promote appropriate behaviors to improve water quality.

(11) Evaluate existing private septic systems in the Critical Area for upgrades and connection to the public sewerage system.

(12) Encourage the implementation of clean marina best management practices.

(13) Continue to provide easement programs that provide financial benefits and flexibility of use to farmland owners to permanently preserve their farms and forests.

Policy: Continue to assure the sustainable management of public and private forest resources to provide ecosystem services and meet human needs.

Actions:

- (1) Continue to protect forest resources pursuant to the Forest Conservation Act and Chesapeake Bay Critical Area regulations, and continue to protect “forest buffers” as required by the County’s Regulations for the Protection of Water Quality, Streams, Wetlands, and Floodplains.
- (2) Continue to implement the County’s Forest Sustainability Program and promote sustainable forest management among agencies, forest landowners, and environmental organizations, guided by sound science and assessment of forest health.
- (3) Implement actions and commitments for forest management in the Baltimore Watershed Agreement, the Reservoir Watershed Management Agreement Action Strategy, and the County’s Sustainability program.
- (4) Adopt and implement a No Net Loss of Forest policy.
- (5) Continue to prepare Forest Health Assessments and implement Forest Management Plans for large County-owned forested properties.
- (6) Continue to increase forest cover and maintain forest health using mitigation fees from the Forest Conservation Act and the Chesapeake Bay Critical Area Act.
- (7) Continue to support the program of the County Forest Conservancy District Board.
- (8) Include reforestation elements in community plans and community conservation projects.
- (9) Continue to promote and support programs for community reforestation, including the Tree-Mendous Maryland Program, the County’s Growing Home Campaign, Rural Residential Reforestation projects, and Big Trees program.
- (10) Continue the protection of forestland in the Coastal Rural Legacy Area through easements or in-fee acquisition.
- (11) Address forest pests, diseases, and other biotic stressors and continue cooperative projects for suppression of Gypsy moths and control of exotic invasive species.
- (12) Promote and implement efforts for sustainable waste wood and woody biomass utilization.
- (13) Continue collaboration with the USDA Forest Service, the Maryland Department of Natural Resources – Forest Service and other agencies and organizations for the collection and use of forest assessment data and research and the implementation of sustainable forest management practices.
- (14) Continue to implement and improve deer management measures to better protect forest resources. Evaluate and address the impact that deer browsing has on priority forest determinations.

Policy: Implement biological diversity protection measures for the County’s diverse habitats and their dependent wildlife and the ecological processes that ensure healthy, productive, and sustainable ecosystems. Restore lost or degraded ecosystem functions, and foster environmental stewardship.

Actions:

- (1) Develop a Biological Diversity Conservation Plan that includes measures to assess and protect the natural habitats of the County’s listed rare, threatened and endangered species and sustainable acreages of forest, wetland, riparian and early successional field habitats to maintain or improve biological diversity for current and future generations.

- (2) Apply biological diversity conservation and improvement measures to the development plan review process, capital improvement projects, and forest restoration efforts.
- (3) Work in cooperation with government agencies, non-profit organizations, and citizen groups to assess, protect, restore, and create a range of habitats.
- (4) Maintain the extent of the URDL and Resource Conservation zoning to reduce the vulnerability of sensitive areas to conversion for development.
- (5) Continue to implement multiple land preservation programs.
- (6) Evaluate the vulnerability of high-value resource lands to conversion and recommend additional protection where appropriate.
- (7) Utilize the Baltimore County Center for Maryland Agriculture to provide educational opportunities for good land stewardship.
- (8) Support and promote the efforts of the Maryland Environmental Trust and local land trusts to protect sensitive lands.

Policy: Recognize that mineral resources are an important and valuable element of the local economy. Develop appropriate land use policies to protect ongoing operations and prevent loss of these resources to other land uses.

Actions:

- (1) Restrict land development in undeveloped areas containing deposits of commercially valuable mineral resources.
- (2) Encourage a dialogue with the mineral resource industry to raise awareness of mineral resource-land use conflicts, and develop options for their resolution.
- (3) Permit mineral extraction activities in suitable areas pending environmental and community impact assessments.
- (4) Design and improve road networks to handle the truck traffic from mining activities in areas presently or likely to be used for extraction of mineral resources.
- (5) Assure that post-mining reclamation plans are compatible with surrounding land uses and comply with State Surface Mining Regulations.

APPENDICES

Appendix A: The Twelve Visions of State Planning Policy

The 1992 Planning Act established Seven Visions to provide growth management guidance for State and local plans, policies, and programs. The Maryland General Assembly later added five additional visions via legislative action. (SOURCE: Maryland Department of Planning – Plan Maryland web site).

