

# **Anne Arundel County 2017 Land Preservation, Parks and Recreation Plan**

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# CONTENTS

|  |        |
|--|--------|
| Executive Summary.....   | 1      |
| A.    Introduction.....  | 1      |
| B.    Framework.....   | 1      |
| C.    Recreation and Parks.....  | 3      |
| D.    Agricultural Land Preservation.....  | 8      |
| E.    Natural Resources Conservation.....  | 9      |
| CHAPTER I:    INTRODUCTION .....   | 1      |
| A.    Purpose of the Plan .....  | 1      |
| B.    Preparation of the Plan.....   | 1      |
| C.    The LPPRP’s Relationship to the Comprehensive Planning Process .....           | 2      |
| D.    Public Participation.....  | 2      |
| CHAPTER II    FRAMEWORK.....   | 1      |
| A.    Physical Characteristics .....   | 1      |
| B.    Demographic Characteristics .....  | 8      |
| C.    Comprehensive Plan Framework.....  | 11     |
| D.    The LPPRP’s Relationship to State Planning .....                               | 18     |
| E.    Implications for Land Preservation and Recreation.....                         | 19     |
| CHAPTER III    RECREATION, PARKS, AND OPEN SPACE                                     |        |
| A.    County and State Goals.....  | III-2  |
| B.    Needs Analysis, Proximity and Equity Analysis, Progress Since 2013 LPPRP ..... | III-11 |
| C.    County Priorities .....  | III-40 |
| CHAPTER IV    AGRICULTURAL LAND PRESERVATION   |        |
| A.    Goals and Objectives .....   | IV-3   |
| B.    Current Implementation Program and Progress Since the 2013 LPPRP .....         | IV-5   |
| CHAPTER V    NATURAL RESOURCES LAND CONSERVATION                                     |        |
| A.    Planning Context and Goals.....  | V-1    |
| B.    County Implementation Program and Progress Since the 2013 LPPRP .....          | V-3    |

## Appendices

|            |  |
|------------|--|
| Appendix A | Anne Arundel County Recreation and Open Space Sites Inventory                                      |
| Appendix B | Compilation of Public Comments   |
| Appendix C | Summary of Recommendations and Status for Recreation from the Anne Arundel County Small Area Plans |
| Appendix D | Recreational Facilities Needs Analysis Tables  |
| Appendix E | Recommendations of Water Access Commission   |
| Appendix F | Agricultural Preservation Inventory  |
| Appendix G | Residential Resource Land Listing  |

## Tables

### CHAPTER II FRAMEWORK

|            |   |   |
|------------|---|---|
| Table II-1 | Land Cover, 2014 .....  | 1 |
| Table II-2 | Watersheds.....   | 2 |
| Table II-3 | County and Planning Area 2010 Population and 2035 Projections ..... | 9 |
| Table II-4 | Population by Age, Anne Arundel County and Maryland.....            | 9 |

### CHAPTER III RECREATION, PARKS, AND OPEN SPACE

|              |  |        |
|--------------|--|--------|
| Table III-1  | Department of Recreation and Parks FY 2017 Operating Budget Summary .....  | III-10 |
| Table III-2  | Department of Recreation and Parks FY 2017 Capital Budget Summary.....     | III-10 |
| Table III-3  | Anne Arundel County Program Open Space Apportionments, 2008-2017.....      | III-10 |
| Table III-4  | Recreation and Resource Land by Owner.....                                 | III-13 |
| Table III-5  | County, Municipal, and Board of Education Recreation Land by Type.....     | III-13 |
| Table III-6  | Recreation Land by Planning Area .....                                     | III-19 |
| Table III-7  | Per Capita Recreation Land by Planning Area .....                          | III-19 |
| Table III-8  | Department Survey Responses: Facility Needs .....                          | III-21 |
| Table III-9  | Department Survey Responses by Recreation Planning Area .....              | III-22 |
| Table III-10 | Status of General Development Plan Recreation Implementation Actions ..... | III-25 |
| Table III-11 | Summary Needs Report .....   | III-28 |
| Table III-12 | Needs by Planning Area, 2017.....  | III-30 |
| Table III-13 | Needs by Planning Area, 2035.....  | III-30 |
| Table III-14 | Land Acquisition, Development, and Rehabilitation Recommendations .....    | III-41 |

### CHAPTER IV AGRICULTURAL LAND PRESERVATION

|            |  |       |
|------------|--|-------|
| Table IV-1 | Selected Agricultural Statistics .....                                   | IV-2  |
| Table IV-2 | Summary Table of Preserved Agricultural Lands.....                       | IV-8  |
| Table IV-3 | South Rural Legacy Area Expenditures Summary .....                       | IV-12 |
| Table IV-4 | South County Small Area Plan Recommendations for the Rural Economy ..... | IV-16 |

### CHAPTER V NATURAL RESOURCES LAND CONSERVATION

|           |  |      |
|-----------|--|------|
| Table V-1 | State and County Goals for Natural Resources Land Conservation ..... | V-4  |
| Table V-2 | Protected Natural Resource Lands.....                                | V-13 |
| Table V-3 | Land Protected by Local Land Trusts.....                             | V-14 |

## Maps

|             |   |        |
|-------------|---|--------|
| CHAPTER II  | FRAMEWORK   |        |
| Map II-1    | Location .....  | 3      |
| Map II-2    | Land Cover .....  | 4      |
| Map II-3    | Watersheds and Water Resources .....  | 5      |
| Map II-4    | Woodlands, Sensitive Areas .....  | 6      |
| Map II-5    | LPPRP Planning Areas and Small Area Planning Areas .....                        | 10     |
| Map II-6    | GDP Land Use .....  | 13     |
| Map II-7    | Development Policy Areas .....  | 14     |
| Map II-8    | Priority Funding Areas .....  | 15     |
| Map II-9    | Designated Conservation Areas .....   | 16     |
| Map II-10   | Growth Tiers .....  | 17     |
| CHAPTER III | RECREATION, PARKS, AND OPEN SPACE   |        |
| Map III-1   | Parks and Recreation Sites .....  | III-12 |
| Map III-2   | Current and Future Trails Network .....   | III-16 |
| Map III-3   | Proximity Analysis—Overview .....   | III-32 |
| Map III-4   | Proximity Analysis—Water Access .....   | III-33 |
| Map III-5   | Proximity Analysis—Trails .....   | III-34 |
| Map III-6   | Proximity Analysis—Picnic Facilities .....                                      | III-35 |
| Map III-7   | Proximity Analysis—Athletic Fields .....  | III-36 |
| Map III-8   | Proximity Analysis—Indoor Recreation Facilities .....                           | III-37 |
| Map III-9   | Park Equity Analysis—Overall Needs .....  | III-39 |
| CHAPTER IV  | AGRICULTURAL LAND PRESERVATION  |        |
| Map IV-1    | Agricultural and Woodland Preservation Areas .....                              | IV-6   |
| Map IV-2    | Regional Rural Legacy Areas .....   | IV-7   |
| Map IV-3    | Agricultural Easements and Districts .....                                      | IV-9   |
| CHAPTER V   | NATURAL RESOURCES LAND CONSERVATION   |        |
| Map V-1     | Greenways .....   | V-8    |
| Map V-2     | State Targeted Ecological Areas .....   | V-10   |
| Map V-3     | County Designated Conservation Areas .....                                      | V-10   |
| Map V-4     | State Targeted Ecological Areas with County Designated Conservation Areas ..... | V-11   |
| Map V-5     | Protected Natural Resource Land .....   | V-12   |

## Charts

|             |   |       |
|-------------|---|-------|
| CHAPTER III | RECREATION, PARKS, AND OPEN SPACE                             |       |
| Chart III-1 | Department of Recreation and Parks Organizational Chart ..... | III-5 |

## Figures

|             |  |       |
|-------------|--|-------|
| CHAPTER IV  | AGRICULTURAL LAND PRESERVATION                       |       |
| Figure IV-1 | Agricultural Preservation 1980 to 2011 .....         | IV-10 |
| Figure IV-2 | Agricultural Preservation Expenditures Summary ..... | IV-12 |

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# EXECUTIVE SUMMARY

## A. Introduction

An updated Land Preservation, Parks and Recreation Plan (LPPRP) is required to be submitted by each County to the State of Maryland every five years. The 2017 round of LPPRPs is intended to provide a common benchmark to assist the State's evaluation of County land preservation and recreation programs, to ensure good return on public investment. LPPRPs qualify local governments for State Program Open Space (POS) grants, and include three elements:

- Parks, Recreation, and Open Space (Chapter III);
- Agricultural Land Preservation (Chapter IV); and
- Natural Resource Conservation (Chapter V).

Upon adoption by the County Council, this LPPRP becomes an amendment to the Anne Arundel County General Development Plan. The LPPRP serves as a guide for park development, program improvements, and land preservation in Anne Arundel County. The Department of Recreation and Parks (the Department) was responsible for overall coordination of the LPPRP preparation, and had primary responsibility for Chapters III and IV. The Office of Planning and Zoning provided input for the entire plan and had primary responsibility for Chapter V, with assistance from the Department of Public Works, Division of Watershed Ecosystem and Restoration Services.

Public input and stakeholder advice was solicited through a public online survey and meetings with the Water Access Commission, Bicycle Advisory Commission, and Sports Council. The LPPRP was published on the County's website in October 2017, and public

comments were solicited through January 2018 (far exceeding the County's required 30-day review period). Notable recommendations from public comments (provided in Appendix B) include recommendations for ice rinks, indoor and outdoor tennis courts, water access including adaptive boating, track and field facilities and swimming pools.

The LPPRP was presented to the Anne Arundel County Planning Advisory Board (PAB) at public meetings on November 13, 2017. The PAB approved the LPPRP on February 23, 2018. On June 4, 2018, Council Bill No. 58-18 was introduced to the County Council of Anne Arundel County. The purpose of this bill was to repeal the 2013 LPPRP and adopt the 2017 LPPRP. A public hearing was held on July 2, 2018; a second public hearing on the amended bill was held on July 16, 2018. A third public hearing was held on September 4, 2018, and the amended bill to adopt the 2017 LPPRP was approved.

Please refer to the full LPPRP document for more information and detail regarding the topics covered in this Executive Summary.

## B. Framework

### 1. Physical Characteristics

Anne Arundel County comprises approximately 415 square miles (265,000 acres) in central Maryland. The County lies immediately west of the Chesapeake Bay, south of the City of Baltimore, and about 15 miles east of Washington DC. The Patapsco River and the Chesapeake Bay form the County's northern and eastern boundaries, and the Patuxent River serves as the western boundary. Major watersheds include the Little Patuxent River,

Middle Patuxent River, Magothy River, Patapsco River, Severn River, South River and Upper Patuxent River. The County is in the Atlantic Coastal Plain, with relatively flat and gently rolling topography, and its streams and rivers are slow-moving, low-gradient waterways.

The County contains rolling countryside and farmland, suburban and urban communities, industrial centers, and waterfront communities on the Severn River and Chesapeake Bay. Based on Land Use/Land Cover data provided by the Maryland Department of Planning (MDP), resource land acreage declined from 62 percent of the County's land area in 1997 to 49 percent in 2010. County land cover data show that in 2014 (the most recent year for which data are available), 35 percent of the county was forested, 13 percent was agriculture or open space, and 6 percent was wetland or water. The County's extensive wetlands include both tidal and nontidal areas. Forty six percent of the County was developed acreage in 2014.

## **2. Demographics**

As of 2015 (the most recent year for which data are available), Anne Arundel County's population was 555,280, a 3.3 percent increase since 2010. The County is expected to grow by more than 10 percent by 2035, reaching a projected population of 618,200. Continued growth will result in increased demand for recreation facilities and an increasing need to conserve contiguous areas of natural and agricultural resources.

The largest growth is expected in the Western and Northern parts of the County. The lowest increase will be in the primarily rural Southern Planning Area.

The County's age distribution is expected to change. While the share of population under 20 years old is expected to remain steady, the population between ages 20 and 64 is expected to decrease (in actual numbers and as a share of the County's overall population), while the

population age 65 and older is expected to increase from 13 percent of the population in 2015 to 21 percent of the population in 2035. Projected changes in the age distribution of the County's population will result in stable demand for recreation services from the 0-19 age group, possibly decreasing demand from the 20 to 64 age group, and strong and increasing demand from the 65 and over group.

## **3. General Development Plan**

The current comprehensive plan, called the General Development Plan, was adopted in 2009. The overarching themes of the 2009 GDP that form the County's vision are:

- Balanced growth and sustainability
- Community preservation and enhancement
- Environmental stewardship
- Quality public services

Key policies related to resource conservation include encouraging infill and redevelopment within Priority Funding Areas; protecting 3,150 additional open space/natural resource acres by 2020; preserving agricultural and rural land through zoning and protective easements; establishing a protected greenways network; and protecting natural resource areas. Policies specific to recreation and parks include using public facilities across multiple agencies to increase recreational opportunities, and improving recreational opportunities so that all communities have access to facilities and programs.

The Plan calls for continued concentration of higher density residential uses, and most industrial and commercial uses, in the northern parts of the County and in Odenton, Severn, Maryland City, Crofton and Parole. The County's designated conservation areas are largely contiguous in the southern and western parts of the County and provide a good basis for agricultural and natural resource land conservation.

## **C. Recreation and Parks**

### **1. Inventory**

Anne Arundel County, Annapolis, and the Anne Arundel County Board of Education provide approximately 9,400 acres of public park, recreation, and open space land. This acreage includes four regional parks, 95 community and neighborhood parks, 119 school recreation parks, mini-parks within the City of Annapolis, two sports complexes, and 34 special use areas, including an ice rink, aquatic center, recreation center and boat ramps. The County has seven undeveloped park sites totaling 810 acres.

State park land available for recreational use totals approximately 2,260 acres, primarily in the Patapsco Valley State Park and Sandy Point State Park.

Access to waterways—the Chesapeake Bay, rivers and major creeks—is very important to Anne Arundel County’s residents and visitors. Most beaches, piers and boat ramps are owned by neighborhoods, private associations or commercial businesses. The County contains four paved public boat ramps (one owned by the County, one by the State, and two by the City of Annapolis); 18 public “car top” boat launch areas; and three public beaches. Fishing, crabbing, and public water frontage is available at many public recreation areas. The County is working with the State of Maryland to identify and map potential “water trails” that connect numerous destinations along the Chesapeake Bay and its tributaries. The County is also evaluating the potential for primitive, paddle-in campsites within County land along the Patuxent River.

The County owns and manages seven long-distance trails in partnership with communities and state agencies. Most of these trails have sections still to be developed. Three new trail systems are planned: the South Shore Trail, South County trail system, and Patapsco

Greenway Trail. An 80-mile paddling trail on the Patuxent River is managed by the Patuxent River Commission. Annapolis has a 19-mile trail system, partially implemented, known as the Colonial Annapolis Maritime Trail.

Land with a primary objective of natural resource protection is counted in the natural resource lands rather than in the park and recreation land; however, large areas of natural resource lands owned by the State and Federal governments are available for limited public recreation such as hiking and fishing. County natural resource lands total about 10,410 acres. The State of Maryland and the Federal government own about 14,560 acres of natural resource lands. The largest holding is the 8,850-acre Patuxent National Wildlife Refuge.

There have been minimal changes in the County’s recreation inventory since publication of the 2013 LPPRP.

### **2. CAPRA Certification**

Anne Arundel County is pursuing certification through the Commission for Accreditation of Park and Recreation Agencies (CAPRA), an arm of the National Recreation and Parks Association that “accredits park and recreation agencies for excellence in operation and service” (CAPRA website). Certification involves a five-year process that includes three phases: development of the agency self-assessment report, onsite visitation by the Commission, and the Commission’s review and decision.

The County began the CAPRA certification process with internal meetings in 2014 and 2015, and formed subcommittees to address the CAPRA subject-matter areas. The Department intends to submit an application for accreditation—fulfilling the self-assessment step—in December 2017. Commission acceptance of this application would trigger an onsite visit, followed by a potential accreditation

decision. If accreditation is granted by the Commission, the County would develop a new self-assessment report and be revisited and reaccredited every five years.

### **3. Evaluation of Needs**

Future needs for recreation and parks were evaluated using several methods, including local public surveys, stakeholder and user group meetings, the existing statewide recreation participation survey (with the understanding that these data are quite old), and the experience of Recreation and Parks staff in scheduling and maintaining its facilities. Input from these sources was reviewed in the context of previous LPPRPs, as well as insights gained from analysis of the distribution of park land throughout the County (Proximity Analysis) and its location in relation to areas of higher population density and greater levels of poverty (Equity Analysis). The County's sixteen small area plans were also reviewed for specific recreation-related recommendations.

#### *a. Proximity and Equity Analysis*

The Proximity Analysis compares the location of the County's park and recreation facilities to the distribution of its population. Overall, Anne Arundel County provides a diverse and well-distributed system of parks and recreation facilities. Spatial gaps were found in some specific types of facilities, reflecting the County's geography and settlement patterns, as well as limited land availability and budget.

The Proximity Analysis suggests the following conclusions:

- A substantial portion of County residents are within ½ mile of at least one park or recreation facility. Notable gaps in relatively densely populated areas include north of Fort Meade, and near Hanover and Harmans.
- All of the rural Southern Planning Area is within 5 miles of at least one park or recreation facility;

- Most of the County, except for the Western Planning Area, is reasonably close to public water access facilities. The relative lack of such access in the West is largely a function of geography—there are few navigable waterbodies in this part of the County;
- Most of the County is within 5 miles of existing or planned regional trails. The County's most heavily populated areas (i.e., Annapolis, Glen Burnie, Severna Park, Odenton, and Crofton), are generally within ½ mile of at least one such trail; and
- Athletic fields and indoor recreation facilities tend to be clustered, leaving gaps throughout the County—most notably in relatively densely populated areas in the Northern and Western Planning Areas.

The Park Equity Analysis evaluates the degree to which parks and recreation facilities are accessible to populations that are typically underserved by such resources, including areas of high population density, high concentrations of poverty, and high concentrations of children. Areas identified as having the greatest need for park and recreation facilities (i.e., the areas of High and Medium-High Need) include:

- Annapolis-Parole;
- Ferndale-Brooklyn Park;
- Areas north of Fort Meade;
- Glen Burnie and areas to the south;
- Laurel-Maryland City; and
- Waugh Chapel, north of Crofton;

These areas are generally home to the County's highest population density and lowest-income residents. This is consistent with the Proximity Analysis, which also showed gaps for certain kinds of facilities (i.e., athletic fields, water access) in these areas.

Age is also an important equity consideration in the County's recreational facilities and programming. In addition to ensuring that facilities are physically accessible to older populations, the Department offers numerous

senior recreation programs at swim centers and indoor recreation facilities.

#### *b. Guiding Policies*

The LPPRP's policies to guide capital project recommendations are provided below in summary form:

1. Make the maintenance and rehabilitation of existing parks a priority over the development of new parks.
2. Fixing parking deficiencies at existing parks and recreation facilities is a priority.
3. Increase facilities supply by enhancing existing assets rather than developing new assets.
4. Prioritize the development of indoor sports facilities to meet the demand for indoor basketball and other indoor/court sports. This could include enhancement of facilities at existing schools or, where fiscally justified, construction of new community recreation centers.
5. Complete the development of the planned trails and emphasize the construction of small connectors, such as those between trails and schools or other common destinations for nonmotorized travelers.
6. When identifying new parks and recreation facilities, emphasize locations that address gaps identified by the Proximity Analysis and Park Equity Analysis.
7. As new facilities are built or rehabilitated, green building and landscape technologies will be considered as a Department.
8. School Recreation Parks are an important component of the County's parks and recreation system.
9. Public-private partnerships may be a suitable way to develop some kinds of recreation facilities, including reuse/adaptation of existing buildings.
10. Addressing the recreation and related health needs of the County's growing elderly population is an important priority.

## **4. Investment Priorities**

The County's priorities for recreation and park facility investment fall into three categories, as described below: Acquisition and Development; Facility Development; and Facility Rehabilitation.

#### *a. Acquisition and Development Projects*

Land acquisition projects total approximately 1,065 acres in 12 projects. The three largest acquisitions would be approximately 70 acres for new South County Athletic Fields in Edgewater or the surrounding area, 50 acres for athletic fields in the Pasadena-Marley Neck area (if environmental conditions prevent additional athletic fields at Stoney Creek Park), and 50 acres for a new West Area Athletic Complex.

Approximately 10 acres would be for land on which to develop two indoor sports facilities: one to serve the North and East and one to serve the West and South.

Other recreation acquisitions would include:

- Northern Planning Area:
  - a new community park (Glen Burnie Community Park);
  - Expansion of Jessup Park or acquisition of other land in the Jessup area; and
  - additional athletic fields in the Linthicum/BWI area;
- Southern Planning Area: boat ramp and associated parking;
- Western Planning Area: a community park, possibly in the Odenton/Fort Meade vicinity; and
- Countywide: land acquisition and construction of pickleball facilities.

#### *b. Facility Development Projects*

Facility development projects are on land already owned or leased by the County, the Board of Education, or the City of Annapolis. The recommendations include 42 projects. Some of the highlights are described below.

**Development or completion of two large County parks:** A park and athletic complex at the U.S. Naval Academy Dairy Farm property; and development of the Fort Smallwood/Harry and Jeanette Weinberg Park.

**Development of new community parks:** Crownsville Area Park, Mayo-Glebe Heights, Glen Burnie Park, and Stoney Creek Park.

**Development of two indoor swim centers:** Two indoor swim centers, one each in the Southern and Western planning areas..

**Tennis Facilities:** In 2015, the County conducted a feasibility study for an indoor-outdoor tennis facility. The cost and specialized nature of such a facility lends itself to a public-private partnership as proposed by The Tennis Alliance of Anne Arundel County. The current Five Year Capital Improvement Program includes an indoor-outdoor tennis center at Millersville Park, an undeveloped park centrally located in the County.

**Boat Ramps:** The County's overall intent is to establish at least one boat ramp on each shore of each major river in the County. In 2016 the Department secured a consultant to evaluate eight waterfront parks to determine the feasibility of launch facilities for trailer boats. Five sites were deemed feasible:

- Solley Cove Park;
- Beachwood Park;
- Spriggs Farm Park on the Magothy;
- Quiet Waters Park; and
- South River Farm Park.

**Athletic fields:** New development or additions/upgrades at existing parks.

**Trails:** Continued phased development of the County's and the City of Annapolis trail systems:

**Countywide and programmatic projects:** indoor track and field facilities, synthetic turf

fields, irrigation projects, dog parks, and water access projects.

**School Recreation Parks:** The school system's CIP includes construction of a Crofton-area high school, improvements to playground equipment and athletic stadiums, and gym additions. To increase indoor recreation opportunities, the County has been funding middle school-sized gymnasiums at elementary schools at an average cost of \$1.2 million per gymnasium.

### *c. Facility Rehabilitation*

A major component of the CIP over the next fifteen plus years will be the rehabilitation and replacement of existing facilities. This LPPRP includes:

- **Rehabilitation Projects.** Rehabilitation projects at Downs Park, Quiet Waters Park, Lake Waterford Park, Arundel Swim Center and others.
- **Cultural-Historic Resource Projects.** Improvements at Hancock's Resolution, Hot Sox Park, Fort Smallwood Park, and the USNA Dairy Farm Park.
- **Facility Lighting.** Funded annually and typically been used to expand the number of lighted athletic fields; however, for the foreseeable future, it will primarily be used to replace lighting systems that are 30 to 40 years old.
- **School Park Outdoor Recreation.** Capital fund allows for the rehabilitation, replacement or expansion of facilities shared by the Department of Recreation and Parks and the Board of Education.
- **Trail Resurfacing.** Funds to restore and upgrade trails. The B&A Trail is a specific priority, and is in need of major repairs and resurfacing.
- **Facility Conversion.** Evaluation of opportunities to convert underused outdoor basketball or tennis court facilities to skate parks or other uses, based on demand.
- City of Annapolis athletic fields: continued investment.

## **5. Relationship of Priorities to Needs**

The priorities outlined in this LPPRP respond directly to identified needs, as described in this section.

### *a. Primary Needs*

The primary identified countywide needs are for:

- Indoor basketball courts (gyms);
- Multipurpose fields for team sports;
- Baseball / softball diamonds;
- Water access for boating and other water-based recreation; and
- Trails.

The facility development program meets these needs through:

- Two proposed indoor athletic complexes,
- Provision of middle-school sized gyms at elementary schools.
- New multi-purpose fields (approximately 20 are proposed) as well as facility lighting, synthetic turf, and irrigation/drainage projects. Lighting allows fields to be used at night, and synthetic turf allows play when natural turf cannot sustain high levels of use. Irrigation and drainage projects also increase supply and create better playing surfaces.
- Approximately nine new baseball/softball diamonds. Facility lighting projects will also help increase supply.
- A new boat ramp in the South planning area, line items to site and develop additional boat ramps, and the Water Access Program, which includes the evaluation of existing waterfront parks to provide public access and parking for fishing and car top boating.
- Continued development of the County's trail system, including the Broadneck Trail, South Shore Trail, and the WB&A Trail.

### *b. Secondary Needs*

The secondary identified countywide needs are for:

- Indoor swimming;
- Dog parks;
- Picnic pavilions;
- Fishing from piers.

The facility development program proposes to meet these needs through:

- An aquatics center in the Western Planning Area
- Renovation of the Truxtun Park outdoor pool in the City of Annapolis.
- Dog parks at existing and new parks based on demand. The largest demand is in the Northern Planning area.
- Picnic pavilions at new and rehabilitated parks as opportunities arise. The greatest need is in the Northern and Western Planning areas.
- Exploration of enhanced fishing opportunities at Stoney Creek Park, Solley Cove Park, and Spriggs Farm Park.

## **6. Funding**

The overall program has an estimated cost of approximately \$426 million. Over the 15 year period to 2031, the total program cost averages \$28.4 million per year; however, the intent of the LPPRP capital program is to list all the desired projects in one place for use in developing future annual capital budget and CIPs. Table III-14 therefore contains more projects than will likely be completed through 2031. Over time, as priorities change, projects may move from the short range to the medium or long range or vice versa.

## **D. Agricultural Land Preservation**

Anne Arundel County has been an agricultural community for over 350 years. Agriculture continues to be an important component of the local economy, a key element of the landscape, and a defining aspect of Anne Arundel life, especially in South County. In 2012 the Census of Agriculture counted a little over 28,100 acres of land in farms in Anne Arundel County, down 4 percent from 29,200 acres in 2007. The number of farms increased from 377 to 381 in 2012.

Leading crops in terms of acreage are hay, corn and soybeans. In terms of market value of production, nursery, greenhouse products, flowers and sod is the leading agricultural product, accounting for \$9.3 million of the \$19.7 million countywide production value.

The County has a goal to permanently preserve 20,000 acres of farm and productive forest land. As of December 2012, a total of 12,977 acres had been permanently preserved through the County's Agricultural and Woodland Preservation Program, the Maryland Agricultural Land Preservation Foundation (MALPF), and the State's Rural Legacy (RL) Program.

Most of the remaining agricultural lands as well as the land the County has preserved are in a relatively contiguous block in South County that lends itself to further preservation efforts. The County has a solid base of farmers and other landowners committed to preserving much of what remains of the County's agricultural and rural landscape.

The 2017 LPPRP discusses the extent to which progress has been made toward achievement of the agricultural land preservation program recommendations in the 2013 LPPRP. With respect to agricultural land preservation, the 2017 LPPRP notes that the County has made progress towards its 20,000 acre goal, adding nearly 1,000 acres of permanently protected agricultural land since 2011 (the year of measurement for the 2013 LPPRP).

The pool of farmland in the County has continued to decline, albeit less rapidly than in previous LPPRP cycles. This raises the question of whether the 20,000-acre goal remains achievable. The 2013 LPPRP conducted three analyses to address this question, including: investigating the character of unprotected land in the PPA; calculating land available for preservation in County's Rural Agricultural (RA) zoning district outside the PPA; and examine the pace of development in the County's rural area.

Based on a review of the 2013 LPPRP analyses and in light of changes since then, this 2017 LPPRP affirms the previous document's conclusion that the 20,000-acre preservation goal for remains valid, based on the amount of land already preserved, the availability of additional land suitable for protection, and the "de facto preserved" status of considerable acreage (agricultural parcels too small to qualify for MALPF or RL easements, but where no further development is possible under County zoning).

The County continues to strengthen consideration of agricultural economic development and marketing (a recommendation from the 2006 LPPRP), largely through the Anne Arundel Economic Development Corporation (AAEDC). Managing and promoting agricultural and environmental programs are part of the AAEDC mission to serve business needs and to increase the County's economic base through job growth and investment.

With respect to adopting revised program regulations for the Agricultural and Woodland Preservation Program, the LPPRP notes that the current regulations date to 1999, and that updated regulations would enable the County to correct outdated code references and to put in place policies that have been discussed over the years or were recommended in the GDP.

## E. Natural Resources Conservation

Natural resource lands contain forests, wetlands, floodplains, shorelines, streams, stream buffers, and other sensitive natural features.

### 1. Land Conservation Framework

The GDP, together with the 2002 Greenways Master Plan and the 16 Small Area Plans (SAPs) adopted as amendments to the GDP, establish the countywide framework and foundation for integrating natural resources conservation and land use. This framework has five basic elements, as described below.

#### *a. Direct Development to Designated Growth Areas*

These are the County's Priority Funding Areas, with special focus on Town Center Growth Management Areas located in Glen Burnie, Odenton, and Parole.

#### *b. Designate Areas for Conservation*

Anne Arundel County has four designated conservation areas for land preservation:

- Greenways from the County's Greenways Master Plan;
- Portions of the County's open space zoning district that are not in the Greenways network;
- The Priority Preservation Area (PPA);<sup>1</sup> and
- The Resource Conservation Area portions of the Chesapeake Bay Critical Area.

These areas overlap in ways that reinforce natural resource preservation goals. For example, much of the adopted Greenways is also zoned Open Space, and the Tier 4 areas are also within the Priority Preservation Area. Combined, the designated conservation areas

account for approximately 117,200 acres, or 44 percent of the County's land area. Development is not completely precluded in these conservation areas. Based on 2014 land cover data, approximately 21,700 acres (18.5 percent) within the designated conservation areas are developed. The County's designated conservation areas are generally consistent with the State's GreenPrint conservation priorities.

Within the designated conservation areas, approximately 47,600 acres of natural resource land in Anne Arundel County are currently protected by ownership (federal, state, or local), easement, open space zoning, or bog protection zoning. This acreage comprises 18 percent of the County's land area. The Recreation and Open Space Inventory (see Appendix A) includes approximately 25,400 acres of natural resource land under federal, state and local government ownership. Approximately 4,000 acres are protected by easements held by the Maryland Environmental Trust or Maryland Historic Trust. Six local land trusts have protected about 3,555 acres in the County, primarily by easements co-held with MET.

#### *c. Greenway Protection*

The County adopted a Greenways Master Plan in 2002 that mapped a network covering approximately 72,400 acres, or 27 percent of the County's total land area. As of 2016 approximately 48,587 acres, or 67 percent, of the network was protected, as compared to 62 percent protected in 2009.

#### *d. Watershed Management*

The County has done an extensive amount of watershed planning especially in the Patuxent, South, and Severn River watersheds.

The Watershed Protection and Restoration Program within the Department of Public Works:

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<sup>1</sup> The PPA was established in the 2009 GDP, and totals approximately 7,000 acres.

- Administers the County’s National Pollutant Discharge Elimination System (NPDES)—Municipal Separate Storm Sewer System (MS4) permit, the Town Center Surface Water Monitoring Program, and the County’s Biological Monitoring Program.
- Uses a watershed-based approach to restoring degraded stream systems, to improve stream and wetland function, water quality, aquatic and riparian habitat. The program focuses on three key areas to meet State and Federal-mandated pollutant load reductions requirements: Stormwater Management Facility Retrofits; Storm Drain Outfall Repairs; and Stream and Wetland Restoration.
- Performs water quality monitoring; creates impervious and land cover datasets and other assessment data.

Information is compiled and housed in the GIS interfaced Watershed Management Tool (WMT).

#### *e. Regulatory Protection*

These include floodplain management, grading & sediment control, stormwater management, zoning regulations, Critical Area regulations, and subdivision and development regulations.

The Open Space zoning district covers approximately 37,000 acres, almost 14 percent of the County. Limited land uses are permitted in the Open Space district, including farming, for example, but excluding new residential development.

The Critical Area’s Resource Conservation Area (RCA) is extensive in Anne Arundel County, covering approximately 21,900 acres. Approximately 11,320 acres, 52 percent of the RCA in Anne Arundel County,<sup>2</sup> is currently

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<sup>2</sup> Parks, resource lands, agricultural easements, open space zoning; MET and MHT easements; and bog overlay zoning district – merged to avoid double counting.

protected from development by ownership, easement, or zoning. An important aspect of the County’s Critical Area Program is providing natural parks that give opportunities for people to interact with the environment without disturbing natural processes.

## **2. Special programs**

**Patuxent River Policy Plan:** The County is actively involved in watershed planning efforts for the Patuxent River. These efforts involve seven counties and many state and federal agencies, overseen by the Patuxent River Commission.

**The Patuxent River Greenway** is partially complete, and will eventually connect land in portions of seven Maryland counties. The greenway will connect a variety of environmentally sensitive areas.

**The Severn River Commission**, a quasi-governmental organization created by Anne Arundel County and comprised of citizens appointed by the local governments, which acts as an advisory body to state and local government on environmental matters within the Severn River Watershed.

**Anne Arundel County’s Forestry Program** (housed within the Department of Inspections and Permits) administers the reforestation and afforestation requirements of the Critical Area Program, and the Maryland Forest Conservation Act. A component of this program is the coordination of voluntary reforestation projects with landowners and community associations.

**The County’s Emergent (Marsh) Grass Re-Vegetation Program** provides wetland plants to communities and individuals for shoreline stabilization, beautification, habitat enhancement, and water quality improvement.

**Invasive Species Management:** The Division of Natural and Cultural Resources is the Departmental lead on invasive species management, in partnership with other County

agencies. The division's current focus is on a multi-year effort to eradicate non-native phragmites, a perennial, aggressive wetland grass that outcompetes native plants and displaces native animals. This LPPRP retains the 2013 plan's recommendation that Anne Arundel County develop a comprehensive management plan to address NNI.

### **3. County Funding**

The County's Capital Budget and Program contains two primary natural resource land-related projects and programs:

- Greenways, Park Land & Open Space (P400200): a \$2.1 million appropriation in

FY 2017 and approximately \$1.3 million per year for FY 2018 to FY 2022. The County uses this fund to acquire land for greenways, protecting sensitive natural resources, providing additions to existing parks or trails and/or preservation needs.

- Shoreline erosion control for waterfront parks (P468700): approximately \$830,000 for FY 2017 and an average of \$660,000 per year from Fiscal Years 2018-2022.

Funding for natural resources land conservation comes from a variety of sources, including County bonds, general funds, Program Open Space, state and federal grants, and developer contributions.

# CHAPTER I: INTRODUCTION

This chapter describes the purpose and context for preparing the Land Preservation, Parks and Recreation Plan (LPPRP), its objectives and legal framework.

## A. Purpose of the Plan

The State of Maryland requires that counties update Land Preservation, Parks and Recreation Plans (LPPRPs) every five years. The County's updated LPPRP must be adopted by the County and submitted to the Department of Natural Resources (DNR) and the Maryland Department of Planning (MDP) by July 1, 2017, at least 18 months prior to completion of the statewide Maryland Land Preservation and Recreation Plan in early 2019.

LPPRPs support the State's 12 visions for planning in Maryland (see Chapter II) and also qualify local governments for State Program Open Space (POS) grants and other programs related to the plan's objectives for three land resource elements:

- Recreation and parks;
- Agricultural land preservation; and
- Natural resource conservation.

To achieve these purposes, this 2017 LPPRP:

- Describes progress in development of parks and recreation facilities, preservation of agricultural land and conservation of natural resources since the 2013 LPPRP;
- Identifies needs and priorities of current and future County residents for recreation;
- Evaluates State and County goals and objectives for the three land resource elements;
- Sets policy to guide decision-making related to recreation and land preservation during the planning horizon for this plan, 2018 to 2035, and beyond;

- Recommends changes to policies, plans and funding strategies to better implement goals; and
- Ensures that public investment in land preservation and recreation supports the County's General Development Plan, State planning policy, and State and local programs that influence land use and development.

Due to changing state priorities, the purpose of statewide and local LPPRPs has evolved over the years. This 2017 LPPRP has been developed in accordance with the final 2017 guidelines issued in December 2015 by MDP and DNR.

## B. Preparation of the Plan

Anne Arundel County government is responsible for the preparation of the LPPRP. The effort involved coordination between several County departments and offices. The Department of Recreation and Parks was responsible for overall coordination and had primary responsibility for Chapters III and IV.

The Office of Planning and Zoning provided input for the entire plan and had primary responsibility for Chapter V, with assistance from the Department of Public Works, Division of Watershed Ecosystem and Restoration Services. The Department of Recreation and Parks Geographic Information Systems (GIS) personnel provided mapping support.

The following agencies and organizations also contributed to the preparation of the plan:

- Recreation & Parks Advisory Board
- Planning Advisory Board;
- Anne Arundel County Economic Development Corporation (AAEDC);
- Bicycle Advisory Commission;
- Water Access Commission;

- The City of Annapolis and the Town of Highland Beach; and
- Sports Council.

### **C. The LPPRP's Relationship to the Comprehensive Planning Process**

This LPPRP is one of a series of companion plans, regulations, and guidance documents that form Anne Arundel County's planning program.

Chief among these documents is the 2009 Anne Arundel County General Development Plan<sup>3</sup> (GDP) which serves as the core of the County's land use planning program by establishing the overall policy framework for growth and development in the County. The other documents are described in the introduction to the GDP and listed in the County Code at § 18-2-103. Some of these are directly related to the LPPRP:

- **Small Area Plans:** 16 community-based plans that were prepared between 1998 and 2004 to refine and help implement the goals and recommendations of the 1997 GDP.
- **Sector Plans:** plans that provide guidance for growth and development in specific geographic areas; these include the Odenton Town Center Master Plan (updated in 2016) and the Parole Urban Design Concept Plan.
- **Functional Master Plans:** plans that focus on a specific function of County government. Functional plans directly related to the LPPRP are the 2013 Pedestrian and Bicycle Master Plan, 2002 Greenways Master Plan, and the 2001 Annapolis, London Town and South County Heritage Area Management Plan.

Upon adoption by the Anne Arundel County Council, this LPPRP will replace the 2013 LPPRP.

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<sup>3</sup> Anne Arundel calls its Comprehensive Plan the General Development Plan.

### **D. Public Participation**

Public participation has been a critical component of each five-year LPPRP cycle. The Department of Recreation and Parks has a long history of engaging the public in discussions relevant to the LPPRP specifically, as well as discussions of issues relevant to the LPPRP in general (i.e., recreation and park demands, facility conditions, as well as agricultural and natural resource preservation programs, funding and techniques, among others).

As a result of this ongoing dialogue with the community, as well as the short gap since adoption of the previous (2013) LPPRP, the County felt that the input garnered from the public meetings held for the 2013 LPPRP remained largely valid, and that a new round of public meetings prior to the Draft LPPRP would not be an efficient use of staff resources.

Instead, the County used a number of other methods to obtain public input on recreation and land preservation needs, and to update information garnered from previous and ongoing public meetings and other interactions. Public outreach methods used in this LPPRP included an online survey, meetings with committees having a particular interest in the plan, and public meetings with elected and appointed County officials—including formal public input at and subsequent to these meetings. These methods are described in more detail below.

#### **1. Survey**

The Director of Recreation and Parks initiated an internet-based opinion survey for the LPPRP in December 2016, with a closing date of January 31, 2017. To publicize the survey, the County placed advertisements in the Annapolis Capital and Maryland Gazette newspapers on nine days; posted notifications on County Facebook (6,857 followers), Twitter (2,859 followers), Instagram (310 followers), Pinterest (132 followers), and YouTube (more than 36,000 views) feeds; and

sent a notification to more than 6,700 recipients of the County's weekly electronic newsletter.

Over 2,100 responses (from self-selected respondents) were received, providing valuable input for this LPPRP.<sup>4</sup> A summary of the survey can be found in Chapter III.

## **2. Focus Group Meetings**

Department of Recreation and Parks staff also held focus group meetings with representatives from the Water Access Commission, Bicycle Advisory Commission, and Sports Council in early 2017. The LPPRP was subsequently discussed during the March 20, 2017 meeting of the Bicycle Advisory Commission.

## **3. Public Engagement on Related Efforts**

The County has a well-established framework for soliciting and incorporating public input for efforts related to topics addressed in this LPPRP.

For example, County staff from the Departments of Planning and Zoning, and Recreation and Parks held a series of three public meetings in July 2017 as part of the update to its 2002 Green Infrastructure Master Plan. The objectives of the Green Infrastructure Plan Update are to broaden the greenway network and identify potential links between environmental ecosystems, active and passive recreational sites and corridors, scenic areas, and historic and cultural resources. Input from the Green Infrastructure Plan Update feeds into the LPPRP update, and vice-versa.

## **4. Formal Public Review and Meetings**

In October 2017, after incorporating comments from the State Clearinghouse review, the County published the LPPRP on its website for public review, and advertised the availability of the LPPRP via newspaper, email, and the other sources described in Section D.1.

Public comments were solicited through January 2018 (far exceeding the County's required 30-day review period). Notable recommendations from public comments (provided in Appendix B) include recommendations for ice rinks, indoor and outdoor tennis courts, water access including adaptive boating, track and field facilities and swimming pools.

The LPPRP was presented to the Anne Arundel County Planning Advisory Board (PAB) at public meetings on November 13, 2017. The PAB approved the LPPRP on February 23, 2018. On June 4, 2018, Council Bill No. 58-18 was introduced to the County Council of Anne Arundel County. The purpose of this bill was to repeal the 2013 Land Preservation Parks and Recreation Plan and adopt the 2017 Land Preservation Parks and Recreation Plan. A public hearing was held on July 2, 2018; a second public hearing on the amended bill was held on July 16, 2018. A third public hearing was held on September 4, 2018, and the amended bill to adopt the 2017 Land Preservation Parks and Recreation Plan was approved.

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<sup>4</sup> The survey, which used the SurveyMonkey online service, informs the LPPRP, but was not intended to be a statistically valid sample of the County's population.

## CHAPTER II FRAMEWORK

### A. Physical Characteristics

#### 1. Location

Anne Arundel County comprises approximately 415 square miles (265,000 acres) in central Maryland. The County lies immediately west of the Chesapeake Bay, south of the City of Baltimore, and about 15 miles east of Washington DC. Neighboring counties are Baltimore County to the north, Howard County to the northwest, Prince George's County immediately west and Calvert County to the south (Map II-1).

Diverse landmarks and natural features form the boundaries between Anne Arundel County and neighboring counties. The Patapsco River and the Chesapeake Bay form the County's northern and eastern boundaries. The Patuxent River extends for about 30 miles from Laurel to Calvert County and serves as the western boundary with Prince George's County. A CSX rail line extends along the northwest, separating Anne Arundel County from Howard and Baltimore Counties. To the south, the Anne Arundel-Calvert County line extends across rolling farmland from the Patuxent River to the Chesapeake Bay.

The County has approximately 530 linear miles of tidal shoreline and many thousands of acres of rolling countryside and farmland. Industrial centers and the MD 295/I-95 (Baltimore-Washington) corridor extend along the Howard County line. Picturesque waterfront communities of the Severn River and Chesapeake Bay are scattered along the eastern side of the County.

The County's 45 miles of scenic frontage along the Chesapeake Bay offer dramatic vistas and recreational opportunities. Residents and visitors enjoy the Bay area for its seafood, boating, maritime industries and water sports, as well as

its cultural, historic, and scenic values. These resources comprise some of the unique characteristics of the County and are assets in sustaining a high quality of life and economic diversity.

#### 2. Land Cover

The County's Watershed Protection and Restoration Services Division within the Department of Public Works maintains a detailed countywide land cover database and associated mapping. The most recent data (based on 2014 satellite images) indicate that 54 percent of the County land was resource lands and 46 percent was developed lands - mainly residential. Approximately 35 percent of the County was forest (Table II-I and Map II-2).

Based on Land Use/Land Cover (LULC) data provided by MDP, resource land acreage declined from 62 percent of the County's land area in 1997 to 49 percent in 2010. Anne Arundel County's land cover data (Table II-1) and the State's LULC data use different imagery sources, land cover categories, and interpretation methods. As a result, these two data sets cannot be directly compared on an acre-for-acre basis.

**Table II-1      Land Cover, 2014**

|                                  | Acres          | Percent of Total |
|----------------------------------|----------------|------------------|
| <b>Resource Lands</b>            |                |                  |
| Forest                           | 91,813         | 35%              |
| Open Space                       | 15,958         | 6%               |
| Pasture/Hay                      | 8,821          | 3%               |
| Row Crops                        | 10,978         | 4%               |
| Wetland                          | 12,050         | 5%               |
| Water                            | 2,787          | 1%               |
| <i>Subtotal, Resource Lands</i>  | <i>142,407</i> | <i>54%</i>       |
| <b>Developed Lands</b>           |                |                  |
| Residential                      | 90,383         | 34%              |
| Non-residential                  | 32,428         | 12%              |
| <i>Subtotal, Developed Lands</i> | <i>122,811</i> | <i>46%</i>       |
| <b>Total, All Land</b>           | <b>265,218</b> | <b>100%</b>      |

*Source: Anne Arundel County*

For example, acreage considered “rural residential” by MDP may be considered “Open Space” (a category not available in the State analysis) or “forest” in the County’s data.

These discrepancies notwithstanding, the general trend in the last 20 years has been an increase in developed land and a decrease in forested land. As reported in the 2013 LPPRP, approximately 33,000 acres of resource land (almost entirely agricultural and forest land) were developed between 1997 and 2010, while residential land cover increased by 33 percent and non-residential land cover increased by 32 percent.

### 3. Natural Resources

Environmentally sensitive areas occur throughout Anne Arundel County including stream systems, flood plains, wetlands and the Chesapeake Bay Critical Area.

#### a. Topography

Anne Arundel County lies in the physiographic province known as the Atlantic Coastal Plain. Elevations in the County range from sea level along the shore of the Chesapeake Bay to more than 300 feet in the northwestern part of the county near Laurel.

Nearly level or gently sloping areas occupy large areas north of the Severn and Magothy Rivers, on the Deale-Shadyside flats and in the southwestern part of the County on the Patuxent River. The steepest areas are in a north-south section that runs through the central part of the County, where many small streams have cut deep V-shaped valleys into the soft unconsolidated materials of the coastal plain. Broad alluvial terraces border large streams and rivers that flow into the Chesapeake Bay.

#### b. Watersheds and Streams

The County is laced by a network of streams that carry runoff from different land uses to the waters of its many creeks and rivers. Because of its topography, with an extensive shoreline and

numerous peninsulas, the County’s streams tend to be short, first- and second-order, slow moving, low-gradient waterways. All of Anne Arundel County’s streams originate within the County except for the Patapsco and the Little Patuxent Rivers. There are 12 major watersheds in the County, which are part of three larger tributary watersheds in the State: Patapsco/ Back River, Lower Western Shore and Patuxent (Table II-3 and Maps II-3, II-4).