1. **Quality of Life and Sustainability:**

A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment.

2. **Public Participation:**

Citizens are active partners in the planning and implementation of community initiatives and are Sensitive to their responsibilities in achieving community goals.

3. **Growth Areas:**

Growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers.

4. **Community Design:**

Compact, mixed–use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources.

5. **Infrastructure:**

Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;

6. **Transportation:**

A well–maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers;

7. **Housing:**

A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;

8. **Economic Development:**

Economic development and natural resource–based businesses that promote employment opportunities for all income levels within the capacity of the State’s natural resources, public services, and public facilities are encouraged;

9. **Environmental Protection:**

Land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;

10. **Resource Conservation:**

Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;

11. **Stewardship:**

Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and

12. **Implementation:**

Strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, state, and interstate levels to achieve these Visions.

APPENDIX B – Facility Supply And Demand Analysis Methodology

This appendix summarizes the recreational facility needs estimation methodology known as the “recreation supply and demand” model. This methodology has long been used by Baltimore County as its primary means of providing a general, consistent platform for estimating outdoor recreation facility needs, and has become one of the most commonly used facility needs models employed by parks and recreation agencies. The methodology is relatively basic and simplistic, relying on very few numeric factors and mathematical functions. The factors utilized within this methodology, and applied within Table B-1 through B-3 of the “Recreational Facility Needs Analysis” section of Chapter Three are as follows:

1. **SUPPLY:** Supply is the total number of occasions/uses provided by a given type of recreational facility in a single year. To determine existing supply, the quantity of a given facility (such as ball diamonds) is multiplied by that facility’s “season length” and “daily carrying capacity.”

Season Length is the estimated number of days per year that the facility is judged to be available for use. This factor often varies by region or jurisdiction in order to account for weather variations and differences in operational procedures. For example, the supply figures utilized within this plan assign a season length of 84 days for ball diamonds, and 160 days for athletic fields, reflecting the fact that most athletic fields in Baltimore County are kept in use for a longer period than ball diamonds at present.

Daily Carrying Capacity is the estimated number of individual “uses” that a facility provides per day. This figure is calculated by estimating the total number of games or uses that a facility supports in a given day, and multiplying that number by the number of users that, on average, would participate on each occasion (this accounts for activities such as team sports that involve many individual participants). Since the amount of use varies from weekdays to weekends, with more use typically occurring on weekend days, the daily capacity is an average of all seven days of a week.

Once the season length and daily carrying capacity are established, these figures are multiplied to determine the estimated number of use “occasions” supplied by a single facility each year. This figure is itself multiplied by the quantity of existing facilities of the given type (within the study area) to quantify the estimated sum total supply provided each year.

2. **DEMAND:** The demand for activities supported by recreational facilities is estimated through the use of a recreation demand survey. To calculate the overall demand for a certain activity, the survey establishes two numbers based upon survey responses—“participation rate” and “frequency rate.”

Participation Rate represents the percentage of the surveyed sample population that responds that they have participated in a given activity in the past year. For example, if 100 individuals are surveyed, and 13 indicate they played soccer at least once within the past year, the participation rate would be 13%.

Frequency Rate is the average (mean) number of times that the individuals who participated in a given activity did so in a one-year period. During a survey, if respondents answered positively that they had played soccer in the past year, a follow-up question would ask them to estimate the number of times they played. Based on the responses of all the surveyed individuals who had participated in the activity at least once, the average (mean) number of times that each played/participated would be calculated to determine the frequency rate. As an example, the most recent State survey indicates the frequency rate for soccer was approximately 19.9 times per year.

Once the participation and frequency rates have been calculated, they are multiplied by the study area's total population to estimate recreation demand jurisdiction-wide. The result of this calculation is "total occasions demanded," or generically referred to as "demand."

3. **NEEDS DETERMINATION:** The next step in estimating the need for additional recreational facilities involves the comparison of the estimated supply and demand. In cases where demand exceeds supply, the difference between these figures is assumed to be "unmet demand," and indicates that additional facilities would be needed to meet the estimated demand. This unmet demand figure would be divided by the supply factor (i.e., annual carrying capacity) for the appropriate facility type to estimate the number of additional facilities that would need to be provided to satisfy demand. For example, if demand for field sports exceeded supply by a total of 100,000 use occasions, and an athletic field's annual carrying capacity was 8,640, approximately 12 additional athletic fields would be needed to meet the estimated demand ($100,000 \text{ uses demanded} / 8,640 \text{ uses per facility} = 11.6$).