**Table II-2 Watersheds**

| <b>Watershed</b>   | <b>Acres</b>   |
|--------------------|----------------|
| Bodkin Creek       | 5,034          |
| Herring Bay        | 14,239         |
| Little Patuxent    | 27,976         |
| Lower Patuxent     | 3,181          |
| Magothy River      | 22,804         |
| Middle Patuxent    | 26,510         |
| Patapsco Non-Tidal | 15,269         |
| Patapsco Tidal     | 30,847         |
| Rhode River        | 8,783          |
| Severn River       | 44,203         |
| South River        | 36,185         |
| Upper Patuxent     | 22,417         |
| West River         | 7,809          |
| <b>Total</b>       | <b>265,257</b> |

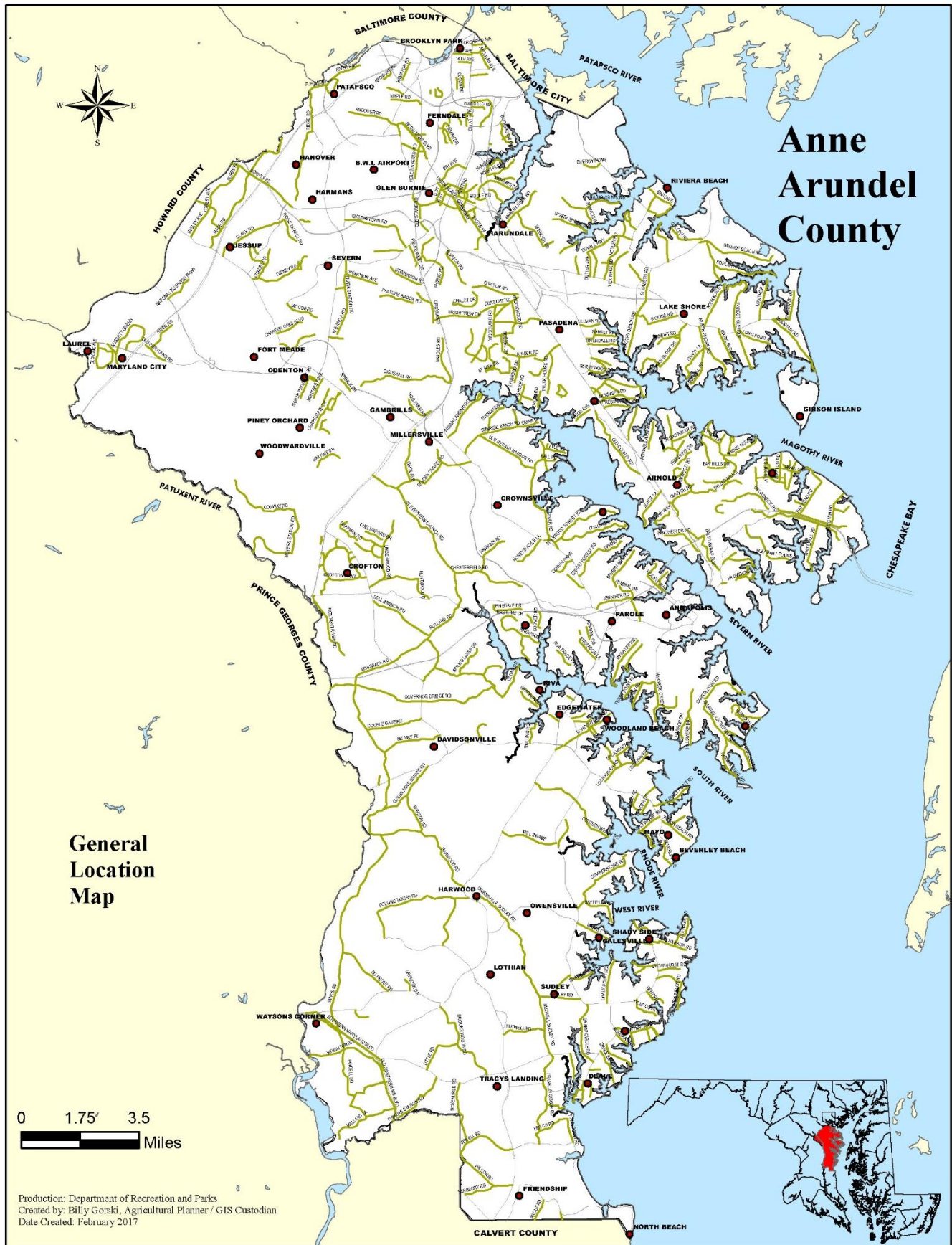
*Source: AACO Major Watersheds GIS layer, 2011*

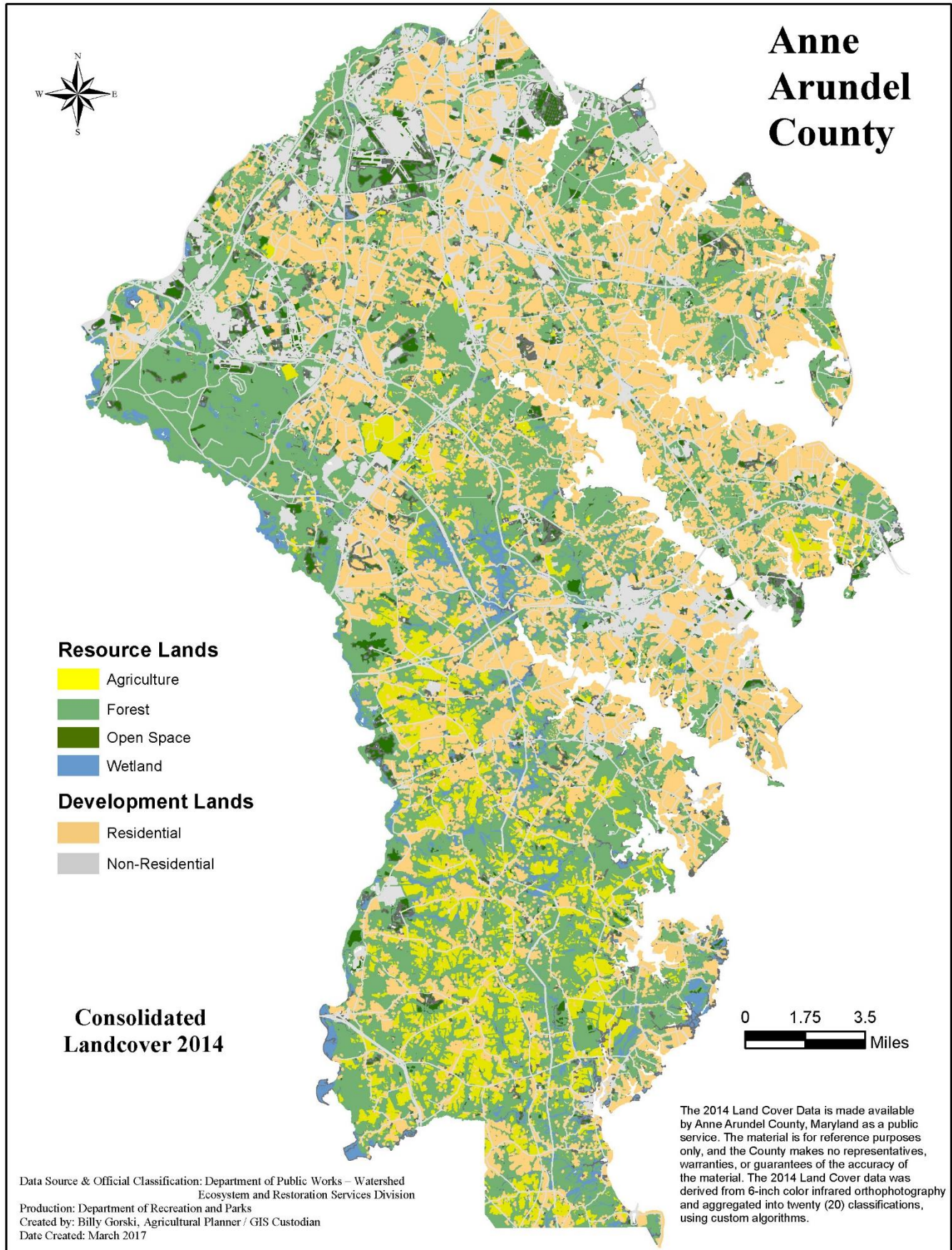
*Note: Total does not match Table II-1 due to differences in data sources and resolutions.*

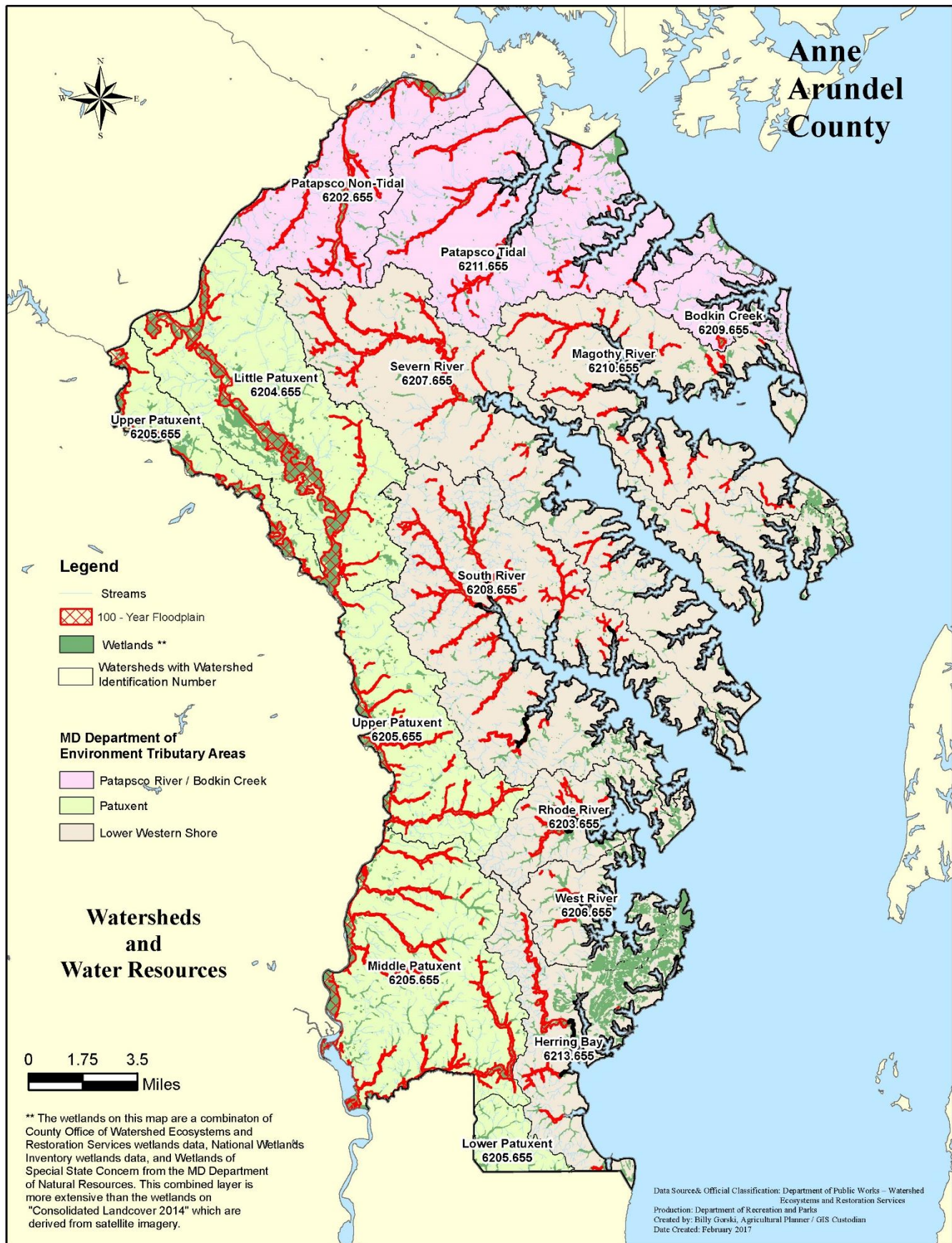
The largest watersheds entirely within the County are the Severn River and South River watersheds. The upper reaches of many streams in older, densely developed areas are enclosed in pipes or confined to man-made channels. However, the County is fortunate in that the majority of its streams and their riparian buffers remain intact. Stream buffers are important in controlling nutrient and sediment runoff, maintaining stream temperatures, and providing aquatic and wildlife habitat. The Jabez Branch in the Severn River watershed was reported in 2006 to be home to the only known naturally reproducing brook trout population in the Maryland coastal plain<sup>5</sup>.

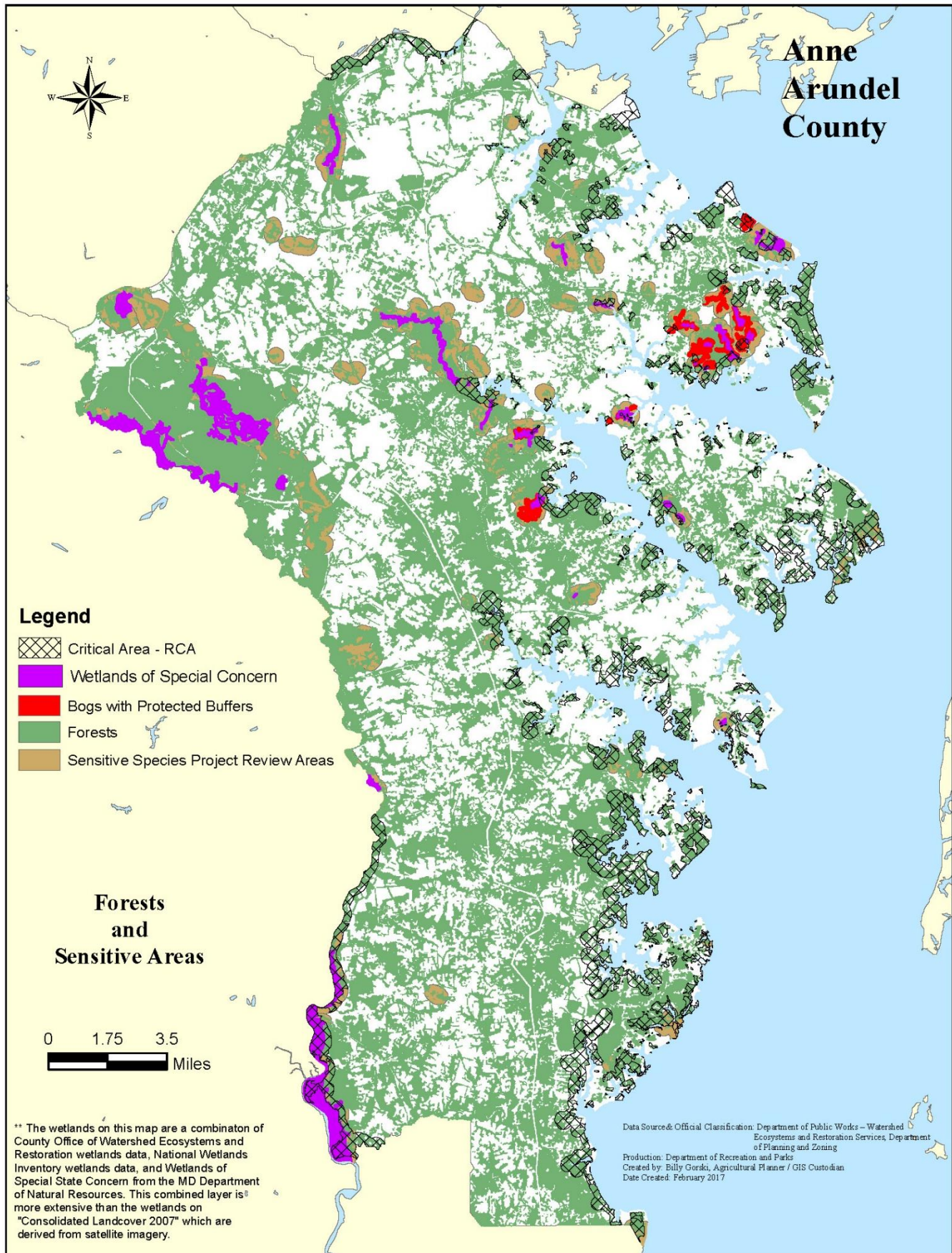
<sup>5</sup> [2006 Maryland Brook Trout Fisheries Management Plan](#), DNR Inland Fisheries Management Division

Map II-1 Location









### *c. Floodplains*

Floodplains play a vital role in absorbing increased volumes of runoff from developed areas. If constricted or reduced, their capacity to absorb stormwater runoff decreases, resulting in increased potential for flooding of property and roadways. It is therefore essential that floodplains be maintained in their natural state, not only to protect stream quality and habitat, but to enhance public safety. Figure 5–2 in the GDP shows generalized 100-year floodplains and FEMA flood hazard zones.

### *d. Forest Land*

Forested land is an important component of the County’s landscape, comprising 35 percent of the County’s land cover in 2014 (Table II-1). Large contiguous forested areas are located along the Patuxent River, especially in the Patuxent Research Refuge; in the South River watershed; and in the northern section of the County near Marley Neck (Map II-2).

### *e. Tidal and Non-Tidal Wetlands*

Wetlands comprise approximately 12,000 acres, or 5 percent of the County’s land cover, and bodies of water comprise another 2,800 acres (Table II-1).

Due to the extensive length of its shoreline, the County contains considerable areas of tidal wetlands (Map II-3). Tidal wetlands are an important component in the health of the Chesapeake Bay, are important to commercial and recreational fisheries, and provide numerous environmental benefits. Wetlands filter sediment and nutrients from upland runoff, control flooding and shoreline erosion, provide nurseries and valuable habitat for fish and aquatic life and absorb nutrients from the water column. Wetlands are protected through the implementation and enforcement of regulations by the Maryland Department of the

Environment and by the US Army Corps of Engineers.

Over one-half of all wetlands in the County are considered upland or non-tidal wetlands. Certain wetlands with rare, threatened, endangered species or unique habitat receive special attention. The Code of Maryland Regulations (COMAR) identifies these “Wetlands of Special State Concern” and affords them certain protections including a 100 foot buffer from development.

### *f. Bogs*

Bogs form in highly acidic areas of saturated soil and standing water, factors which limit the growth of all but a few highly specialized plants. Because decay is minimal, a layer of peat accumulates beneath the bog vegetation. Many bogs are located in northerly areas, and they are also common in mountainous regions, including western Maryland. Bogs on the coastal plain are uncommon; however, Anne Arundel County has more than any other coastal plain county, both inside and outside the Critical Area (Map II-4).

Bogs are fragile areas, requiring unusually careful protection. Maintenance of stable, moist, and nutrient-poor conditions are basic considerations. Any influx of sediment or reduction of acidity may cause loss of the bog by invasion by common woody plants, and protection of surrounding watershed for some distance is essential to preservation of these unique sites. For this reason, Anne Arundel County has adopted regulations to protect bogs and their drainage areas (see Chapter V).

### *g. Other Environmentally Sensitive Areas*

The Chesapeake Bay Critical Area Program defines the Critical Area as all land and water within 1,000 feet of the landward extension of tidal waters or tidal wetlands and the heads of tide. This Critical Area comprises about 51,300 acres or 19 percent of the County. Map II-4

shows the Resource Conservation Area (RCA) portion of the Critical Area.

Sensitive Species Project Review Areas (SSPRAs) represent the general locations of documented rare, threatened and endangered species listed under Maryland's Nongame and Endangered Species Conservation Act. As of

December 2016, 41 animals and 131 plants in Anne Arundel County are listed under the Act.

The majority of the SSPRAs are in northern Anne Arundel County, either along the Patuxent River or in the Chesapeake Bay Critical Area (Map II-4).

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## **B. Demographic Characteristics**

The 2010 Census reported Anne Arundel County's population at 537,656 (Table II-4). By 2015, the County population was estimated by the Census Bureau to have grown 3.3 percent to 555,280.<sup>6</sup> The county is expected to experience growth of slightly more than 10 percent over the next 20 years, reaching a projected population of 618,200 by 2035 (Table II-4).

The 2013 Land Preservation, Parks and Recreation Plan divided the County into four Recreation Planning Areas—North, South, East and West—based on groups of the sixteen Small Area Plan boundaries. This plan uses the same Planning Areas. Map II-5 shows the boundaries of the four Recreation Planning Areas as well as the Small Areas that make up each one. The Small Area Plans, adopted between 2000 and 2004, were prepared to refine and help implement the goals and recommendations of the 1997 General Development Plan. The Recreation Planning Areas were developed to allow a more detailed analysis of the County's recreation and open space needs within each area.

In 2010 (the most recent detailed information available) the Northern Planning Area was home to approximately 173,000 people, 32 percent of the County's population. The Eastern Planning Area had the second highest population with almost 163,000 residents; the Western Planning Area comprised 27 percent of

the population, with the remaining 10 percent of County residents living in the Southern Planning Area.

Countywide in 2015 the population was very slightly over 50 percent female and very slightly under 50 percent male. The population was 75 percent white, 16 percent Black or African American, 4 percent Asian, and 5 percent other races. The total non-white population increased from 22 percent in 2010 to 25 percent in 2015.

Median household incomes in the County vary considerably. Areas with the highest median household incomes in 2010 were in western Crownsville, northern South County, eastern Crofton and eastern Broadneck. Areas with the lowest median household incomes were central Crownsville, western Odenton, eastern Jessup, Brooklyn Park, and northern Glen Burnie (areas shown on Map II-5).

The County is anticipated to grow by nearly 63,000 people between 2015 and 2035 (Table II-4). The largest shares of growth are projected to take place in the Western and Northern Planning Areas. The lowest increase is projected in the primarily rural Southern Planning Area.

As the County's population grows, its age distribution is projected to change (Table II-5). The major population increase will be in persons age 65 and over. This group is projected to increase by more than 55,000 from 2015-2035, and will comprise 21 percent of the population in 2035, compared to 13 percent in 2015. The 20 to 64 age group will decline in real numbers and as

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<sup>6</sup> U.S. Census Bureau, American Community Survey, 2014.

a proportion of the County population, from 62 percent to 55 percent during this period. The population age 19 and under is projected to increase by more than 9,000 persons, representing a slight decrease from 25 to 24 percent of the County population (Table II-5).

Anne Arundel's shifting age distribution is similar to Maryland as a whole. The state is also expected to experience an increase in the 65+ population from 13 percent of the total population in 2010 to 21 percent in 2035.

**Table II-3 County and Planning Area 2010 Population and 2035 Projections**

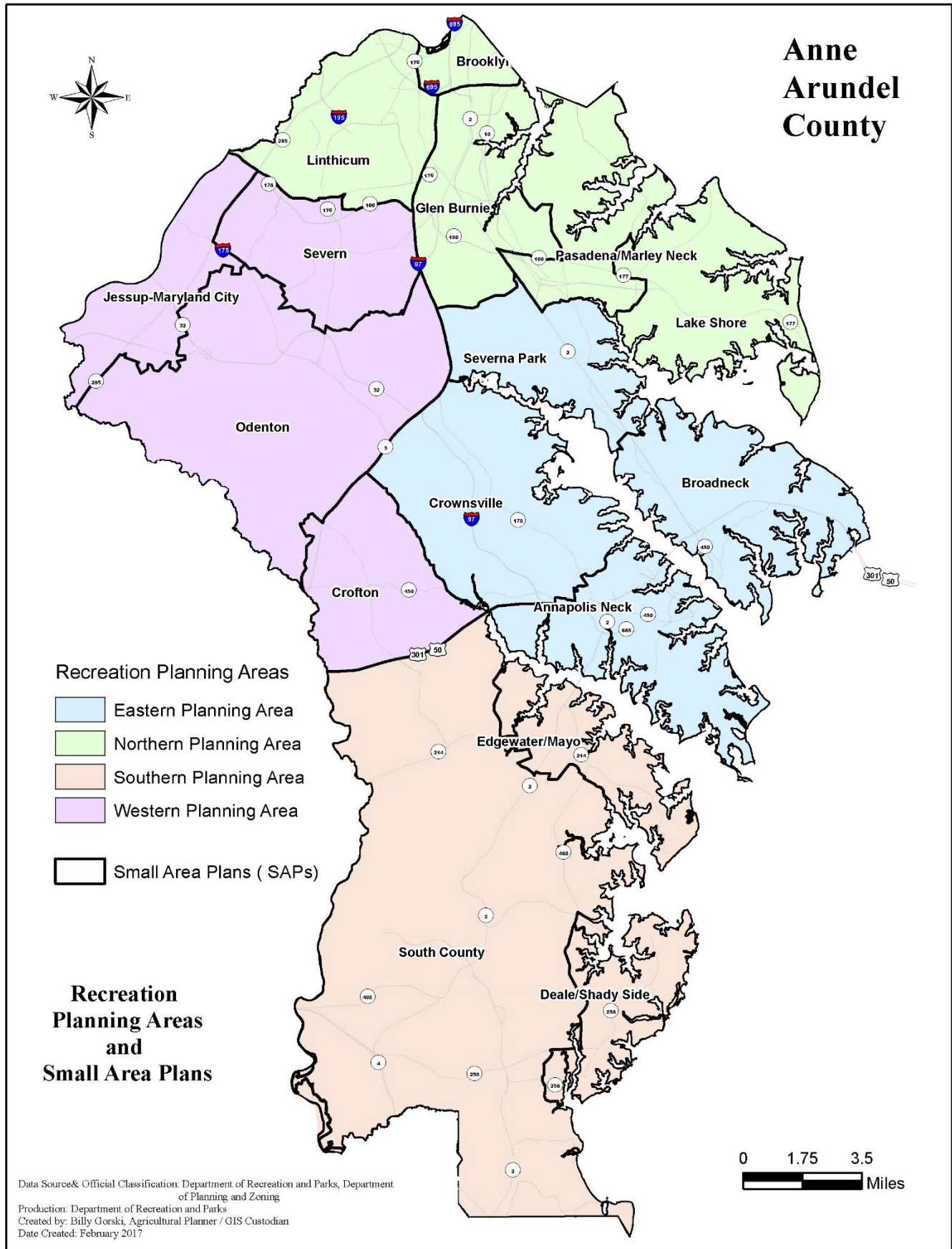
| Planning Area       | 2015 Estimated |                  | 2035 Projected |                  | 2010-35 Projected Change |                            |
|---------------------|----------------|------------------|----------------|------------------|--------------------------|----------------------------|
|                     | Population     | Percent of Total | Population     | Percent of Total | Population               | Share of Countywide Change |
| North               | 179,749        | 32%              | 202,500        | 33%              | 22,751                   | 36%                        |
| South               | 55,953         | 10%              | 60,506         | 10%              | 4,553                    | 7%                         |
| East                | 166,639        | 30%              | 180,500        | 28%              | 13,861                   | 22%                        |
| West                | 152,939        | 28%              | 174,695        | 28%              | 21,756                   | 35%                        |
| <b>Total County</b> | <b>555,280</b> | <b>100%</b>      | <b>618,201</b> | <b>100%</b>      | <b>62,921</b>            | <b>100%</b>                |

Sources: US Census Bureau; Maryland Department of Planning Round 8A Population Projections, March, 2015.

**Table II-4 Population by Age, Anne Arundel County and Maryland**

| Age          | 2015           |                  | 2035           |                  | 2015-2035 Change |                            |
|--------------|----------------|------------------|----------------|------------------|------------------|----------------------------|
|              | Population     | Percent of Total | Population     | Percent of Total | Population       | Share of Countywide Change |
| 0-19         | 139,618        | 25%              | 149,071        | 24%              | 9,453            | 15%                        |
| 20-64        | 343,470        | 62%              | 341,374        | 55%              | (2,096)          | (3)%                       |
| 65+          | 72,192         | 13%              | 127,756        | 21%              | 55,564           | 88%                        |
| <b>Total</b> | <b>555,280</b> | <b>100%</b>      | <b>618,201</b> | <b>100%</b>      | <b>62,921</b>    | <b>100%</b>                |

Source: US Census Bureau, Maryland Department of Planning Round 8A Population Projections, March, 2015.