As indicated elsewhere within this plan, the mathematical results of this supply-demand analysis process provide only a baseline for more detailed analysis. Many other factors, both quantitative and qualitative, can impact both supply and demand, and play an important role in estimating the need to provide additional recreational facilities.

APPENDIX C – Acquisition, Development, and Rehabilitation Priorities

The matrices on the following pages display the acquisition, development, and capital rehabilitation projects that were recommended within the LPPRP staff and public input process. The columns are as follows:

PROJECT DESCRIPTION: The site and type of recommended project. For example, Light the 90' ball diamond at Localville Regional Park. In some cases the entry will be for a “general project category” that involves multiple sites, in which the description will begin with the word “General.” An example of this would be “General Parking Lot and Access Road Renovations and Expansion.” A list of prospective sites for each general project category will follow the matrices.

LOCATION: Geographic location of recommended project, which will either be countywide, one of the four recreation regions (1-4), or by recreation council location/affiliation (e.g., Dundalk-Eastfield, or a site-specific council such as Marshy Point Park). See map on page 10 for a depiction of this administrative geography.

TYPE: Projects are listed as one of three types: acquisition (A), development (D), or rehabilitation (R). In some cases, particularly general project types, there will often be a mix of development and rehabilitation. As an example, the “General Minor Facilities Improvements and Renovations” project may predominantly be utilized for the development of park improvements, but is also utilized for certain general renovation projects.

SHORT-RANGE EST. COST: The estimated project costs for the five-year period from 2012 through 2016.*

MID-RANGE EST. COST: The estimated project costs for the five-year period from 2017 through 2021.*

LONG-RANGE EST. COST: The estimated project costs for 2022 and beyond.*

*** - Note that these cost estimates, listed in thousands of dollars, are very rough and do not reflect engineer cost estimates, bid prices, or other such formalized approaches to defining projected costs. Additionally, it should be noted that funding sources are not defined, and may range from county, state and federal funding, to donations. It is likewise important to note that the project priorities list is a general guide, that fiscal constraints do not allow all projects to be completed, and that priorities vary as time passes.**

GOALS SUPPORTED: One or more numbers that indicate the State and local goals and policies supported by the proposed project, as follows (referenced by number):

State Goals

1. Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens, and thereby contribute to their physical and mental well-being.
2. Recognize and strategically use parks and recreation facilities as amenities to make communities, counties, and the State more desirable places to live, work, and visit.
3. Use State investment in parks, recreation, and open space to complement and mutually support the broader goals and objectives of local comprehensive / master plans.
4. To the greatest degree feasible, ensure that recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile, and help to protect natural open spaces and resources.
5. Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.
6. Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

County Goals/Policies

7. Acquire a variety of parklands and recreation sites to achieve parkland acquisition goals and meet public recreation needs.
8. Provide a diversity of recreational facilities and areas to meet the needs of citizens, and to serve the organized programs of the local recreation and parks councils.
9. Renovate and rehabilitate parks to address the issues of facility aging and outdated recreational infrastructure.
10. Participate and play a vital role within community revitalization programs such as the County's renaissance initiative.
11. Expand waterfront access to the Chesapeake Bay and its tributaries.
12. Pursue alternative funding sources for park acquisition, development, capital improvements, recreational programs and special events.
13. Promote a greater appreciation for the natural environment through interpretation and hands-on experiences, and expand efforts to protect sensitive environmental areas within the County's parklands.
14. Enhance park and facility accessibility and provide quality recreational opportunities for individuals of all abilities.
15. Expand opportunities for citizens to participate in and experience arts programs and events, and historically and culturally significant sites.
16. Evaluate facility design standards as necessary to better meet recreational demands, enhance facility safety and functionality, and ensure that parks and facilities are sustainable, attractive community enhancements.

17. Participate in various partnerships to maximize resources and efforts for the benefit of Baltimore County citizens.
18. Expand the use of technology to enhance agency operations, and to better meet the needs of the public.