## C. Comprehensive Plan Framework

### 1. General Planning Strategy and Context

The County's current Comprehensive Plan was adopted in 2009. In Anne Arundel County the comprehensive plan is called the General Development Plan (GDP). The 2009 GDP includes a Land Use Plan to guide future development patterns, a Transportation Plan and a Water Resources Plan that assesses land use impacts on local water resources management. The GDP also proposes a Priority Preservation Area in accordance with new State requirements for agricultural land preservation. The following are the overarching themes of the 2009 GDP that collectively form the County's community vision:

- Balanced growth and sustainability
- Community preservation and enhancement
- Environmental stewardship
- Quality public services

To realize this vision the plan makes several key policy recommendations in different plan chapters with respect to recreation, growth and land preservation, and conservation:

- Encourage infill development and redevelopment opportunities inside the Priority Funding Area. (Chapter 3)
- Focus economic development and business attraction efforts in Town Centers, Mixed Use districts, Revitalization districts, and areas with existing or planned transit access.
- Acquire approximately 3,150 additional acres of land for open space and natural resource land protection by year 2020 (Chapter 3).
- Maintain the Rural Land Use designation and Rural Agricultural (RA) zoning as the primary mechanism for preserving the rural character of South County and other rural areas (Chapter 4).
- Establish an interconnected network of protected woodlands and open space in

accordance with the Greenways Master Plan (Chapter 5).

- Ensure maximum protection of the County's green infrastructure, nontidal wetlands, designated wildlife refuges and other natural resource areas, even in areas designated as mixed use, in town centers or in areas designated for growth (Chapter 5).
- Public facilities should be utilized across multiple agencies to provide increased recreational opportunities (Chapter 6).
- Improve and expand recreational opportunities so that all communities have sufficient access to facilities and programs (Chapter 6).
- Preserve 80 percent of undeveloped land within the Priority Preservation Area through protective easements in order to meet the State's PPA protection goal (Chapter 8).
- Provide an expanded bikeway and sidewalk network. (Chapter 9).

The 2009 GDP Land Use Plan is shown on Map II-6. Higher density residential and most industrial and commercial uses are concentrated in the northern parts of the County and in Odenton, Severn, Maryland City, Crofton and Parole. Rural land use covers much of the Crownsville area and nearly all of South County with the exception of a few communities.

The GDP's goals, policies, and action items are set forth in each of its chapters, and summarized in Chapter 12. The goals, policies, and action items that are relevant to this LPPRP are discussed in detail below and in Chapters III, IV, and V.

Map II-7, which is taken from the GDP, shows the County's three Development Policy Areas, which were defined to better focus growth in areas which utilize existing and planned infrastructure, and preserve existing neighborhoods and the environment. These policy areas are designated in the Land Use Plan as appropriate for a particular range of future

land uses and public facilities. The three Development Policy Areas defined in the GDP are Targeted Growth Areas, Managed Growth Areas, and Rural Areas.

Map II-8, also taken from the GDP shows the County's Priority Funding Areas (PFAs). These existing communities or other locally designated areas where the State and local jurisdictions want to encourage and support economic development and new growth.

## **2. Designated Conservation Areas**

The LPPRP recognizes four designated conservation areas within Anne Arundel County (Map II-9):

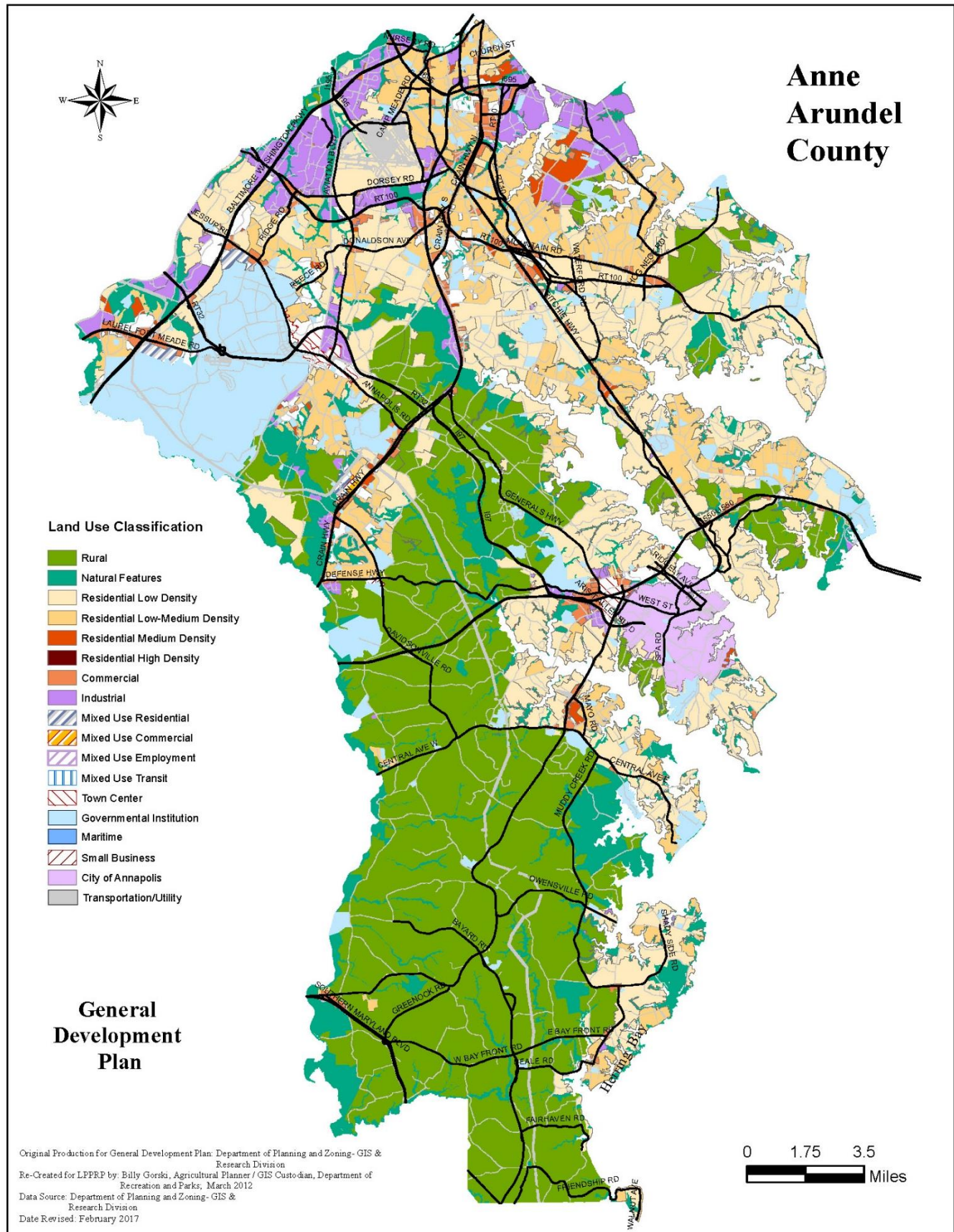
- The Resource Conservation Area portions of the Chesapeake Bay Critical Area.
- The Priority Preservation Area.
- Greenways from the County's Greenways Master Plan.
- Portions of the County's open space zoning district that are not in the Greenways network. Open space zoning is a mapped zoning district in Anne Arundel County

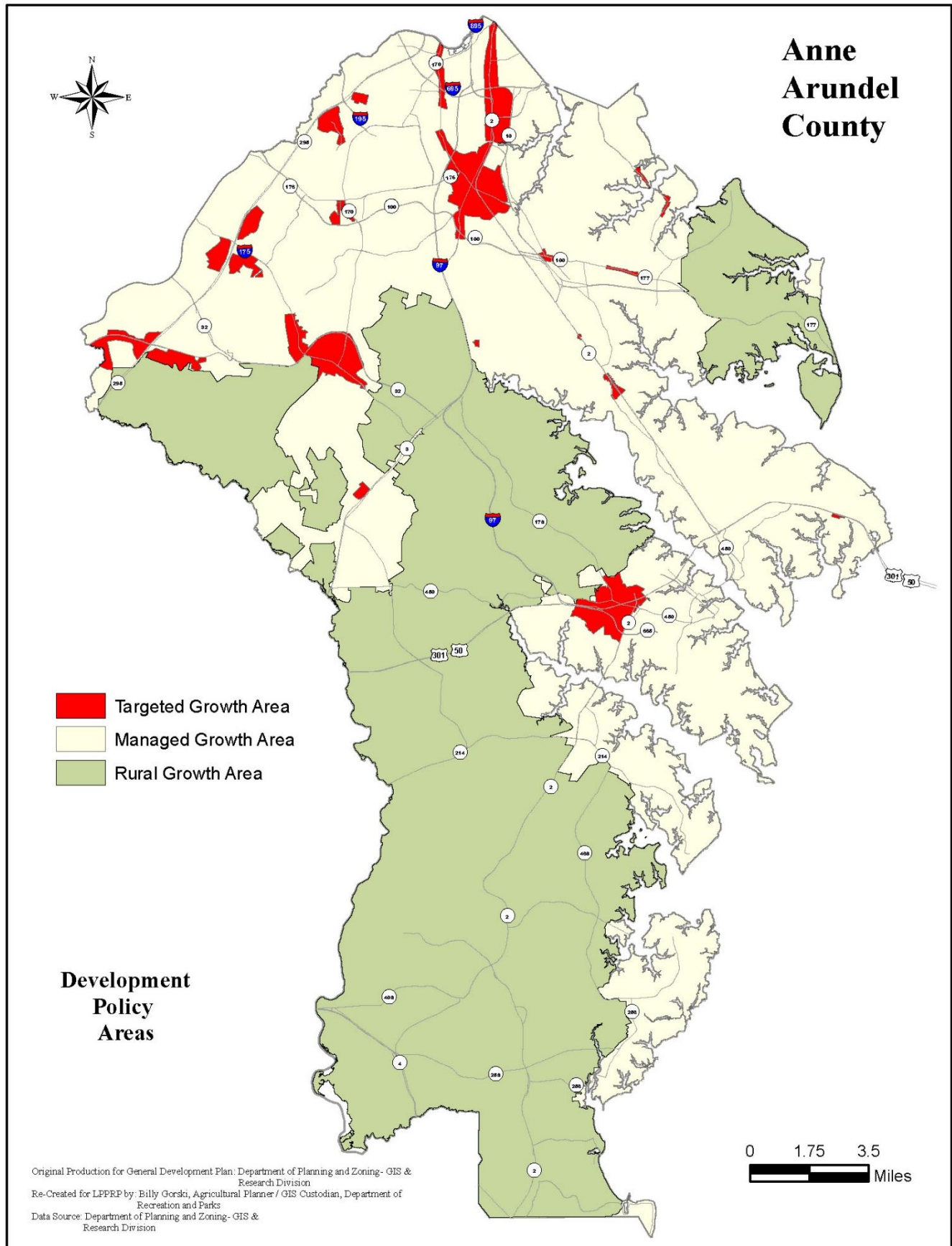
comprising 100-year floodplains, wetlands, parkland, and other open space.

These designated areas overlap in ways that reinforce the conservation goals. For example, much of the adopted Greenways is also zoned Open Space, and the Tier 4 areas are also within the Priority Preservation Area. Map II-9 only shows the areas with Open Space zoning that are not designated in another category.

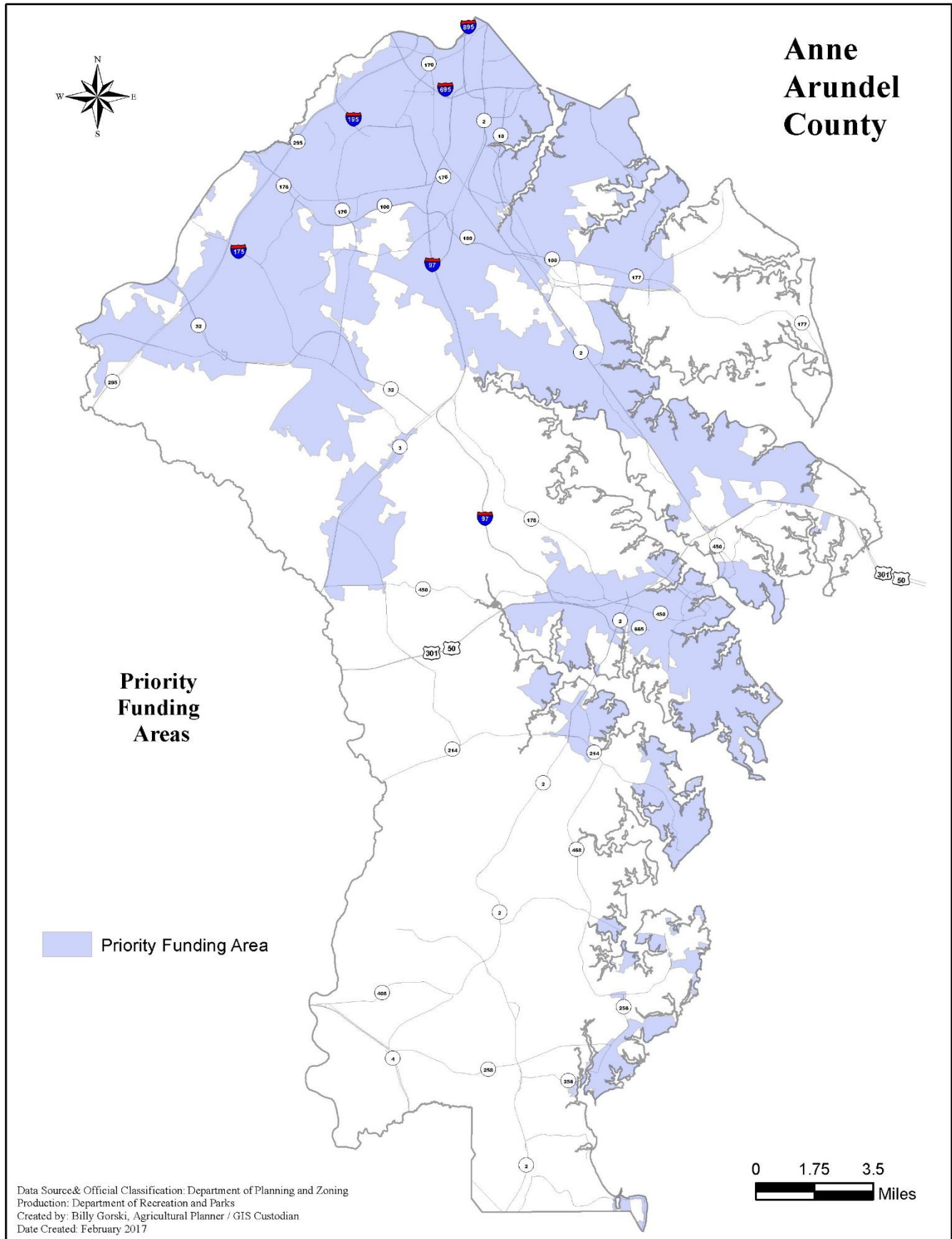
The County's Tier 4 growth area, designated in response to the Maryland's Sustainable Growth and Agricultural Preservation Act of 2012 (see Map II-10 and Chapter IV, Section B.4.a), identifies a large portion of the County where only minor subdivisions (five lots or less) are permitted. Although not a designated "conservation area", the Tier IV designation, along with the RA zoning district reduces the amount of agricultural and natural resource land that could be converted to development.

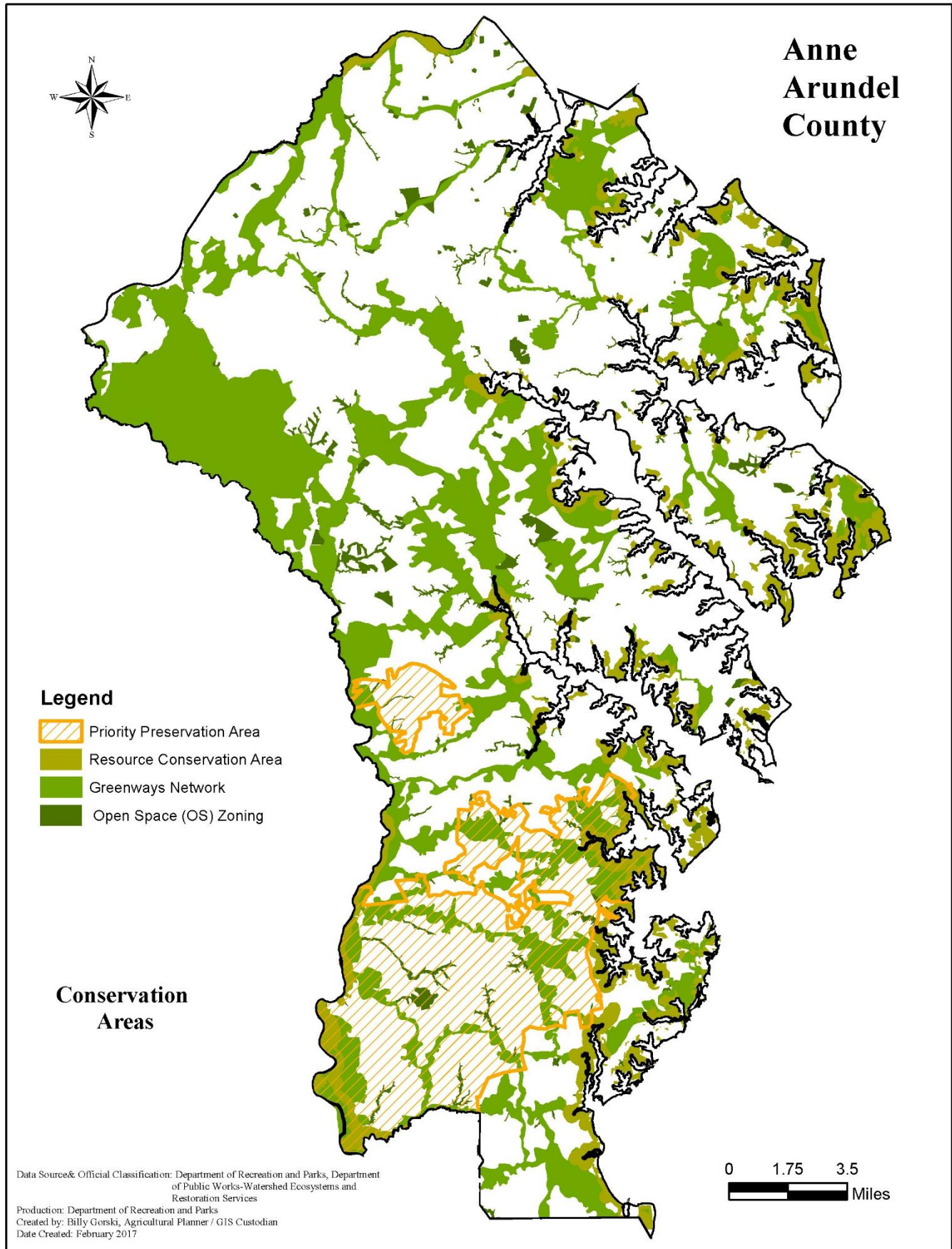
These areas are discussed in more detail in Chapters IV and V.

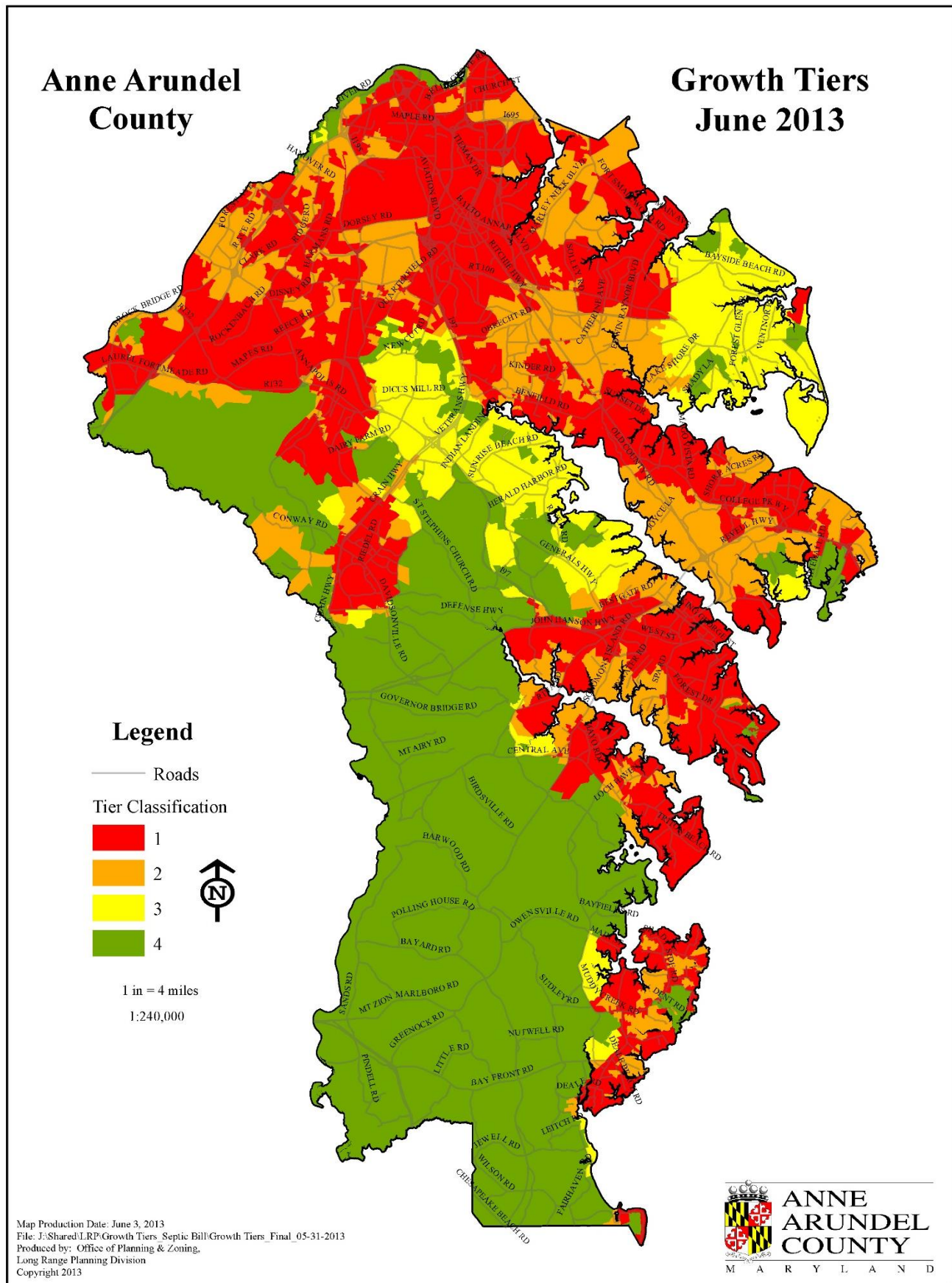




**Map II-8      Priority Funding Areas**







## **D. The LPPRP's Relationship to State Planning**

The LPPRP's goals, objectives, and implementation policies are developed in the context of and support the 12 visions for planning in Maryland adopted by the Maryland General Assembly. These were established as part of Maryland's Smart, Green and Growing initiative and provide a context for growth and

development, land preservation, resource conservation, and parks and recreation planning (see box).

The LPPRP also responds to other state plans, programs and initiatives such as the state LPRP and the PlanMaryland initiative. These are discussed in chapters III, IV, and V.

### **State Planning Visions**

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.

## **E. Implications for Land Preservation and Recreation**

The County's location, physical characteristics, demographics, and comprehensive plan framework have significant implications for land preservation and recreation policies.

- Anne Arundel County is projected to experience sustained population growth, with about 58,000 new residents between 2014 and 2035. Continued growth will result in increasing demand for recreation facilities and an increasing need to conserve contiguous areas of natural and agricultural resources.
- The bulk of the population growth will be in the Western (34 percent) and Northern (37 percent) Recreation Planning Areas, which can be expected to create increased demand for recreation facilities and services.
- Projected changes in the age distribution of the County's population over the next 20 years will result in stable demand for recreation services from the 0-19 age group, possibly decreasing demand from the 20 to 64 age group, and strong and increasing demand from the 65 and over group.
- The themes that make up the vision of the 2009 GDP are balanced growth and sustainability, community preservation and enhancement, environmental stewardship, and quality public services. Parks and recreation, agricultural land preservation and natural resources conservation are essential means to achieve this vision.
- The County's designated conservation areas are largely contiguous in the southern and western parts of the County and provide a good basis for agricultural and natural resource land conservation.
- The Open Space zoning district covers much environmentally sensitive land and is an important element of the County's Greenways Master Plan. Approximately 37,000 acres are zoned open space; almost 14 percent of the County.
- The main concentration of agricultural lands is in the Southern Planning Area. These lands are interspersed with forest lands, requiring a coordinated agricultural and forestland approach to land preservation.

## CHAPTER III RECREATION, PARKS, AND OPEN SPACE

### Introduction

This chapter describes Anne Arundel County's goals and objectives for parks and recreation and evaluates them in the context of State goals, and the future needs and priorities for park and open space acquisition, development, and rehabilitation. The County's goals and priorities are established based on:

- State goals and policies;
- Anne Arundel County's General Development Plan (GDP);
- The mission, objectives, and policies of the Anne Arundel County Department of Recreation and Parks;
- A supply, demand, and needs analysis of recreational facilities and activities based on a local survey, stakeholder input, proximity analysis and state surveys of public recreational interests.

Based on these inputs, this Chapter outlines a program for recreational land acquisition, facility development, and rehabilitation.

Parks and recreation facilities benefit the County in many ways:

- promoting health and wellness;
- providing opportunities for recreation, physical activity, education and relaxation;
- connecting people with nature;
- protecting open space, environmental resources and historic sites; and
- engaging communities in protection of the environment.

A high quality park system improves the County's quality of life and the health of its residents and helps to preserve environmental resources. By making the county a desirable place to live and work, it contributes significantly to the County's economic health.

The National Recreation and Parks Association (NRPA) has developed three "pillars" that reflect these benefits. The three pillars are:

*Health & Wellness:* Leading the nation to improved health and wellness through parks and recreation.

Parks and recreation facilities promote health and wellness in the County's population in many ways: athletic leagues and fitness classes for all ages, trails for walking and biking, places and facilities for casual games and relaxation, classes to develop skills, and many other opportunities.

*Conservation:* Protecting open space, connecting children to nature, and engaging communities in conservation practices.

Anne Arundel County is committed to developing its parks and recreation system in a manner that provides opportunity for people of all ages to enjoy natural resources, and that supports the protection of natural resources. County parks provide access to natural areas, waterways, and coastlines.

The Maryland Partnership for Children in Nature is a public and private partnership begun in 2008 that seeks to provide opportunities for children to play and learn outdoors and promote environmental literacy, in particular within underserved communities. In addition to private organizations, the partnership includes the Maryland Departments of Agriculture, Education, and Natural Resources.

The Partnership was instrumental in helping the State to update its environmental literacy education program (COMAR 13A.04.017) and to pass the first Environmental Literacy Graduation Requirement (COMAR 13A.03.02.03) in the Nation. Since then, the Partnership has supported school systems as they develop and implement their local environmental literacy programs.

The partnership's 2016-17 Action Plan includes objectives to strengthen the partnership between schools, educators, and parks; to increase the number of state and local park visits by students and school groups; and to ensure that parks provide the opportunity for informal play and interaction with natural elements.

The goals and actions supported by this LPPRP support increased access for students and families to natural areas. Many county parks staffs across the state are working with educators to develop ways to support the environmental literacy graduation requirement by increasing access to public lands.

*Social Equity:* Ensuring all people have access to the benefits of local parks and recreation.

The County seeks to provide a network of recreation facilities and parks distributed through the County so that all residents have convenient access. This plan includes an evaluation of the network and identifies areas where access can be improved.

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## A. County and State Goals

This section discusses the interrelationships between the County's and State's goals for recreation and parks.

### 1. County Goals

#### a. 2009 General Development Plan

The 2009 General Development Plan (GDP) provides the policy framework for park and recreation planning. The policies are contained in Chapter 6 of the Plan, which addresses public services including schools, libraries, health care, and public safety services. The GDP has a single overarching goal and two related policies for recreation and facilities:

##### **Goal:**

Provide a diverse range of accessible recreational facilities and programs to serve the needs of all county residents.

##### **Policies:**

- Public facilities should be utilized across multiple agencies to provide increased recreational opportunities.
- Improve and expand recreational opportunities so that all communities have sufficient access to facilities and programs.

#### b. Greenways Master Plan

The *Anne Arundel County Greenways Master Plan* was adopted 2002. The goal of the Greenways Master Plan is to:

*Create an interconnected network of greenways in Anne Arundel County that protects ecologically valuable lands for present and future generations and provides open space, recreational, and transportation benefits and opportunities for people.*

While the Greenways Plan is primarily natural resource-land oriented, this major goal helps further both the County and State's recreation goals. Chapter V of this LPPRP discusses the Greenways Master Plan in greater detail.

#### c. Pedestrian and Bicycle Master Plan

The *Anne Arundel County Pedestrian and Bicycle Master Plan* was finalized in June 2013. The purpose of the plan was to identify improvements which increase the potential for safe walking and bicycling. The 2013 PBMP focused on pedestrian and bicycle improvements which create transportation alternatives within urbanized areas. While primarily focused on on-road bicycle and pedestrian transportation, the plan also addressed off-road trails and connections to parks.

#### d. Department of Recreation and Parks

The mission of the Department of Recreation and Parks (the Department) is to:

- Enrich the lives of our citizens by offering quality active and passive recreational opportunities and accessible youth and adult services while pursuing the preservation and enhancement of our natural, cultural and historic resources;
- Develop and operate regional and community parks throughout the County;
- Expand the County's network of bike trails and citizen access to our waterways; and
- Manage and expand open spaces pursuant to the County's land-use plan.

The Department of Recreation and Parks objectives are established in its Guidelines and Reference Manual:

- Improve quality of life by conserving and enhancing the natural and developed environment for current and future generations.
- Enable Anne Arundel County citizens to attain the maximum physical benefits and social enjoyment through participation in recreational sports.
- Promote the highest ideals and standards of sportsmanship.
- Offer youth sports that ensure maximum opportunities for participation by all team members and provide a positive environment for personal development.
- Provide opportunities for lifelong enjoyment of a physical activity and a recreational outlet for the participants.

*e. The City of Annapolis*

The City of Annapolis Department of Recreation and Park's mission is to:

*Enrich the quality of life for Annapolis area residents and advocate for healthy, active living by offering quality recreational programs and community facilities within an array of parks and natural open spaces.*

The goals for parks and recreation for the City of Annapolis are embodied in the 2009 Annapolis Comprehensive Plan. The Plan has three policies in Chapter 6, Parks that guide the city's parks program:

- Enhance existing parks and facilities, with the objective of supporting structured and informal recreation, protecting the natural environment, and encouraging human health and fitness.
- Complete the network of pedestrian and bicycle pathways.

- Expansion of the parks system should be undertaken selectively and strategically, with the objective of taking advantage of rare opportunities, providing parks and recreation services to underserved areas, allowing public access to the waterfront, and furthering environmental goals.

These policies were confirmed in the City's 2009-2014 Five Year Comprehensive Plan Update, adopted in September, 2014.

In its comments on the Draft LPPRP, the City further noted its interest in developing environmental education programs and activities at public schools within the City, an initiative that would require coordination between the City and the Anne Arundel County Board of Education. Specific activities identified by the City include rain gardens, tree planting, and landscaped natural areas. Use of school grounds for environmental initiatives could support the Maryland Partnership for Children in Nature, providing opportunity for students to participate in creating and caring for plantings that are beneficial to the natural environment.

## **2. State Goals**

The State's goals for recreation, parks, and open space, shown on the following page, are compatible with the County's goals. The County's goals complement and expand upon the State's goals. For example, the GDP's overarching goal seeks to provide a diverse range of accessible recreational facilities and programs to serve the needs of county residents.

Consistent with State goal #4, County policies direct the County to improve access to parks and recreation areas.

### State of Maryland 2017 Goals for Recreation, Parks, and Open Space

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, play, 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.

### 3. Organization, Programs, and Procedures

This section describes the organizational framework in which Anne Arundel County plans, acquires, develops, and operates parks and recreation facilities and open space.

#### *a. Organizational Structure and Planning Procedures*

A number of entities and organizations provide park and recreation facilities and programs in Anne Arundel County.

#### *i. Department of Recreation and Parks*

The Department's organization structure is shown in Chart III-I. The **Director's Office**, which consists of a Director and Deputy Director, provides leadership and management for the entire Department, determine Departmental staffing requirements, establish policy, develop legislation and oversee special projects and initiatives. Administrative support, in the Office of The Director, is provided by two administrative specialists who maintain calendars, schedule meetings, craft correspondence and provide customer service. The Director supervises two major operational bureaus: the Bureau of Parks and the Bureau of Recreation.

The **Bureau of Parks** is responsible for the management, operation, and maintenance of the County's 17,000 acre park system, and includes

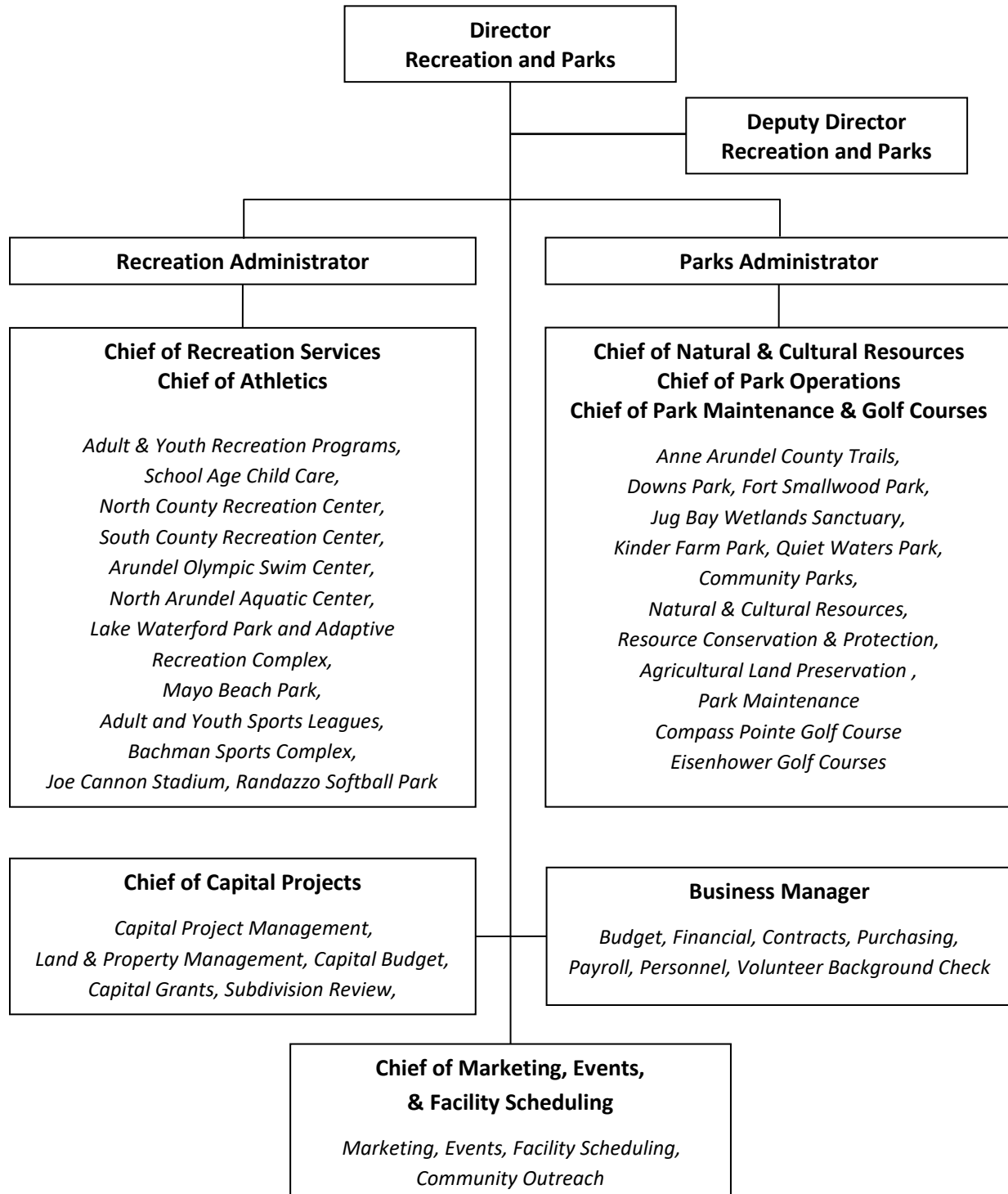
three Divisions: Park Operations, Natural and Cultural Resources, and Park Maintenance.

The Park Operations Division carries out the management, operation, and maintenance of regional parks (Downs Memorial Park, Fort Smallwood Park, Kinder Farm Park, and Quiet Waters Park).

The Natural and Cultural Resources Division protects and preserves the natural and cultural resources in the County (see Chapter V), while providing education and leisure opportunities for County residents and visitors. This division manages 58 cultural/historical resource sites, including 13 structures or complexes of structures (see Section B.1), the Jug Bay Wetlands Sanctuary, the County's Water Access Program, and Countywide Trails.

The Park Maintenance Division provides daily maintenance of over 100 community and neighborhood parks, to ensure the safety of park patrons and protect the county's investment in park properties. This includes horticulture and turf maintenance services that maintain landscaped features at numerous sites. The Park Maintenance division also manages the Eisenhower and Compass Pointe golf courses.

**Chart III-1 Department of Recreation and Parks Organizational Chart**



The Bureau of Parks also houses the Agricultural Preservation Program, which oversees the purchase of agricultural and woodland conservation easements (see Chapter IV).

The **Bureau of Recreation** is responsible for the overall planning and operation of recreational programming and facilities, as well as youth and adult sports leagues. It consists of two divisions: the Recreation Services Division and the Athletics Division.

The Recreation Services Division carries out the planning and implementation of a wide variety of recreation programs. This division produces program guides, organizes community use of schools, and manages the wide variety of recreational programs provided by the Department, including part-time staff that actually run the programs and interact directly with the participants in the programs. Specific responsibilities of the Recreation Services Division include:

- Operation of County's two aquatic centers and two indoor recreation centers; and
- Management of the school age child care program, which operates before and after school care programs at 36 elementary and one middle school, and

The Athletics Division is responsible for managing adult and youth sports leagues, as well as the County's major outdoor recreation facilities: the Bachman Sports Complex and Joe Cannon Stadium.

In addition to the two major bureaus, three divisions also answer directly to the Director of Recreation and Parks: Marketing, Events, and Scheduling; Business Management; and Capital Projects.

The Marketing, Events and Scheduling Division promotes the many services provided by the Department. It also organizes and hosts numerous public events throughout the year such as awards ceremonies, groundbreaking and ribbon-cutting events, athletic tournaments and charitable events such as the annual Life Line 100 mile bicycle ride. This Division is also responsible for public outreach and facility scheduling.

The Business Management Division provides all business-related support for Department operations, including budget, financial management, contracts, purchasing, payroll, background checks, and personnel administration.

The Capital Projects Division develops the Department's annual capital budget, and manages all park planning, land acquisition and park development activities. This Division also maintains a land and property inventory, and addresses impacts to parkland, such as road widening, utilities and private encroachments. The Division reviews all developer subdivision requests to minimize impacts to greenways, parks and trails. The Division also oversees the development of park master plans and long range plans (including this LPPRP). All capital improvement and land acquisition grants are the responsibility of this Division.

#### ii. Boards and Commissions

Several advisory bodies, established through provisions of the Anne Arundel County Code or executive orders, provide guidance and recommendations for parks and recreational facilities and programs in Anne Arundel County. These include:

- The Recreation & Parks Advisory Board, established through Section 550 of the County Code. This seven member Board makes advisory recommendations to the Director of Recreation and Parks in relation to programs, services and facilities. The Board meets monthly.
- Bicycle Advisory Commission was formed in 2015. Its mission involves working toward a safe, effective, and modern network for bicycle facilities. This group has been meeting monthly identifying resources, hazards, opportunities for success, as well as identifying failures and near failures. The Department of Recreation and Parks is among many County and State agencies that participate in this commission.
- The Water Access Committee, formed in 2011, was elevated to a Commission in 2016. The Commission recommends

policies and specific projects to improve public water access.

### **Guidelines and Reference Manual**

The Department maintains a Guidelines and Reference Manual which establishes departmental policies for programs, facilities, and participants. The manual guides:

- Board of Education and Department of Recreation and Parks' facility users;
- Organizations seeking accreditation;
- Participants in youth and adult organized sports programs;
- Organizations sponsoring youth/adult recreational and athletic programs; and
- Individuals seeking coach's certification.

Policies in the manual cover:

- *Organizational Accreditation:* An accreditation process for all organizations and groups to promote and ensure the quality and diversity of athletic and recreational programming.
- *Facility Scheduling:* The Department has a joint use agreement with the Board of Education under which County recreational use of Board of Education indoor and outdoor facilities is scheduled by the Department of Recreation and Parks.
- *Facility User Rules & Guidelines:* Rules and guidelines pertaining to restrictions on tobacco, drug, and alcohol use; facilities fees; and rules for the use of indoor and outdoor facilities.
- *Scheduling Areas:* The County is divided into 12 scheduling areas, one for each high school feeder system. Each area contains a high school, as well as middle and elementary schools, and includes fields and facilities owned by the Board of Education, Department of Recreation and Parks, and City of Annapolis.
- *Background Check Program:* Ensures that every individual who has the opportunity to interact with children undergoes a criminal background check.
- *Organized Sports Rules:* Each adult and youth sport has specific administrative requirements that are fully discussed at

organizational meetings held in advance of the respective season.

- *Youth Coaches Certification Clinic:* The Department provides a clinic for those interested in coaching youth athletics. The clinic covers topics such as coaching philosophy, sports psychology, legal matters, first aid, and health.
- *Coaches Associations:* Coaches Associations function as advisory boards and work with departmental staff in overseeing particular sports.
- *Disciplinary Actions:* The Department has the authority to impose disciplinary sanctions for unsportsmanlike behavior and/or non-compliance with departmental policies, guidelines, or standards.
- *Appeals Board:* The Department has an Appeals Board with the function and power to hear and decide appeals on departmental decisions involving disciplinary and organizational accreditation matters.
- *Departmental Awards:* The Department has an Awards Program that recognizes coaches, players, or volunteers who demonstrate a level of accomplishment worthy of recognition— whether athletic, scholastic or community based.
- *Americans with Disabilities Act (ADA) Accommodations.* The Department acknowledges that all persons have the right to register for and participate in any Anne Arundel County Department of Recreation and Parks sponsored sports leagues if they meet essential eligibility requirements such as age and registration deadlines.

### iii. Other Recreational Service Providers

The following agencies and municipalities provide parks and recreational services for Anne Arundel County residents:

- **Anne Arundel County Department of Aging and Disabilities** provides some recreation programming for the elderly in Anne Arundel County.
- **The City of Annapolis Department of Recreation and Parks** is responsible for City-owned parks and recreation facilities. The City owns or maintains approximately 40 parks and open space sites, as well as the

Pip Moyer Recreation Center. The Department has a full-time staff and offers a broad range of sports and other recreational programs for all age groups, including before and after school care.

- **The Town of Highland Beach** has limited recreational facilities comprising a playground and beach that are maintained by the municipality of Highland Beach. The Town also owns and maintains the historic summer home of Frederick Douglass.

*b. Programs*

*i. Department of Recreation and Parks*

The Department of Recreation and Parks provides recreation opportunities and adaptive programs for youth and adults of all abilities. Throughout the year the County offers diverse youth programs, teen programs, adult programs, as well as therapeutic and adaptive recreation programs for children and adults with disabilities. The County offers classes for social, cultural and technological enrichment, including arts and crafts, computer courses, language arts, dance, swimming, gymnastics, aerobics, karate, and fitness instruction. The Department publishes a program guide three times a year.

**CAPRA Certification**

Anne Arundel County is pursuing certification through the Commission for Accreditation of Park and Recreation Agencies (CAPRA), an arm of the National Recreation and Parks Association that “accredits park and recreation agencies for excellence in operation and service” (CAPRA website).

CAPRA certification requires an agency to demonstrate compliance with 151 national standards (including 37 Fundamental Standards). Certification involves a five-year process that includes three phases: development of the agency self-assessment report, onsite visitation by the Commission, and the Commission’s review and decision.

The County began the CAPRA certification process with internal meetings in 2014 and 2015, and formed ten subcommittees to address each of the ten CAPRA subject-matter areas. These include:

- Section 1: Agency, Authority, Role and Responsibility;
- Section 2: Planning;
- Section 3: Organization and Administration;
- Section 4: Human Resources;
- Section 5: Financial Management;
- Section 6: Programs and Services Management;
- Section 7: Facility and Land Use Management;
- Section 8: Public Safety, Law Enforcement, and Security;
- Section 9: Risk Management; and
- Section 10: Evaluation, Assessment, and Research.

As of 2018, extensive work has occurred in every subcommittee, and has been shared throughout the entire Department. To date the Department has completed work on 99 standards, including 32 fundamental standards.

The Department intends to submit an application for accreditation—fulfilling the self-assessment step—in December of 2017. Commission acceptance of this application would trigger an onsite visit, followed by a potential accreditation decision. If accreditation is granted by the Commission, the County would develop a new self-assessment report and be revisited and reaccredited every five years.

**Special Needs Programs**

Special camps are provided for children and teens for a wide range of activities, such as fine arts, fitness, challenger sports, wilderness challenge, cheerleading and theater, as well as Babysitting Certification and Teen Day Camps.

The County strives to promote accessibility for all residents. Adaptive facilities and programs include the following:

- Central Special School and Ruth Parker Eason Special schools have recreation programs, adaptive sports, and swimming.
- Freedom Field at Lake Waterford Park provides adaptive sports for all ages and abilities, and can be reserved by community programs, such as Special Olympics.
- Mayo Beach Park and Lake Waterford Park Adaptive Day Camps provide youth ages 4

to 21 the opportunity to attend a comprehensive summer camp with youth of all abilities including their siblings and friends. The County offers inclusion opportunities as requested by parents for other summer camp programs.

The County also works with state, local, and private providers to continue to offer adaptive and inclusive recreation opportunities for residents of all abilities.

### **Sports Leagues**

Recreational programs continue to experience increased participation in Youth, Adult, and Community Sports Leagues, Recreation Programs and Summer Camps. The Department's Facility Scheduling Office schedules the use of approximately 120 schools and 70 parks by approximately 600 accredited community organizations, translating to over 10,000 requests for the use of County facilities. In addition, the Therapeutic Division currently serves nearly 400 participants in therapeutic recreation programs.

#### **ii. Anne Arundel County Department of Aging and Disabilities**

The Department of Aging and Disabilities administers over 20 individual programs and operates seven senior centers in Annapolis, Arnold, Brooklyn Park, Glen Burnie (Pascal), Odenton (O'Malley), Pasadena, and South County (in Edgewater). Program offerings include yoga, aerobics, pilates, computer awareness, and English as a second language. Participation is free and open to any resident age 55 or older.

#### **iii. The City of Annapolis**

The City of Annapolis Department of Recreation and Parks publishes a program guide three times per year. This Department provides most of the programs in the City, while the Anne Arundel County Department of Recreation and Parks provides programs for Anne Arundel County.

#### **iv. Recreation Organizations**

Not-for-profit organizations play an important role in recreation in Anne Arundel County. There are many such organizations including,

but not limited to, The Tennis Alliance of Anne Arundel County, Arundel Soccer, Greater Severna Park Athletic Association, also known as the Green Hornets, Crofton Athletic Council, Brooklyn Park Youth Association, and Southern Athletic Association.

These organizations not only run programs for thousands of children and adults each year, and also partner with the Department to offer services not otherwise provided by the Department, including:

- Sponsoring youth athletic clinics and community leagues.
- Helping maintain fields and facilities under maintenance agreements with the Department.
- Raising funds through grants and other fundraising activities for improvements to parks.
- Sharing resources to expand recreational athletic opportunities.
- Engaging hundreds of parents and others in volunteering as coaches and in other capacities.
- Submitting proposals and recommendations regarding departmental policies and guidelines.

Representatives of these organizations provided input to this LPPRP.

### **c. *Funding***

The County funds its parks and recreational program from a variety of sources.

#### **i. Operating Funds**

The Anne Arundel County Department of Recreation and Parks FY 2017 operating budget was approximately \$24.7 million (excluding School Age Child Care, a special, self-supporting fund), nearly the same as in fiscal year 2009. Revenue sources include approximately \$11 million in user fees (including approximately \$4 million associated with the golf courses). Table III-1 shows the generalized breakdown of the expenditures.

ii. Capital Funds

Most park acquisition, facility development and rehabilitation funding comes from the County's Capital Budget which incorporates funds from Program Open Space (POS)<sup>1</sup>.

The County's FY 2017 capital budget totals approximately \$19.9 million, of which approximately 78 percent is from County funds (Table III-2).

Excluding prior appropriations, the County's Capital Budget and Five Year CIP for recreation and parks totals \$90.6 million. Since 2008 the County's annual POS appropriation has fluctuated substantially, reflecting the broader economy, but has averaged approximately \$3.7 million per year (Table III-3). The City of Annapolis receives a portion of Anne Arundel County's annual POS funding.