Appendix C – Acquisition, Development, and Rehabilitation Priorities

Project Description	Location	Type#	Acres to be Acquired	Short-Range Est. Cost*	Mid-Range Est. Cost*	Long-Range Est. Cost*	Goals Supported#
ACQUISITION PROJECTS							
Acquire site for a regional park to serve Region 1, possibly as part of the redevelopment of the Spring Grove Hospital complex	Region 1	A	9	1,400			1,2,3,6,7,12,17
Acquire property in the Granite area of southwest Baltimore County, to serve as a predominantly passive/nature park	Region 1	A	250	3,000			1,2,3,6,7,12,13,17
GENERAL Parkland Acquisition	Countywide	A	1,300	15,000	15,000	30,000	1,2,3,4,5,6,7,10,11,12,13,17
			Acquisition Totals:	19,400	15,000	30,000	
DEVELOPMENT PROJECTS							
Construct Maintenance-Storage-Workshop Building at Marshy Point Nature Center	Countywide	D	N/A	70			3,13,14
Construct community center to serve the Cockeysville community, and possibly to act as a replacement to the existing Cockeysville PAL Rec. Center	Cockeysville	D	N/A	3,000			1,2,5,8
Construct community center to serve the Perry Hall - White Marsh community	Perry Hall	D	N/A	3,000			1,2,5,8
Construct a regional serving facilities at the Spring Grove site, post acquisition	Region 1	D	N/A	3,500			1,2,3,8,10,12,17
Develop planned community park at Gough Park Site	White Marsh	D	N/A	3,500			1,2,5,8
Make recreational improvements including dog park and ball diamond expansion at Saint Helena Park	Dundalk-Eastfield	D	N/A	250			1,2,5,8,11,17
Construct dog park in the Perry Hall - White Marsh community, through a partnership with interested citizen group	Perry Hall - White Marsh	D	N/A	175			1,2,5,8,11,17
Construct fishing pier at Battle Grove Park, via private development agreement	North Point Village	D	N/A	100			1,2,3,8,11,14

*- Time Frame: S - Short (within next five years), M - Medium (6-10 years), L - Long (11-20 years)

#- A = acquisition, D = development, R = rehabilitation/renovation

Appendix C – Acquisition, Development, and Rehabilitation Priorities

Project Description	Location	Type#	Acres to be Acquired	Short-Range Est. Cost*	Mid-Range Est. Cost*	Long-Range Est. Cost*	Goals Supported#
Construct artificial turf field, potentially with lighting, at Towson High School Rec. Center	Towson	D	N/A	800			5,9,14,16,17
Construct indoor and outdoor equestrian facilities, for standard and therapeutic use, at the Baltimore County Center for Maryland Agriculture and Farm Park	Countywide	D	N/A	2,300			1,3,8,12,14,17
Construct natural playground at Robert E. Lee Park	Countywide	D	N/A	215			1,2,3,4,8,12,13,14,16,17
Construct community center at the Loch Raven Center site, which shall replace the existing center that is being converted to a school recreation center	Greater Loch Raven	D	N/A	3,000			1,2,5,8,10
Construct community center in the Catonsville community, which shall replace the existing Bloomsbury Community Center that is being converted to a school recreation center	Catonsville	D	N/A	3,000			1,2,5,8,10
Construct the Indian Rock section of the proposed Northeast Regional trail	Perry Hall - White Marsh	D	N/A	450			1,2,3,5,8,9,10,14,16,17
Construct Education/Interpretive Center at Robert E. Lee Park	Countywide	D	N/A	2,500			1,2,3,8,12,13,14,17
GENERAL Regional Park Development	Countywide	D	N/A	5,000	8,000	16,000	1,2,3,4,5,8,10,12,14,15,16,17
GENERAL Community and Neighborhood Park Development	Countywide	D	N/A	14,000	17,500	35,000	1,2,3,4,5,8,10,12,14,15,16,17
GENERAL Path, Trail and Sidewalk Construction & Renovations	Countywide	D,R	N/A	3,500	6,000	12,000	1,2,3,5,8,9,10,14,16,17
Developm't. Totals:				48,360	31,500	63,000	
REHABILITATION PROJECTS							
Continue renovations to the Sollers Point Community Center site (formerly a high school recreation center) to provide community-serving recreation facilities	Turner Station	R	N/A	3,250			1,2,4,5,8,9,10,14,15,17,18

*- Time Frame: S - Short (within next five years), M - Medium (6-10 years), L - Long (11-20 years)