**Table III-1: Department of Recreation and Parks FY 2017 Operating Budget Summary**

| <b>Function</b>     | <b>\$ (x 1,000)</b> | <b>Percent</b> |
|---------------------|---------------------|----------------|
| Director's Office   | 2,316               | 9%             |
| Recreation Division | 7,579               | 31%            |
| Parks Division      | 9,443               | 38%            |
| Golf Courses        | 5,356               | 22%            |
| <b>Total</b>        | <b>24,694</b>       | <b>100%</b>    |

**Table III-2: Department of Recreation and Parks FY 2017 Capital Budget Summary**

| <b>Source</b>                  | <b>\$ (x 1,000)</b> | <b>Percent</b> |
|--------------------------------|---------------------|----------------|
| Bonds                          | 10,984              | 55%            |
| General Fund PayGo             | 4,716               | 24%            |
| Program Open Space Grants      | 2,390               | 12%            |
| Other State and Federal Grants | 112                 | <1%            |
| Private/other contributions    | 1,740               | 9%             |
| <b>Total <sup>(1)</sup></b>    | <b>19,942</b>       | <b>100%</b>    |

**Table III-3: Anne Arundel County Program Open Space Apportionments 2008 – 2017**

| <b>Year</b>              | <b>\$ thousands</b> |
|--------------------------|---------------------|
| 2008                     | 5,455               |
| 2009                     | 1,913               |
| 2010                     | 741                 |
| 2011                     | 7,499               |
| 2012                     | 3,218               |
| 2013                     | 6,411               |
| 2014                     | 2,241               |
| 2015                     | 2,833               |
| 2016                     | 3,740               |
| 2017                     | 2,549               |
| <b>Total</b>             | <b>36,600</b>       |
| <b>Average (2008-17)</b> | <b>3,660</b>        |

Source: Department of Recreation and Parks.

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<sup>1</sup> POS is a state program (§ 5-905 of the Natural Resources Article, Annotated Code of Maryland) that provides funds to the state and local jurisdictions for land acquisition and development for recreation and open space. Funds are allocated to counties proportionally, based on real estate transfer tax collection.

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## B Needs Analysis, Proximity and Equity Analysis, Progress Since the 2013 LPPRP

County priorities for land acquisition, facility development and rehabilitation are based on consideration of identified needs in the context of State and County goals. Previous updates of the LPPRP contained needs analyses based on statewide surveys and methodology contained in the State's October 2010 LPPRP guidelines to evaluate the amount of land and facilities needed to satisfy the demand for recreational facilities and activities. This methodology LPPRP updates those previous efforts by incorporating other inputs including additional surveys, input from focus groups, past plans and public comments received as part of the LPPRP plan development process.

This section examines the supply, demand and park and recreation facility needs in the County.

### 1. Supply

The Department of Recreation and Parks maintains a detailed inventory of recreation and open space land and facilities. This inventory is part of a management tool that is being developed cooperatively with the County's Office of Information Technology in a multi-phase, web-based project, which will provide both internal and external functionality.

The internal component of the inventory project will introduce an intranet departmental tool to assist with public inquiries, operational issues, scheduling, renovations and future planning. The Department's external website includes search and browse functions that enable the public to locate specific recreation facilities and activities. When completed, the public internet portal will provide additional functionality and detail to the Department's existing online presence.

The Department of Recreation and Parks has also begun mapping the locations of park elements such as ball fields, trails, courts, playgrounds, and water fountains as an additional enhancement to the inventory.

Appendix A contains the County's LPPRP Inventory, as required by the State's 2017 LPPRP Guidelines. Map III-1 shows the location of the park and recreation sites. GIS

data for these sites can be provided to the State. Table III-4 summarizes recreational and resource land.

As of 2018 Anne Arundel County has a total of 36,527 acres of recreation and resource land under federal, state, and local ownership (Table III-4). The County, the City of Annapolis and Highland Beach own a combined 19,582 acres, or 54 percent of the total. The State and Federal governments own 16,945 acres, or 46 percent.

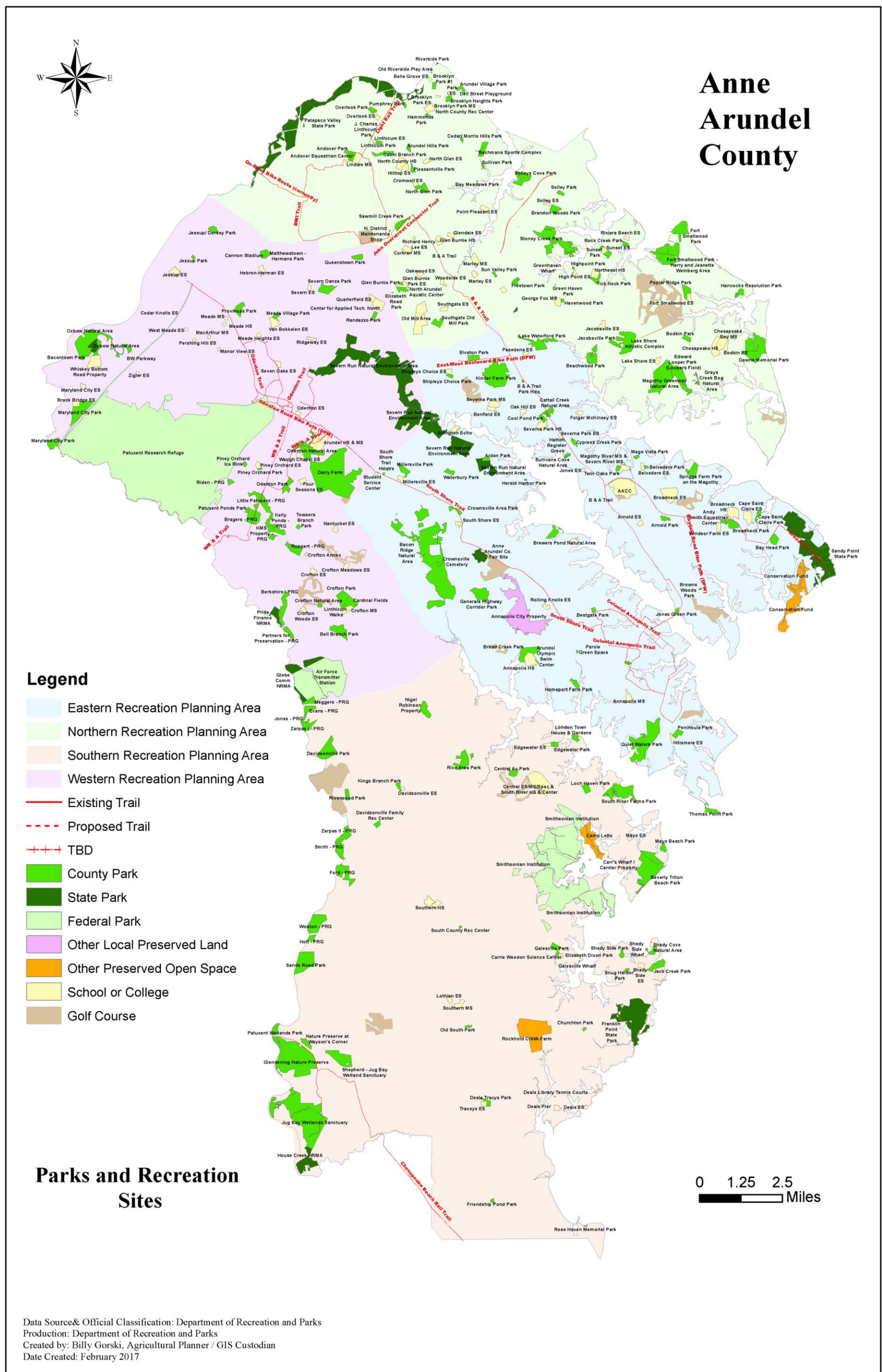
#### *a. County and Municipal Land*

The County together with the City of Annapolis and the Board of Education provides approximately 9,248 acres of local recreation land. This acreage comprises 7,208 acres of County parks and recreation areas, 1,836 acres of recreation land at schools (school recreation parks) and 203 acres in the City of Annapolis. Table III-5 lists these parks and recreation areas by type.

**Regional parks** provide a wide variety of recreation opportunities including sports, picnic areas, water access, and trails. Anne Arundel County's four regional parks are located in the Northern and Eastern Planning Areas of the County and are focused on "passive" recreation, with sports and athletic facilities located at community parks and sports complexes.

**Community and neighborhood parks** serve similar functions, with community parks generally serving larger areas than neighborhood parks. Community parks are distributed throughout the County. Half of neighborhood parks are in the Northern Planning Area.

**Miniparks** are located throughout the City of Annapolis and serve as neighborhood parks for neighborhoods within the city. Miniparks are a type of neighborhood park, but smaller, generally less than a half-acre. They include street-end parks.



**Table III-4 Recreation and Resource Land by Owner**

| Owner                           | Recreation <sup>(1)</sup> | Acres<br>Resource <sup>(2)</sup> | Total         |
|---------------------------------|---------------------------|----------------------------------|---------------|
| Anne Arundel County             | 7,208                     | 4,991                            | 12,199        |
| Subdivision Open Space(3)       |                           | 4,872                            | 4,872         |
| Board of Education (4)          | 1,836                     | 0                                | 1,836         |
| City of Annapolis               | 203                       | 471                              | 674           |
| Town of Highland Beach          | 1                         | <1                               | 1             |
| <b>Subtotal: Local</b>          | <b>9,248</b>              | <b>10,334</b>                    | <b>19,582</b> |
| State                           | 1,873                     | 2,790                            | 4,663         |
| Federal                         | 0                         | 12,282                           | 12,282        |
| <b>Subtotal: State, Federal</b> | <b>1,863</b>              | <b>15,072</b>                    | <b>16,945</b> |
| <b>Grand Total</b>              | <b>11,121</b>             | <b>25,406</b>                    | <b>36,527</b> |

Notes:

<sup>(1)</sup> Pursuant to the State's guidelines, recreation land is defined as land on which the primary recreational activities do not depend on the presence of natural resources. Totals reflect the closure of the Annapolis Roads golf course.

<sup>(2)</sup> Pursuant to State guidelines, resource land is land and/or related water areas for which natural resource protection, conservation, or management is of primary importance. This land may support agricultural, recreational, economic, or other uses to the extent that they do not conflict with protection or preservation of the natural resource.

<sup>(3)</sup> Includes land owned by Anne Arundel County and property owners associations.

<sup>(4)</sup> Board of Education land has been calculated as 60 percent of gross site acreage, as permitted by the State's guidelines. Lands owned by private schools is not included, although these lands host substantial recreational activity.

**Table III-5 County, Municipal, and Board of Education Recreation Land by Type**

| Type                   | Number     | Acres        | Examples   |
|------------------------|------------|--------------|--|
| Regional Park          | 4          | 1,221        | Downs Park, Fort Smallwood Park/Harry & Jeanette Weinberg Park, Kinder Farm Park, Quiet Waters Park                                |
| Community Park         | 75         | 2,980        | Cross Stree Park, Jessup Dorsey Park, Sawmill Creek Park, Tick Neck Park   |
| Minipark               | 24         | 4            | Burnside Park, Dick Simms Park, First and Spa  |
| Neighborhood Park      | 20         | 60           | Cedar Morris Hill Park, Herald Harbor Park, Rose Haven Memorial Park   |
| Other Public Land      | 1          | 2            | Northern District Maintenance Shop   |
| School Recreation Park | 119        | 1,850        | Annapolis High School, Bates Middle School, Broadneck High School, Germantown Elementary School, Hilltop Elementary School         |
| Special Use Area       | 34         | 2,240        | Glen Burnie Town Center Ice Rink, Jonas Green Park, North Arundel Aquatic Center, Shady Side Wharf, South County Recreation Center |
| Sports Complex         | 3          | 157          | Annapolis Sports Complex, Bachman Sports Complex, Cannon Stadium   |
| Undeveloped            | 7          | 810          | Crownsville Area Park, Rockhold Creek Farm Park, Stoney Creek Park   |
| <b>Total</b>           | <b>287</b> | <b>9,324</b> |  |

**School Recreation Parks.** School recreation parks comprise land at facilities owned by the Board of Education. The County has use agreements with the Board permitting general public use of fields, gymnasiums, and other facilities at certain times. The 119 such parks are widely distributed and contribute significantly to recreation opportunities in the County.

**Other Recreation Sites.** In addition to the above, the County's recreation inventory includes two sports complexes, and 34 special use areas including the Glen Burnie Town Center Ice Rink, Jonas Green Park, and North Arundel Aquatic Center. The County also has 7

undeveloped park sites which will be for recreational use once in operation.

**Cultural and Historic Sites.** The County's land and property inventory includes 58 cultural / historic sites. Within those 58 sites are 13 historic structures or complexes of structures:

- Andover Equestrian Center – Hamilton House;
- B & A Trail – Earleigh Heights Ranger Station;
- Dairy Farm Park Complex;
- Fort Smallwood Park Complex
- Hancocks Resolution and the Cook Farm House;

- Hot Sox Field at Wilson Park—Wilson Farm House;
- Jug Bay Wetlands Sanctuary—Station Masters House;
- Jug Bay Wetlands Sanctuary—Riggleman Complex;
- Kinder Farm Park Complex;
- Linthicum Walks;
- London Town House and Gardens—William Brown House;
- Patuxent River Greenway-Bayard—Queen Annes Bridge Road Suspension Bridge; and
- South Shore Trail—Childs Residence (Cecil Avenue Rangers Station).

#### *b. State and Federal Land*

State and Federal recreation and open space lands in Anne Arundel County total nearly 16,945 acres of which approximately 1,863 acres are recreation land and 15,072 acres are natural resource land (Table III-4).

The major State-owned recreation areas in the County are Sandy Point State Park, Patapsco Valley State Park, and the Anne Arundel County Fair Site. Major State-owned natural resource areas include Severn Run Natural Environmental Area, House Creek Natural Resource Management Area, Patapsco Valley State Park, Franklin Point, and Globecom Wildlife Management Area (WMA).

Federally owned land in the County includes the Patuxent Research Refuge, United States Air Force Globecom property (adjacent to, but separate from the County-owned WMA), the Smithsonian Environmental Research Center, and the United States Naval Academy Dairy Farm (currently leased by the County).

Anne Arundel County has entered into agreements with state agencies (such as the Maryland Aviation Administration and the Maryland Department of Natural Resources) to lease state-owned land for local recreation use. Examples include Jonas Green Park and portions of Arden Park and the South Shore Trail).

#### *c. Water Access*

Anne Arundel County has 533 miles of shoreline along tidal waters, the sixth-most among

Maryland counties, to serve a population of more than 564,000—far more than other counties with longer shorelines. Water and access to the water are fundamental characteristics of life in Anne Arundel County. This includes water access for recreation—including boating, swimming, fishing, crabbing, and appreciation of water views. Many neighborhoods maintain community (i.e., restricted to neighborhood residents and their guests) beaches, piers, and boat ramps. In addition, there are 221 commercial and community marinas with nearly 10,500 boat slips in the County.<sup>2</sup> The County does not operate or manage these community and commercial facilities.

Despite the importance of water access, the County has comparatively few public water access points to serve the general population, and specifically those who do not live in water-privileged communities. Public water access points in the County, described in detail below, include boat ramps, “car-top” boat launches, beaches, and parks and publicly accessible resource lands with water frontage.

The Department of Recreation and Parks maintains a guide to canoe and kayak launch sites and fishing spots throughout the County – this guide is available on the Department’s website. In addition to providing car top boat access, the County is working with the State of Maryland to identify and map potential “water trails” which connect numerous destinations along the Chesapeake Bay and its tributaries. The County is also evaluating the potential for primitive, paddle-in campsites within County land along the Patuxent River.

#### *i. Public Boat Ramps*

A major initiative of the County Executive and the Department of Recreation and Parks is to provide public boat ramps on all major rivers in Anne Arundel County. Currently, there are 4 public boat ramps (paved ramps intended for use

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<sup>2</sup> Source: *Marinas of Anne Arundel County* (2010).  
[http://www.aacounty.org/departments/planning-and-zoning/research-and-gis/map-services/forms-and-publications/20110526\\_AACoMarinas.pdf](http://www.aacounty.org/departments/planning-and-zoning/research-and-gis/map-services/forms-and-publications/20110526_AACoMarinas.pdf)

by trailer-mounted boats) in the County, including:

- Fort Smallwood Park;
- Sandy Point State Park (State of Maryland);
- Truxtun Park (City of Annapolis); and
- Tucker Street Boat Ramp (City of Annapolis—restricted to City residents).

ii. Public Car-top Launches

The public boat ramps above also allow launching of smaller “car-top” vessels (i.e., canoes, kayaks, and other nonmotorized watercraft that do not need a trailer). Public car-top boat launch sites are located at the following parks and resource lands:

- Beachwood Park;
- Carr’s Wharf;
- Davidsonville Park;
- Discovery Village;
- Downs Park;
- Fort Smallwood Park;
- Galesville Wharf;
- Green Haven Wharf;
- Homeport Farm Park;
- Jonas Green Park;
- Mayo Beach Park;
- Patuxent Wetlands Park;
- Quiet Waters Park;
- Rose Haven Memorial Park;
- Shadyside Park;
- Solley’s Cove Park;
- Spriggs Farm Park; and
- Wooten’s Landing Park

iii. Public Fishing and Crabbing

Many recreation areas throughout the County offer pier or shoreline fishing and crabbing, including Patapsco Valley State Park, Downs Memorial Park, South River Farm Park, Deale Pier, Quiet Waters Park, Truxtun Park, Carr’s Wharf, and Wooten’s Landing Park.

iv. Public Beaches

Swimming and wading is a designated and intended activity at Sandy Point State Park, Fort Smallwood Park, and Mayo Beach Park. All of these locations have bathroom facilities, however, only Sandy Point State Park provides

lifeguards; other sites are posted as “swim at your own risk” sites. The County Health Department monitors water quality conditions at more than 80 public and private beaches in the County where people swim, and provides alerts when poor water quality makes contact with the water potentially unsafe.

v. Public Lands with Water Frontage

Developed and undeveloped County parks and resource lands with water frontage (including frontage accessible only by hiking) total over 7,600 acres. These lands include, for example, Beachwood Park, Homeport Farm Park, Shady Cove Natural Area, and Spriggs Farm Park on the Magothy. State Parks such as Patapsco Valley and Sandy Point offer additional opportunities<sup>3</sup>.

Water viewing is also an important recreational activity. While a number of parks do not offer direct access to the water, many offer water views and/or have walking trails. Examples include, Broad Creek Park, Jug Bay Wetlands Sanctuary, Elizabeth Dixon Park, Lake Waterford Park, London Town House and Gardens, Patuxent River Greenway-Oxbow Natural Area, Quiet Waters Park, Shady Side Park, and Thomas Point Park.

d. *Trails*

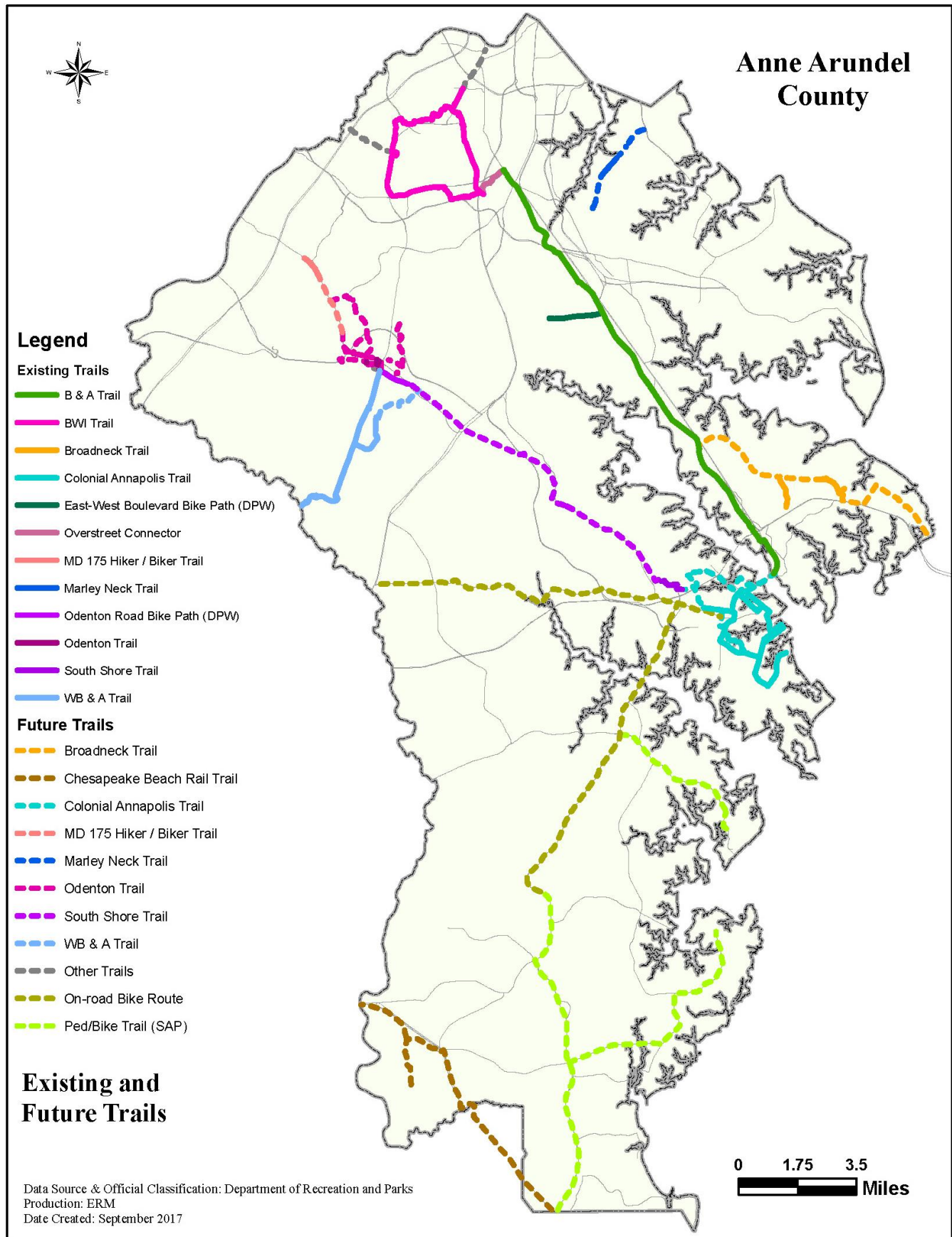
Anne Arundel County is home to multipurpose trails with national, regional, and local significance. Key recreational trails in the County are summarized below. Map III-2 shows the County’s existing and envisioned trails

While the focus of this LPPRP is on the recreational function of trails, these facilities also serve important transportation functions, providing a mode of travel for individuals who do not have access to, or prefer not to use automobiles or public transit. To the degree that trails also facilitate non-motorized transportation, they also help the County achieve the air quality, environmental, and traffic congestion goals described in the GDP and elsewhere in County policy.

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<sup>3</sup> Department of Recreation and Parks Water Access Parks Acres Database.

**Map III-2. Current and Future Trail Network**



i. County Trails

**Baltimore & Annapolis Trail (B&A Trail).**

An established 13.3 mile recreational greenway that follows the route of the former B&A Railroad from Glen Burnie to Annapolis. The trail is owned and managed by the Department, is one of the premier recreational greenways in the State, and connects to the BWI Trail (see below). The B&A Trail greenway encompasses 147 acres within a 66-foot-wide, landscaped corridor. The trail has a 10-foot-wide, paved surface and is used by walkers, runners, bicyclists and equestrians. The trail also offers an exercise course for persons with disabilities. The trail is being repaved, starting at its northern terminus and heading south. By the end of 2016, a two-mile section from Dorsey Road to Norfolk Avenue was completed.

The Department of Recreation and Parks has produced a series of manuals on the B&A Trail Park, including a park operation manual, maintenance manual and a park ranger manual, which includes a section in sign language.

**BWI Trail:** An existing 12.5-mile paved trail encircling much of the perimeter of Baltimore-Washington Thurgood Marshall International Airport (BWI). The trail connects scenic areas, recreational sites, communities, and transit facilities, and is co-managed by the Anne Arundel County Department of Recreation and Parks and the Maryland Aviation Administration. Spur trails connect the BWI loop with the Linthicum Light Rail Station, the BWI Amtrak station, and with the northern terminus of the B&A Trail.

**Marley Neck Trail:** This trail will provide circulation and recreation for the Marley Neck Boulevard corridor. The first section of trail is nearly one half mile long, adjacent to Creekside Village. Additional segments would be constructed (by developers) in conjunction with new development between Spencer Road and Fort Smallwood Road.

**MD 175 Trail.** This shared-use trail is being developed cooperatively with the State Highway Administration (SHA). The first section was completed in 2015, and extends from Rockenbach Road to MacArthur Road. Two

additional segments under construction and will extend the trail to Llewellyn Avenue in 2017. An existing trail system within the Parkside subdivision, west of Rockenbach Road, connects MD 175 to Parkside Boulevard. SHA continues to include right-of-way and trail designs in ongoing streetscape upgrades to the MD-175 corridor.

**Shady Side Trails:** With the support of the Shady Side community, the Department constructed a natural-surface trail system on existing road frontage along Idlewild Road and within the Shady Cove Natural Area. Trail provides a safe pedestrian corridor between residential communities, recreational opportunities, a school, and the water.