#- A = acquisition, D = development, R = rehabilitation/renovation

Appendix C – Acquisition, Development, and Rehabilitation Priorities

Project Description	Location	Type#	Acres to be Acquired	Short-Range Est. Cost*	Mid-Range Est. Cost*	Long-Range Est. Cost*	Goals Supported#
Make renovations and enhancements to Battle Acre Park and Monument, in conjunction with the commemoration of the bicentennial of the Battle of North Point	Gray Charles, Region 4, Countywide	R	N/A	300			1,2,3,8,9,10,14,15,17
Renovations at Rosedale Park, including correction of erosion issues, field renovations, and path renovations	Rosedale	R	N/A	1,300			1,9,17
Correct shoreline erosion problems via "living shoreline" project at Stansbury Park's shoreline and pond; construct canoe and kayak access as part of projects	Dundalk-Eastfield	R	N/A	125			2,3,5,9,11,13,16
Renovate sports fields and correct erosion problems at Fullerton Park and Elementary School Rec. Center	Overlea-Fullerton	R	N/A	875			1,9,17
GENERAL Recreation Facilities Improvements and Renovations	Countywide	R,D	N/A	7,600	10,000	20,000	1,2,3,5,8,9,10,14,16,18
GENERAL Field Renovations and Enhancements, including lighting	Countywide	R,D	N/A	5,500	7,500	15,000	1,2,3,5,8,9,10,14,16,17
GENERAL Playground/Tot Lot Renovations and Enhancements	Countywide	R,D	N/A	1,275	1,500	3,000	1,2,3,5,8,9,10,14,16,17
Rehab. Totals:				20,225	19,000	38,000	
GRAND TOTAL, ALL PROJECTS:				87,985	65,500	131,000	

*- Time Frame: S - Short (within next five years), M - Medium (6-10 years), L - Long (11-20 years)

#- A = acquisition, D = development, R = rehabilitation/renovation

APPENDIX D – DEFAULT PARKLAND ACREAGE GOAL METHODOLOGY

This appendix summarizes how to calculate the generic state acres of parkland per 1,000 persons goal, whether the generic existing goal of 30 acres per thousand population, or the revised Baltimore County goal of 25 acres per thousand population, as proposed within this plan. There are three categories of preserved acreage that may count towards the goal: local recreation acreage, a portion of local natural resource acreage, and a portion of qualifying State and Federal acreage. What types of land qualify under each category and how each category counts towards the goal are explained below in the appropriate section.

STEP 1: SETTING THE GOAL

Since a jurisdiction's parkland acreage goal is based upon a certain amount of parkland per thousand persons, the goal fluctuates with changes in population. As all of the recreation regions in Baltimore County are expected to continue to experience population growth through 2030, their parkland acreage needs will continue to grow as well. Using the generic State of Maryland established goal of 30 acres of parkland per thousand citizens, if a study area had 150,000 population, its acreage goal would be:

$$30 \text{ acres} * 150 \text{ (total residents/1,000)} = 4,500 \text{ acres}$$

STEP 2: LOCAL RECREATIONAL ACREAGE PORTION OF THE GOAL

The types of lands that may be counted as recreational lands, and counted (except where noted) 100% towards the acreage goal, include:

- Neighborhood Parks
- Community Parks
- City/Countywide Parks
- Metro/Regional Parks
- Educational Recreation Areas (only 60% of site acreage is counted towards the goal)

Thus, if the jurisdiction used in the example above (with 150,000 population) had 1,800 acres of combined parks and 1,000 acres of school-recreation centers (equating to 600 acres of parkland based on the 60% rule for educational rec areas), they would have a total of 2,400 creditable acres of local parkland. That 2,400 acres would equate to 16 acres per thousand citizens.

STEP 3: LOCAL NATURAL RESOURCE ACREAGE PORTION OF THE GOAL

In addition to local recreation acreage, one-third of the acreage of certain types of natural resource lands may be counted towards the parkland acreage goal, up to a maximum of 15 acres per thousand citizens. These include:

- Natural Resource Areas (i.e., unimproved/undeveloped open spaces and resource areas such as stream valleys, forest conservation reservations)

- Historic Cultural Areas (in Baltimore County these areas are situated within parks, and thus counted as recreational acreage instead of resource acreage)
- Private Open Space (open space owned by home owners or condo owners associations, and dedicated as open space via the County's development process)

Thus, if the 150,000 population jurisdiction had 3,300 acres of natural resource lands, they would contribute 1,100 acres towards the parkland acreage goal (i.e., one-third their acreage). This 1,100 creditable acres would equate to approximately 7.3 acres per thousand citizens, which combined with the "local recreation acreage" from step two would result in an overall parkland supply level of 23.3 acres per thousand citizens.

STEP 4: STATE AND FEDERAL ACREAGE PORTION OF THE GOAL

Counties that have not met the parkland acreage goal after completing steps two and three of the calculations may be eligible to count a share of state and federal parklands within their jurisdiction towards their local parkland acreage goal. However, only federal and state parklands and natural areas in excess of 60 acres per thousand population within a county may be counted towards the local acreage goal. It is highly unlikely that Baltimore County will ever receive any acreage credit in this manner, as this provision generally only benefits counties in which there are vast state and federal lands AND a relatively small population (the County's large population would require about double the amount of existing state and federal parkland to exceed 60 acres per thousand people).