**Broadneck Peninsula Trail:** A partially-complete proposed 8.7-mile east-west trail, linking Sandy Point State Park with the B&A Trail in Arnold, generally following College Parkway and East College Parkway. The existing one-mile (Phase I) segment of the trail runs from East College Parkway to Green Holly Drive (providing a connection to Broadneck Park, the Broadneck Library, and Broadneck High School). The remainder of the trail will primarily use property within the right-of-way of College Parkway and will provide linkages to Anne Arundel Community College, schools, and communities along College Parkway. Construction of Phase II (Green Holly Drive to Bay Dale Drive) is planned to start in Spring 2017, along with design of Phase III (Bay Dale Drive to Peninsula Farm Road) and initiation of an alignment study for Phase V (East College Parkway to Sandy Point State Park).

**Washington, Baltimore & Annapolis Trail (WB&A Trail):** A partially complete multi-use rail trail that will extend into Anne Arundel County from Prince George's County, connecting to the planned South Shore Trail in Odenton (see below). This trail will use much of the former WB&A railroad corridor between Odenton and the Patuxent River, providing a trail connection to the MARC train station in Odenton. Phases I, II, and III are open, and consist of 5.5 miles of paved trail extending southward from Odenton and terminating near the Patuxent River. The design of the fully-

funded bridge crossing over the Patuxent River kicked off in January 2017 with a public meeting held on March 28, 2017 to review concepts. This crossing would connect the Anne Arundel County portion of the trail to the Prince George's County portion, and thus to the East Coast Greenway and other major interstate trails in the Baltimore-Washington region.

**South Shore Trail:** A planned 10.3-mile multi-use rail trail that will utilize the portion of the former WB&A railroad right-of-way running between Odenton and Anne Arundel Medical Center in Annapolis. A small segment between AAMC and Bestgate Road has been completed. The remainder of the trail will stretch from Bestgate Road to the WB&A Trail in Odenton, which will connect to Prince George's County's WB&A Trail at the Patuxent River. Phase I of the trail was expected to be under construction by Summer 2017.

**Patapsco Greenway Trail:** A conceptual multijurisdictional pedestrian and bicycle system for accessing Patapsco Valley State Park. The greenway will provide recreational as well as transportation opportunities by linking neighborhoods, businesses, and landmarks. The concept for this trail system was developed cooperatively with DNR, the Maryland Park Service, the Baltimore Metropolitan council, the University of Maryland, Anne Arundel, Howard, Baltimore, and Carroll Counties and Baltimore City. The Anne Arundel County segment would connect the BWI Trail to the Grist Mill Trail in Howard County.

**South County Trail:** The County is in the process of studying potential alignments for a South County bike lane and trail system extending from the Mayo-Edgewater Area southward to the proposed Chesapeake Beach Trail which will connect to Calvert County. Unfortunately South County bike trail does not have the benefit of abandoned railroads such as the B&A Trail, the WB&A Trail and the South Shore Trail. The identification of right of way will require the willingness of private property owners to sell or donate right of way to the County, wherever existing road rights of way are not sufficient to accommodate an off road trail or bike lane.

**Water Trails:** The Patuxent River Commission, in partnership with a host of other agencies and partners in Maryland, designated an 80-mile paddling trail along the Patuxent River from Calvert County to Howard County. This trail is also coterminous with the water trail portion of the Star Spangled Banner National Historic Trail, as well as the Captain John Smith Chesapeake National Historic Trail. A number of boat launch sites are available including three in Anne Arundel County at Patuxent Wetlands Park, Wooten's Landing, and Davidsonville Park.

**The City of Annapolis.** The City's refers to its trails and pathways system as the Colonial Annapolis Maritime Trail. This system is designed for use by bicyclists and pedestrians, and comprises designated sidewalks, on-road sections, and off-road trails. The entire system within the City is approximately 19 miles, of which nearly 14 miles are complete, and 5 miles are in various stages of planning and development.

The City adopted a Bicycle Master Plan in 2011. Its vision is to encourage more bicycling by developing and continually improving safe and accessible streets through programs like Safe Routes to School and off-road networks and amenities such as bicycle storage, signage, education, enforcement, and maps.

## ii. National Trails

Three multi-state national trails intersect in Anne Arundel County (see Map III-1), including:

- The East Coast Greenway, a planned route from Florida to Maine that crosses through Maryland and Anne Arundel County.
- The American Discovery Trail runs from Delaware to California.
- The September 11 National Memorial Trail is a planned 1,300-mile system of trails and roadways linking the World Trade Center in New York, the Pentagon in Washington D.C and the Flight 93 Memorial in Shanksville, Pennsylvania.

These trails use all or portions of the following local trails: WB&A, B&A, BWI, South Shore,

Broadneck, and Colonial Annapolis Maritime trails and trail system. These multi-state trails will be mainly paved or hard surface trails and are designated primarily for recreation although locally they also serve as alternative modes of transportation.

*e. Private Quasi-Public Land and Facilities*

Private quasi-public lands make a significant contribution to public recreation in Anne Arundel County. These lands include neighborhood parks, mini-parks, marinas, indoor recreation centers and gyms, neighborhood pools and clubhouses, tennis clubs, and golf courses.

Fort George G. Meade comprises approximately 5,400 acres in western Anne Arundel County and is home to approximately 16,300 military personnel and about 39,000 civilian employees and contractors. Fort Meade operates a number of recreation facilities that are open to authorized personnel and their families and guests including an equestrian center, a track, and indoor and outdoor swimming pools. While these facilities reduce demand on county recreation facilities, they are not included in the

recreation inventory in Appendix A, because they are not open to the general public.

*f. Breakdown by Planning Area*

Table III-6 shows the breakdown of recreation sites by planning area, while Table III-7 shows the amount of active recreation land per 1,000 population. Section B.4.a provides the Proximity Analysis, consistent with state guidance for preparing the 2017 LPPRP. This section updates information that has appeared in previously adopted Anne Arundel County LPPRPs (i.e., 2013, 2006, etc.), and is complementary to, but does not replace the Proximity Analysis.

The number and types of sites are somewhat unevenly distributed around the County. This is not surprising given the county's history and geography. Each Recreation Planning Area is not intended to be "self-sufficient"; residents of one area will use parks in nearby areas. Specialized parks and facilities, such as aquatic centers and sports complexes serve countywide needs, and thus cannot be placed in all planning areas.

**Table III-6: Recreation and Resource Land by Planning Area**

|                                    | North     |              | South     |              | East       |              | West      |               | Total      |               |
|------------------------------------|-----------|--------------|-----------|--------------|------------|--------------|-----------|---------------|------------|---------------|
|                                    | Sites     | Acres        | Sites     | Acres        | Sites      | Acres        | Sites     | Acres         | Sites      | Acres         |
| Community Park                     | 25        | 674          | 15        | 603          | 22         | 694          | 15        | 581           | 77         | 2,552         |
| Minipark                           | 0         | 0            | 0         | 0            | 19         | 4            | 0         | 0             | 19         | 4             |
| Neighborhood Park                  | 10        | 41           | 2         | 1            | 6          | 9            | 1         | 9             | 19         | 59            |
| Regional Park                      | 3         | 589          | 0         | 0            | 2          | 632          | 0         | 0             | 5          | 1,221         |
| School Recreation Park             | 42        | 711          | 14        | 229          | 34         | 510          | 28        | 401           | 119        | 1,850         |
| Special Use Area                   | 8         | 797          | 9         | 47           | 20         | 545          | 4         | 931           | 41         | 2,320         |
| Sports Complex                     | 1         | 86           | 0         | 0            | 0          | 0            | 1         | 22            | 2          | 109           |
| State Park                         | 1         | 992          | 0         | 0            | 1          | 786          | 0         | 0             | 2          | 1,778         |
| Undeveloped Parkland               | 4         | 400          | 5         | 771          | 2          | 54           | 0         | 0             | 11         | 1,225         |
| Other                              | 1         | 2            | 0         | 0            | 0          | 0            | 0         | 0             | 1          | 2             |
| <b>All Recreation Land</b>         | <b>95</b> | <b>4,293</b> | <b>45</b> | <b>1,651</b> | <b>106</b> | <b>3,234</b> | <b>49</b> | <b>1,943</b>  | <b>295</b> | <b>11,121</b> |
| Resource Land                      |           | 427          |           | 5,769        |            | 1,726        |           | 12,612        |            | 20,534        |
| Subdivision Open Space, Countywide |           |              |           |              |            |              |           |               |            | 4,872         |
| <b>Grand Total</b>                 |           | <b>4,720</b> |           | <b>7,420</b> | <b>0</b>   | <b>4,960</b> |           | <b>14,556</b> |            | <b>36,527</b> |

**Table III-7: Per Capita Recreation Land by Planning Area**

|  | North | South | East | West | Total |
|--|-------|-------|------|------|-------|
| Acres active recreation land per 1,000 population, 2015 <sup>(1)</sup> | 21    | 14    | 19   | 13   | 18    |
| Acres active recreation land per 1,000 pop, 2035 <sup>(1, 2)</sup>     | 19    | 13    | 18   | 12   | 16    |

<sup>(1)</sup> Active recreation land includes all recreation land in Table III-6, minus the "Undeveloped Park" and "Other" Categories

<sup>(2)</sup> Reflects projected 2035 population, with no changes to current recreation acreage.

Table III-7 shows that the Northern and Eastern Planning Areas have more per capita active recreation land than the West and South. Conversely, most resource land in the County is in the West, an area that includes the Patuxent National Wildlife Refuge (NWR).

The largest population growth through 2035 is projected in the Northern and Western Planning Areas. Absent new acquisitions, by 2035 the recreation land per 1,000 persons will decrease from 18 to 16 acres, with proportionate decreases among the four Planning Areas.

#### *g. Changes since 2013*

Appendix A lists changes in recreational facility supply since adoption of the 2013 LPPRP. Notable changes include addition of 7 multipurpose fields, and a loss of 7 baseball fields, 7 tennis courts, 6 volleyball courts, and 4 basketball courts.

## **2. Demand**

Anne Arundel County used three main inputs to determine the demand for recreational land and facilities:

- Three recreation surveys;
- Review of past plans; and
- Public input from meetings and comments.

Staff created a consolidated database of all inputs for internal review and decision making purposes by County staff. The three inputs are described in detail below.

#### *a. Surveys*

##### *i. Department Survey*

In late 2016, the Department of Recreation and Parks initiated an online survey about the County-operated parks and recreation. The survey was conducted via the internet and respondents to the survey were self-selected. Over 2,100 responses were received providing valuable input into the Plan. The survey had questions regarding facility usage and condition, participation in County programs, and land preservation. Findings from the survey (see Appendix B) included:

- Facilities reported as having the highest usage levels include:
  - Trails (B&A, BWI, WB&A);
  - Regional parks (Quiet Waters, Kinder Farm, Downs and Fort Smallwood Parks);
  - Several beach parks; and
  - Two swim centers (Arundel Olympic Swim Center and North Arundel Aquatic Center)
- The perceived condition of parks varies. The facilities with highest reported usage also have the highest ranking for condition, generally with over 85% of respondents stating that the facilities are in excellent or good condition.
- Almost half (48%) of survey respondents reported using trails for walking, biking, jogging. The next highest level of participation was for aquatic activities (31% of respondents), followed by team and individual sports (27%), nature and environmental programs (25%) and boating (25%).
- Many respondents use facilities in neighboring counties, generally only a few times per year. The most frequent reason given was to access programs or facilities not available in Anne Arundel County.
- 5% of respondents do not live in Anne Arundel County; most either work in the county or visit to use recreation facilities or parks within the county.

Perceptions of the need for certain facilities are shown in Tables III-8 and III-9. Key findings include:

- The facilities for which the greatest immediate need is expressed are trails, boat ramps, nature centers, dog parks, fishing piers, swimming beaches and tennis, especially indoor courts.
- Generally, the survey reports the greatest need for more parks that provide the opportunity to connect with nature: trails, water access, nature centers, swimming beaches, gardens.

**Table III-8 Department Survey Responses: Facility Needs**

| Response <sup>(1)</sup>                             | More Facilities are Needed Now |                           | More Facilities are Needed In Future |                           |
|---|--------------------------------|---------------------------|--------------------------------------|---------------------------|
|   | Number of responses            | Percentage of respondents | Number of responses                  | Percentage of respondents |
| Trails (walking/biking)                             | 446                            | 21%                       | 236                                  | 11%                       |
| Water access – non motorized                        | 438                            | 20%                       | 134                                  | 6%                        |
| Water Access – motorized or sail (i.e., Boat Ramps) | 339                            | 16%                       | 151                                  | 7%                        |
| Nature Centers                                      | 316                            | 15%                       | 275                                  | 13%                       |
| Fitness trail                                       | 312                            | 15%                       | 270                                  | 13%                       |
| Dog park  | 279                            | 13%                       | 242                                  | 11%                       |
| Fishing (from pier)                                 | 267                            | 12%                       | 177                                  | 8%                        |
| Swimming (beach)                                    | 263                            | 12%                       | 150                                  | 7%                        |
| Tennis (indoor)                                     | 240                            | 11%                       | 74                                   | 3%                        |
| Dog beach   | 235                            | 11%                       | 152                                  | 7%                        |
| Tennis (outdoor)                                    | 235                            | 11%                       | 114                                  | 5%                        |
| Mountain bike trails                                | 233                            | 11%                       | 185                                  | 9%                        |
| Gardens (gazebos, plantings, fences/paths)          | 219                            | 10%                       | 222                                  | 10%                       |
| Swimming (outdoor )                                 | 215                            | 10%                       | 154                                  | 7%                        |
| Community/recreation center                         | 211                            | 10%                       | 231                                  | 11%                       |
| Swimming (indoor)                                   | 198                            | 9%                        | 157                                  | 7%                        |
| Restrooms at recreation facilities and parks        | 197                            | 9%                        | 109                                  | 5%                        |
| Facilities for the disabled                         | 176                            | 8%                        | 209                                  | 10%                       |
| Water park – with water slides, lazy river etc      | 173                            | 8%                        | 152                                  | 7%                        |
| Indoor gymnasium (basketball, volleyball)           | 167                            | 8%                        | 159                                  | 7%                        |
| Open fields (casual use, non-programmed)            | 166                            | 8%                        | 206                                  | 10%                       |
| Playgrounds, tot lots                               | 161                            | 8%                        | 181                                  | 8%                        |
| Multi-purpose fields, (lacrosse, soccer, football)  | 154                            | 7%                        | 190                                  | 9%                        |
| Multi-purpose fields with field lights              | 153                            | 7%                        | 176                                  | 8%                        |
| Picnic areas  | 140                            | 7%                        | 216                                  | 10%                       |

<sup>(1)</sup> A total of 2,442 survey responses were received; not all respondents provided answers to questions about facility needs.

- For facilities related to sports, the greatest need is for tennis courts, specifically all-weather indoor courts. The county has 161 outdoor tennis courts (most at the high schools) but only one, publicly accessible indoor court. Although the overall number of outdoor tennis courts is high, these courts are widely spread across the County, and many are at schools, which may have access limitations. Moreover, as described in Section C.2.b, the increase in popularity of tennis leagues has increased demand for concentrations of multiple tennis courts in discrete locations, specifically within public parks or recreation facilities (rather than school facilities).
- A high proportion of respondents have a family member participating in team sports, but fewer respondents noted a need for additional facilities, indicating that leagues

are currently able to schedule the fields that they need. County Staff is aware of a need for facilities that can host tournaments. The needs analysis in the following section of this plan also indicates that additional fields will be necessary as the County's population grows.

- A high proportion of respondents (27%) noted a need for additional dog parks. These facilities have grown in popularity since the 2013 LPPRP.
- Planning Area-specific responses were generally consistent with countywide responses—walking/biking trails were the most requested types of facilities in all Planning Areas. The next most requested facility types varied by Planning Area, but generally included, nature centers, dog parks, and water access.

**Table III-9 Department Survey Responses by Recreation Planning Area**

| Facility Type                                       | Percent of Respondents Indicating a Need for Additional Facilities <sup>(1)</sup><br>By Recreation Planning Area |          |          |         |            |
|---|--|----------|----------|---------|------------|
|   | Eastern  | Northern | Southern | Western | Countywide |
| Trails (walking/ biking)                            | 37   | 28       | 29       | 35      | 34         |
| Nature Centers                                      | 30   | 26       | 27       | 30      | 29         |
| Fitness Trail                                       | 30   | 24       | 26       | 34      | 29         |
| Water Access - non-motorized                        | 35   | 20       | 23       | 21      | 28         |
| Dog Park  | 26   | 26       | 21       | 25      | 26         |
| Water Access - motorized or sail (i.e., boat ramps) | 30   | 19       | 19       | 19      | 24         |
| Community/recreation center                         | 21   | 21       | 19       | 29      | 22         |
| Gardens (gazeboes, plantings, fencing/paths)        | 24   | 20       | 17       | 21      | 22         |
| Mountain Bike Trails                                | 23   | 18       | 17       | 21      | 21         |
| Swimming (beach)                                    | 23   | 19       | 16       | 19      | 21         |
| Dog Beach   | 21   | 18       | 15       | 14      | 19         |
| Facilities for the Disabled                         | 19   | 19       | 15       | 22      | 19         |
| Open fields (casual use, non-programmed)            | 21   | 16       | 13       | 20      | 18         |
| Swimming (outdoor)                                  | 19   | 15       | 18       | 19      | 18         |
| Picnic Areas  | 19   | 18       | 12       | 19      | 18         |
| Swimming (indoor)                                   | 16   | 15       | 19       | 21      | 18         |
| Tennis (outdoor)                                    | 23   | 10       | 13       | 18      | 17         |
| Multi-purpose fields (lacrosse, soccer, football)   | 18   | 16       | 13       | 22      | 17         |
| Playgrounds, tot lots                               | 17   | 18       | 15       | 19      | 17         |
| Multi-purpose fields with field lights              | 18   | 15       | 13       | 19      | 16         |
| Picnic Pavilions/Shelters                           | 16   | 18       | 12       | 18      | 16         |
| Indoor gymnasium (basketball, volleyball)           | 16   | 17       | 14       | 16      | 16         |
| Water Park (with water slides, lazy river etc.)     | 13   | 18       | 13       | 19      | 16         |
| Tennis (indoor)                                     | 21   | 9        | 11       | 15      | 16         |

<sup>(1)</sup> Excludes respondents from outside the County or respondents who did not identify the zip code area of their residence.

The survey results were also examined for differences between the County's four Recreation Planning Areas (shown on Map II-5). Key findings regarding facility needs, as shown in Table III-9, are:

- Recreational facility needs are experienced county-wide. With certain exceptions pointed out below, the proportion of respondents expressing a need for a particular type of facility is roughly similar across the four planning areas.
- A greater proportion of respondents from the Eastern Planning Area expressed a need for several types of facilities: water access, walking/biking trails, and tennis courts, both indoor and outdoor. (Water access includes boat ramps for sail or motorized boats and soft landings.)
- A greater proportion of respondents from the Western Planning Area expressed a need for a community/recreation center and multipurpose fields.
- Generally, a lower proportion of respondents from the more rural Southern Planning Area

expressed a need for recreational facilities of all types.

- Respondents from the Eastern and Southern Planning Areas were much more likely to have used the County's water access facilities (27 to 33 percent of respondents) than respondents from the Northern and Western Planning Areas (12 to 16 percent of respondents). In spite of this similarity, 35 percent of Eastern respondents see a need for additional water access, while only 23 percent of Southern respondents expressed this need.

Perceptions of the need for certain recreation programming parallel the results for facility needs

- The greatest programming needs were reported for trail usage programs (32% of respondents) and environmental/nature programs (25%).
- 15 to 20 percent of respondents noted a need for additional programming in the areas of

fitness, aquatic activities, art/hobby programs, and team/individual sports.

- Strong interest was also expressed in additional educational programs, senior citizen programs, boating, trips, and therapeutic recreation.

#### ii. Activity participation surveys

The County used a State survey, *2003 Participation in Local Park and Recreation Activities in Maryland*, as the primary input into the recreation facilities supply/demand model<sup>4</sup> (see Section 3 below). Findings in these surveys were based on responses from 400 households in the Suburban Baltimore (Central Maryland) region, representatively proportioned to the population in Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties.

Although more than a decade old, the data from this survey are the most recent “statistically significant” information available. This LPPRP uses the online survey and other public input to adjust the findings of the 2003 State survey. Results of State and national surveys discussed below were also used.

#### iii. Other Local Surveys

Two older surveys were conducted in Deale, Shady Side, and Galesville in 2000 and in South County in 2003. The main needs and preferences identified in the 2000 survey included:

- Continued preservation of open space;
- An indoor recreation center;
- Passive recreation (hiking/jogging, bird watching, etc.);
- Increased community outreach, particularly to underserved communities or individuals;
- Additional water access; and
- Partnerships between county and community organizations.

The main recommendations from the South County survey were (1) open space preservation; (2) trails; (3) a gymnasium/community center, (4) water access and (5) park/playground areas.

#### iv. State Surveys

In August, 2014, Goucher College conducted a statewide telephone survey on State parks and programming. The survey asked Marylanders to rate how likely they would be to participate in activities offered at the various parks across the state. The percent of respondents likely to participate in various activities was:

- Relaxing: 79 percent
- Visiting Historic Sites: 68 percent
- Hiking or Walking: 67 percent
- Picnicking: 64 percent
- Swimming: 40 percent
- Biking: 36 percent
- Camping: 32 percent
- Fishing: 32 percent
- Canoeing or Kayaking: 30 percent

A 2010 Maryland State Park Economic Impact Study surveyed approximately 3,400 Maryland state park visitors, including visitors to Sandy Point State Park. Respondents rated hiking/walking as the most popular activity in the state parks, followed by relaxation, swimming, sightseeing, and picnicking.

The study demonstrated the economic benefit of state parks by gathering data on spending by park visitors within the communities outside the park. Seventy percent of spending impacts were found to be concentrated within a 20 minute drive of parks. Statewide, the average daily spending outside of the park was \$37 per person for day visitors and \$53 per person for overnight visitors. The central region (including Anne Arundel County) had the lowest spending levels of the four regions: \$14 per person for day visitors and \$38 per person for overnight spending.

#### v. National Surveys of Organized Sports

Recently documented national trends in sports are useful to qualify the local survey data. The Sports and Fitness Industry Association reported that nationwide, from 2009 through 2014, there was a 9 percent drop in the number of children

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<sup>4</sup> While these data are 9 years old, they are the most recent available, statistically valid data on park and recreation demand in Maryland.

and youth participating in sports<sup>5</sup>. Sports showing declines included games that have been considered “core youth sports”: baseball, basketball, football, soccer and volleyball. Some sports saw increased participation, including gymnastics, lacrosse, rugby, beach volleyball, fast pitch softball, and ice hockey. Basketball remains the most popular team sport, even though nationally it experienced a 6.8% decrease from 2009-2014.

Citing the same report from SFIA, the 2016 report “State of Play” from the Aspen Institute notes that declines in participation were lower among youth from families with higher income. Children from higher income families are more likely to be active in sports, especially for youth ages 13-17. The report states that, “In today’s youth sports landscape, those who have the greatest opportunity to continue playing into adolescence are those who can afford the club teams, training, and equipment required to advance through the system or even play in high school, many of which provide sport opportunities for only the better athletes.”

Echoing this finding, a 2004 study cited in Social Issues in Sports<sup>6</sup> found that team sport participation peaks at age 11, and many participants drop out of the sports programs before high school. Possible causes cited include the stress on high performance; expenses for training, traveling teams, sports camps, and equipment; injuries; lack of training for youth coaches; and earlier starts in youth sports, leading to boredom with a sport after a number of years.

The strategies espoused by the Aspen Institute report reinforce the importance of sports leagues coordinated by the Department of Recreation and Parks. Local recreational sports are a strong asset in raising healthy children and youth. The report encourages “sport sampling” as opposed to specialization, and emphasis on local recreation leagues. The report encourages

partnerships to strengthen local leagues, including partnerships with schools and organizations such as the YMCA, as well as professional sports industries investing in local recreation facilities.

#### *b. Plan Review*

The 2009 General Development Plan (GDP), the 16 Small Area Plans, and the 2013 LPPRP were reviewed as part of the LPPRP planning process.

##### *i. 2009 General Development Plan (GDP)*

The GDP recommended eight actions to implement its recreation goals and policies. Table III-10 summarizes the status of these implementation actions.

##### *ii. Small Area Plans (SAPs)*

The recommendations from the 16 Small Area Plans (SAPs) were reviewed as part of this LPPRP. As discussed in Chapter II, the 1997 GDP divided the County into 16 small planning areas and recommended that a separate, more detailed land-use plan be completed for each area (Map II-5). Many of the SAP recommendations were fulfilled through the 2006 and 2013 LPPRP and others have been carried forward for consideration in this Plan. Almost all of the plans called for enhanced recreational opportunities for people of all ages and backgrounds. Many of the plans discussed the need for more water access, and many also called for the development of more hiker, biker, and equestrian trails along with the development of parks for active and passive recreational uses. Specific recreation recommendations from the SAPs, as well as their current status, are described in Appendix C.

##### *iii. 2013 LPPRP*

The action items from the 2013 LPPRP were reviewed as part of this plan. Many of the goals and action recommendations have been fulfilled. Some of the others are carried forward as action items in this LPPRP, while some others are no longer applicable or are otherwise not being recommended. Proposed projects are described below in Section C.

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<sup>5</sup> Sports and Fitness Industry Association, Sports, Leisure and Fitness Activities Topline Participation Report, 2015, cited at [www.engagesports.com](http://www.engagesports.com)

<sup>6</sup> Ronald B. Woods, PhD, Social Issues in Sport, Third Edition, 2016

**Table III-10 Status of General Development Plan Recreation Implementation Actions**

| <b>Implementation Action</b>  | <b>Status</b>   |
|---|---|
| Formulate additional joint use schedules at school sites to enhance the community's use of public facilities, especially where there are current deficiencies in recreational space.  | This is done on an ongoing basis by the Department's Scheduling Office.   |
| Formalize an agreement between the Department of Recreation and Parks and the Department of Aging and Disabilities to utilize Senior Centers for community recreation purposes when space is available.   | The two departments cooperate on an on-going basis. R&P offers recreation-oriented classes at senior centers (replacing classes formerly offered at Anne Arundel Community College), and the departments are working on a plan to strengthen their partnership. |
| Promote connectivity to existing and/or planned recreational spaces through the subdivision and site development process.   | This is done on an ongoing basis by the Park Bureau's Capital Projects Division.  |
| Assess current and future needs for local community centers. Include an evaluation of needs identified in the Small Area Plans, as well as other areas that may be underserved with regard to multi-purpose community space.  | See discussion below under Policy Considerations in Section B5.   |
| Acquire approximately 850 additional acres of land for active recreation projects, targeting the land acquisition recommendations of the 2006 LPPRP.  | This objective was exceeded with acquisitions such as the Naval Academy Dairy Farm, Reece Road (West Area Park), Millersville Park and Riva Park expansion area. See also new proposed acquisition and development program in Section C.                        |
| Upgrade existing parks and develop new parks in accordance with the LPPRP and with new initiatives identified in the Department of Recreation and Parks CIP. Continue to use Program Open Space and other State and Federal programs and grants as available to implement these projects. | Ongoing by the Park Bureau's Capital Projects Division.   |
| Prepare a master plan for use of the Naval Academy Dairy Farm property in Gambrills to serve as a passive use regional park for the West County area.   | Master Plan is complete. Discussions with the Navy continue regarding the incorporation of athletic fields into the current master plan. This LPPRP recommends Phase I construction in the mid-range 2017 to 2021 period (see Table III-14).                    |
| Complete an inventory of sites in the County that provide public waterfront access, make it available on the Internet, and identify future sites as needed to increase public access.   | Complete and ongoing, see above under Section B1.   |

*c. Community Outreach*

Public participation was an important part of the LPPRP preparation process. The County used a number of methods to gauge public opinion on recreation and land preservation needs, including an online survey as discussed in Section 2.a), and focus group meetings, and formal meetings with County staff, members of the Recreation Advisory Board, Bicycle Commission, Water Access Commission, and representatives for the County's youth and adult sports leagues.

During preparation of the 2013 LPPRP, the County maintained a web page dedicated to LPPRP comments, and conducted well-advertised public meetings in each of the four LPPRP Planning Areas to obtain public input and introduce the LPPRP planning process. Based on focus group discussions for this

LPPRP, combined with the relatively gradual change in economic, budgetary, and demographic conditions in the County, the input received for the 2013 LPPRP remains largely valid, and thus informs this 2017 LPPRP.

As reported in the 2013 LPPRP, some of the major themes that emerged from this previous input included:

- Maintenance at existing facilities needs improvement.
- Additional fields for team sports (baseball/softball and multi-purpose fields) are needed to keep pace with demand as the County population grows. This can be accomplished in part through more intensive use of fields:
  - Install lighting to extend usage hours at existing fields.
  - Install synthetic turf fields where possible to maximize the utility of existing fields.

- There is a shortage of indoor recreation opportunities including but not limited to tennis, basketball, volleyball and swimming.
- Land preservation should continue to be a County priority, particularly in the Southern Planning Area.

Indoor gyms and multipurpose fields capable of hosting regional tournaments or events are also needed, according to commission members, sports league officials, and Department staff interviewed for this 2017 LPPRP. Such tournaments (primarily, but not limited to lacrosse and basketball, two sports for which central Maryland is nationally renowned) offer substantial financial opportunities to the County.

In response to additional input from the public and user groups since 2013, the Department's Five Year CIP includes an indoor/outdoor tennis center to be designed and constructed as a public private partnership with The Tennis Alliance of Anne Arundel County, a non-profit 501(c)3 organization.

#### *d. Formal Public Meetings*

Formal public meetings were held with the Recreation Advisory Board, Planning Advisory Board, and County Council on [Dates TBD]. Public comments from these meetings can be found in Appendix B.

### **3. Needs Analysis**

The needs analysis starts with a recreation facilities supply/demand model for 14 types of recreation facilities<sup>7</sup>. For each facility type the model compares facility supply to demand for the County as a whole, and for each of the four Planning Areas. The analysis results in two products:

- A summary of surpluses or deficits in the number of facilities needed to serve County residents,

- A summary of surpluses or deficits in the number of facilities needed to serve each Planning area.

The results of this analysis are combined with the 2016 survey results, trend information, the proximity and equity analyses (see Sections B.4 and B.5), and the rest of the County's public outreach process described in Chapter II and earlier in this chapter to set County priorities for land acquisition, facility development, and rehabilitation.

Supply comes from the recreation inventory (Appendix A). Demand is based on the *2003 Participation in Local Park and Recreation Activities in Maryland* survey cited above as modified by the 2016 LPPRP Survey, and current and projected population.

The analysis uses two time frames: current (2018) and mid to long-range (2035). Estimates for short-range demand and need are based on actual 2015 population (the most recent available) and mid to long-range demand on projected 2035 population. The long-range analysis is conducted due to the length of time needed to plan, fund and implement new facilities, especially indoor recreation centers.

The County used participation data from the state survey for all recreation activities except baseball/softball (in the County's experience, participation rates in these sports are much higher than the rates reported for the Baltimore region as a whole).

Model data for daily carrying capacity, sport season length, and demand were taken from Anne Arundel County's 2013 LPPRP

Detailed tables for the supply, demand, and needs analyses are provided in Appendix D. The electronic version of these tables (available from the Department) includes explanatory comments about demand, season length or daily carrying capacity. The results from the needs analysis are combined with survey results and the Department's experience with usage to establish the following estimates of the County's needs. The State recognizes in its guidelines for the LPPRP that priorities are subject to change for a variety of legitimate and sometimes unpredictable reasons.

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<sup>7</sup> The state required analysis of four facility types for the 2013 LPPRP; the County selected the other ten. While 2017 LPPRP guidelines no longer specifically require these analyses, the County has retained them to provide continuity of policies based on previous analyses.

*a. Countywide Needs*

Table III-11 summarizes results obtained from the detailed supply/ demand model tables contained in Appendix A. The table lists the Countywide supply of existing facilities, and shows the estimated surplus or deficit of facilities for 2018 and 2035. Sizable deficits exist now for some facilities, deficits that will increase through 2035 as the County's population increases, unless new facilities are developed to keep pace with growth.

The deficits identified in Table III-11, with additional needs derived from the County survey, County staff, and stakeholder input, are:

**Primary Deficit**

- Public water access: boat ramps, fishing piers and swimming beaches. This need is indicated strongly both by the County survey and the needs analysis summarized in Table III-11 (boat ramps and fishing piers).
- Indoor basketball and tennis courts; indoor facilities would also provide for volleyball courts which, although not analyzed through this model, are known by staff to be a need.
- Multi-purpose fields for team sports, specifically a venue capable of hosting regional tournaments for lacrosse, soccer, and other popular sports. The Department is now being asked to provide field time for cricket matches, which places additional demands on multi-purpose fields that are already at capacity;
- Baseball / softball diamonds, especially 90-foot baseball diamonds;
- Multipurpose trails. Although the needs analysis does not indicate a deficit, use of trails for fitness and recreation has grown in popularity since the 2003 data were gathered, and the County's survey indicates a need for the County to continue its ongoing trail development program.

Although indoor swimming is identified as a secondary deficit based on supply and demand

modeling, Department planners and programmers have noted that the two indoor swim centers in the County are currently operating at capacity, therefore, two additional facilities, one in the west and one in the south planning areas, are being proposed in this plan.

**Secondary Deficits**

- Nature centers (from the County's survey; consistent with the desire, also noted in the survey, for more environmental programming.);
- Track and field facilities. Not analyzed in the demand model or found in the survey; however, County staff is aware that track/field users have been displaced from high schools due to the installation of synthetic turf fields and the resulting increase in the number of groups using them.
- Indoor swimming;
- Dog parks; and
- Picnic pavilions;

These findings are generally consistent to the observations of County Staff charged with managing parks and recreation programming, as well as representatives from County boards and commissions. As part of the 2017 LPPRP outreach process, these stakeholders identified the need for (and fiscal opportunity associated with) and extreme difficulty in finding and acquiring land suitable for an outdoor multipurpose field complex; as well as the absence of non-AACPS multipurpose fields in the Northern part of the County.

The Department is in the process of creating primitive camp sites for car top boaters, primarily on the Patuxent River. Additionally the County is in the early stages of evaluating general use camping opportunities within County parks and natural resource areas. Currently, the County offers organized group camping at Thomas Point Park and Downs Memorial Park.

**Table III-11: Summary Needs Report**

| Activity  | Facility Type                                | 2018<br>Facilities | 2018<br>Demand <sup>(1)</sup> | 2035<br>Demand <sup>(1)</sup> | Comments<br>Comparison to Previous LPPRP Recreation Needs Reports  |
|---|--|--------------------|-------------------------------|-------------------------------|--|
| Baseball/ Softball                                      | Diamonds                                     | 360                | (15)                          | (57)                          | Similar needs vs. 2006 LPPRP. Supply has decreased since 2013 LPPRP; but the season length and overall demand have increased with population. National trends show decreased popularity of baseball (softball is steady or increasing). Based on the County's experience, this LPPRP retains the participation factor used in 2006 and 2013, which was higher than indicated in the 2003 survey for the region. The County continually evaluates this demand based on scheduling requests and consultation with sports league officials. |
| Basketball (indoor)                                     | Courts<br>(indoor league)                    | 121                | (47)                          | (66)                          | Similar needs to 2013. Supply is steady, while demand is increasing with population.   |
| Basketball (outdoor)                                    | Courts<br>(outdoor recreation)               | 153.5              | 75                            | 66                            | Supply remains adequate; maintenance of facilities is important.   |
| Field Sports (football, soccer, lacrosse, field hockey) | Multi-Purpose fields                         | 235                | (22)                          | (51)                          | Supply must increase proportionally with growing population; tournament facilities are needed.   |
| Tennis (indoor)   | Courts                                       | 1                  | (10)                          | (12)                          | The County has only one publicly accessible indoor tennis court. Survey results and staff experience indicate substantial demand for indoor tennis courts. An indoor tennis facility would have a county-wide service area.  |
| Tennis (outdoor)  | Courts                                       | 161                | 19                            | 3                             | Modest surplus; however, the County lacks concentrations of multiple courts suitable for league play or tournaments. Courts are scattered.   |
| Boating   | Ramps, Launch<br>Areas, Put-Ins              | 48                 | (81)                          | (96)                          | Deficits reduced since 2013 (supply increased with 12 cartop boat launch areas), but remain high. Supply does not include private facilities (marinas, individual docks, etc.)   |
| Dog Exercising  | Acres  | 5                  | (8)                           | (10)                          | Increased demand as dog parks grow in popularity. Acreage supply has not changed since the 2013 LPPRP.   |
| Golf Courses  | Courses                                      | 16                 | 1                             | (0)                           | Higher demand due to population increase. Inventory includes private (14) and public (2) courses, although private course acreage is not counted in the recreation acreage. This demand will continue to be met by the private sector.   |
| Picnicking  | Pavilions                                    | 68                 | (16)                          | (26)                          | Supply has not increased since 2013. Demand is increasing with population.   |
| Swimming (indoor)                                       | Pools  | 2                  | (6)                           | (6)                           | Continued demand, which must be met through private and quasi-public (i.e., neighborhood) facilities, rather than public facilities.   |
| Tot-Lots/Playgrounds                                    | Playgrounds                                  | 181                | 83                            | 72                            | Large surplus, although demand increases with population. Supply has remained stable since 2013; thus, the surplus will decrease, while remaining comfortable.   |
| Trails: hike, bike, nature                              | Trail miles                                  | 240                | 67                            | 47                            | Supply increased by 81 miles. Demand is high and increasing, as these activities increase in popularity.   |
| Fishing from pier                                       | Fishing Spots (10'<br>per spot on each side) | 469                | (17)                          | (72)                          | Continued demand since 2013. Supply has increased by 36 fishing spots since 2013, but demand is expected to increase more due to population growth.  |
| Ice skating   | Rinks  | 3                  | (2)                           | (2)                           | Continued deficit and unchanged supply.  |

Source: Appendix D

Note:

<sup>(1)</sup>: A number without parenthesis indicates a facility surplus. A number in parenthesis indicates a facility deficit. For example, 2018 demand shows a deficit of 47 indoor basketball courts and a surplus of 66 outdoor basketball courts.

## **Other Needs**

The Department received public input regarding the need for the following facilities (listed below) not identified as primary or secondary deficits in Table III-11. These facilities are described in more detail in Section C.2.

- Indoor ice rinks, for hockey, figure skating, and recreational skating;
- Track and field facilities; and
- A boathouse (including adaptive boating facilities) to serve recreational rowing and paddling activities.

### *b. Planning Area Needs*

The supply/demand model was also run for the four Recreation Planning Areas. Tables III-12 and III-13 summarize the model results for 2018 and 2035, respectively. The model is statistically less reliable at the regional level than for the County as whole because, among other reasons, it does not factor in the differing recreation demand levels by sport in different parts of the County. For example, demand for baseball/softball is higher in the north than in the east (based on requests made to the scheduling office).

In addition, the Planning Area geography must be considered in interpreting the results. For example, the western region shows the highest need for fishing piers, but this reflects i) the relative lack of waterbodies in this part of the County capable of supporting game fish; ii.) the lack of public and community water access locations in this part of the County (compared, for example, to the East); and iii) specific

information in the inventory regarding shoreline fishing opportunities on the Patuxent River.

Notwithstanding these limitations the Recreation Planning Area data are informative, and are summarized below. The northern and western planning areas anticipate the greatest population growth: 29,500 and 27,700 people, respectively, between 2010 and 2035. Deficits in these areas will increase without new facilities.

### **Northern Planning Area**

The largest facility deficits in the Northern Planning Area are for water access, multi-purpose fields, indoor basketball, dog parks, and picnic pavilions.

### **Southern Planning Area**

The Southern Planning Area has few current major deficits and, with low projected population increase, few deficits are projected through 2035.

### **Eastern Planning Area**

The largest facility demands in the Eastern Planning Area are for baseball/softball diamonds, indoor basketball courts, water access, and fishing from piers.

### **Western Planning Area**

The Western Planning Area has current deficits for several types of facilities including baseball/softball diamonds, multi-purpose fields, indoor basketball courts, trails, picnic pavilions, indoor swimming, tennis, and dog parks.

**Table III-12: Needs by Planning Area, 2018**

| Activity                    | Facility Type                | Facility Surplus (Deficit) <sup>(1)</sup> |       |       |       |       |
|-----------------------------|------------------------------|---|-------|-------|-------|-------|
|                             |                              | Countywide                                | North | South | East  | West  |
| Baseball/ Softball          | Diamonds                     | (15)                                      | 23    | 8     | (17)  | (23)  |
| Basketball (indoor)         | Courts (indoor league)       | (47)                                      | (10)  | (2)   | (13)  | (19)  |
| Basketball (outdoor)        | Courts (outdoor recreation)  | 75  | 42    | 6     | 16    | 11    |
| Field Sports <sup>(2)</sup> | Multi-Purpose fields         | (22)                                      | (25)  | 14    | 5     | (13)  |
| Tennis, Outdoor             | Courts, outdoor              | 19  | 23    | 6     | 2     | (9)   |
| Boating                     | Ramps, Launch Areas, Put-Ins | (81)                                      | (34)  | (2)   | (9)   | (35)  |
| Dog Exercising              | Acres                        | (8)                                       | (4)   | (1)   | (1)   | (1)   |
| Golf Courses                | Courses                      | 1   | (1)   | 2     | 4     | (1)   |
| Picnicking                  | Pavilions                    | (16)                                      | (10)  | (3.4) | 13    | (15)  |
| Swimming (indoor)           | Pools                        | (6)                                       | (1)   | (1)   | (1)   | (2)   |
| Tot-Lots/Playgrounds        | Playgrounds                  | 83  | 27    | 11    | 36    | 11    |
| Trails: hike, bike, nature  | Trail miles                  | 67  | 14    | 39    | 24    | (7)   |
| Fishing from pier           | Fishing Spots <sup>(3)</sup> | (17)                                      | 30    | 178   | (88)  | (131) |
| Ice skating                 | Rinks                        | (2)                                       | (1)   | (0.5) | (0.5) | (0.3) |

Note:

<sup>(1)</sup> A number without parenthesis indicates a facility surplus. A number in parenthesis indicates a facility deficit.

<sup>(2)</sup> Football, soccer, lacrosse, field hockey, and similar sports requiring a playing field.

<sup>(3)</sup> Assumes 10 linear feet per fishing spot on each side of a pier.

**Table III-13: Needs by Planning Area, 2035**

| Activity                    | Facility Type                | Facility Surplus (Deficit) <sup>(1)</sup> |       |       |       |       |
|-----------------------------|------------------------------|---|-------|-------|-------|-------|
|                             |                              | Countywide                                | North | South | East  | West  |
| Baseball/ Softball          | Diamonds                     | (57)                                      | 5     | 3     | (22)  | (39)  |
| Basketball (indoor)         | Courts (indoor league)       | (66)                                      | (18)  | (4)   | (15)  | (26)  |
| Basketball (outdoor)        | Courts (outdoor recreation)  | 66  | 39    | 5     | 15    | 7     |
| Field Sports <sup>(2)</sup> | Multi-Purpose fields         | (51)                                      | (37)  | 11    | 2     | (24)  |
| Tennis, Outdoor             | Courts, outdoor              | 3   | 16    | 4     | 1     | (15)  |
| Boating                     | Ramps, Launch Areas, Put-Ins | (96)                                      | (40)  | (3)   | (10)  | (40)  |
| Dog Exercising              | Acres                        | (10)                                      | (5)   | (2)   | (1)   | (2)   |
| Golf Courses                | Courses                      | (0)                                       | (1)   | 1     | 3     | (2)   |
| Picnicking                  | Pavilions                    | (26)                                      | (14)  | (4)   | 12    | (18)  |
| Swimming (indoor)           | Pools                        | (6)                                       | (2)   | (1)   | (1)   | (2)   |
| Tot-Lots/Playgrounds        | Playgrounds                  | 72  | 22    | 10    | 35    | 7     |
| Trails: hike, bike, nature  | Trail miles                  | 47  | 5     | 37    | 22    | (15)  |
| Fishing from pier           | Fishing Spots <sup>(2)</sup> | (72)                                      | 7     | 172   | (94)  | (152) |
| Ice skating                 | Rinks                        | (2)                                       | (1)   | (0.5) | (0.5) | (0.5) |

Source: Appendix D.

Note:

<sup>(1)</sup>: A number without parenthesis indicates a facility surplus. A number in parenthesis indicates a facility deficit.

<sup>(2)</sup> Football, soccer, lacrosse, field hockey, and similar sports requiring a playing field.

<sup>(3)</sup> Assumes 10 linear feet per fishing spot on each side of a pier.

#### 4. Proximity and Equity Analyses

The State's 2017 LPPRP guidelines include two required analyses that are new to the LPPRP process: a Proximity Analysis and an Equity Analysis. This section presents the results of those analyses.

##### *a. Proximity Analysis*

The Proximity Analysis is a geospatial analysis that compares the location of the County's park and recreation facilities (as identified in the Inventory in Appendix A) to the distribution of its population. The intent of the Proximity Analysis is "to generally determine where the public can readily access these amenities and where they cannot" (2017 LPPRP Guidelines).

As per the State guidelines, the County mapped a series of "catchment areas" for its parks and recreation facilities, specifically:

- Catchment areas for parks and recreation facilities in the South Planning Area were assigned 5-mile catchment areas;
- Catchment areas for all other parks and recreation facilities in the County were ½ mile, except in cases described below.

Maps III-3 through III-8 show the catchment areas for various elements of the County's system. Map III-3 shows the overall park and recreation system, with ½ mile and 5-mile buffers, as described above;

Map III-4 shows public water access locations. This map uses a 5-mile catchment area for boat ramps and car-top launch sites, reflecting the automobile-oriented purpose of those sites. All other water access facilities have a ½ mile buffer. Community water access locations and private docks are not shown.

Map III-5 shows both ½ mile and 5-mile catchment areas for the County's trails. The use of two different catchment areas reflects the observation that these trails are often "destinations" for individuals who do not necessarily live within walking distance.

Map III-6 shows both ½ mile and 5-mile catchment areas for parks with picnic facilities. Again, the use of two catchment areas reflects

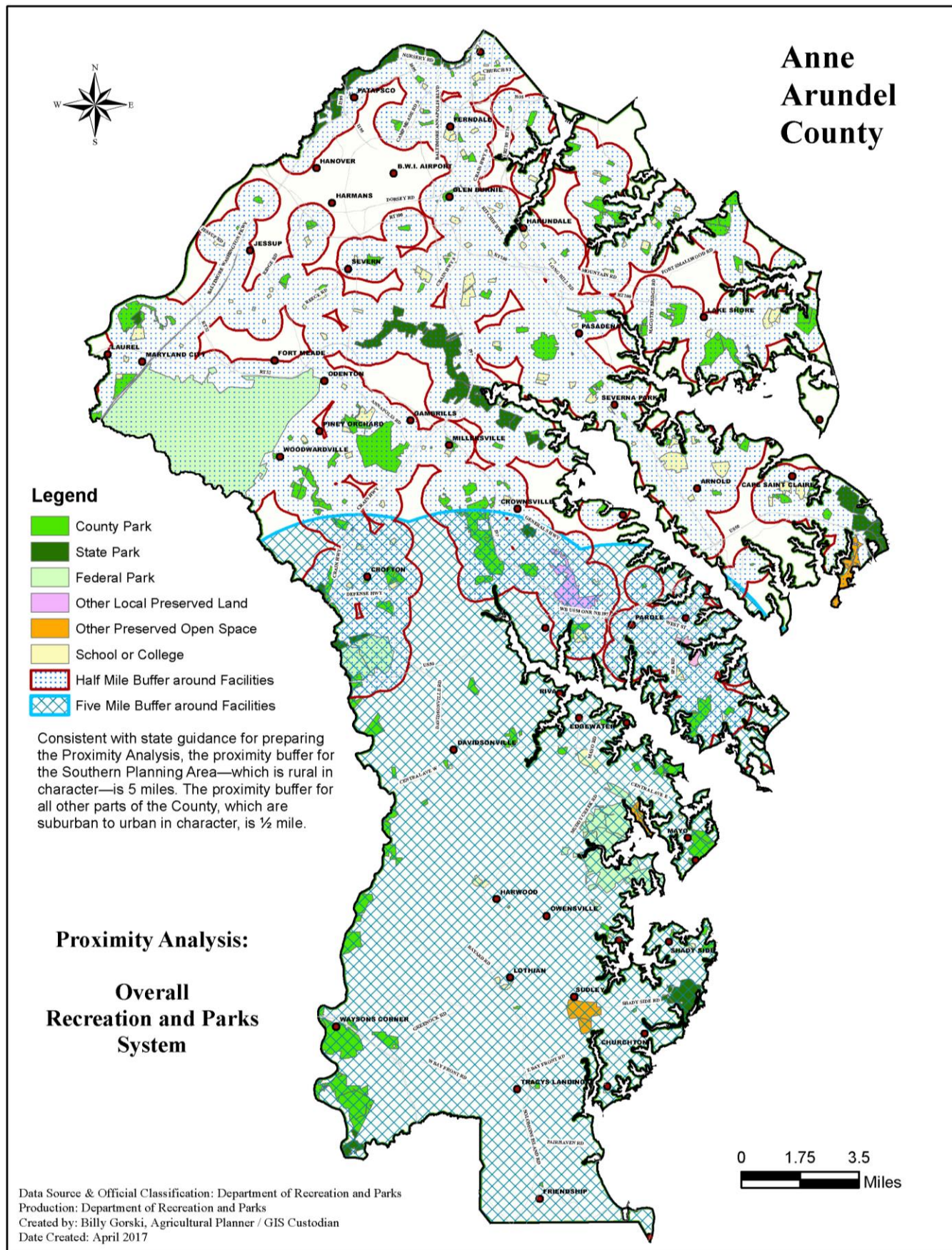
users who drive to picnic facilities, as well as those who walk.

Map III-7 shows 5-mile buffers around athletic fields, while Map III-8 shows 5-mile buffers around indoor recreation facilities (including gymnasiums with basketball courts, aquatic centers, and similar facilities). While some residents may walk or bicycle to these facilities, their primary use is to meet Countywide (or sub-county) demand, such as through sports leagues.

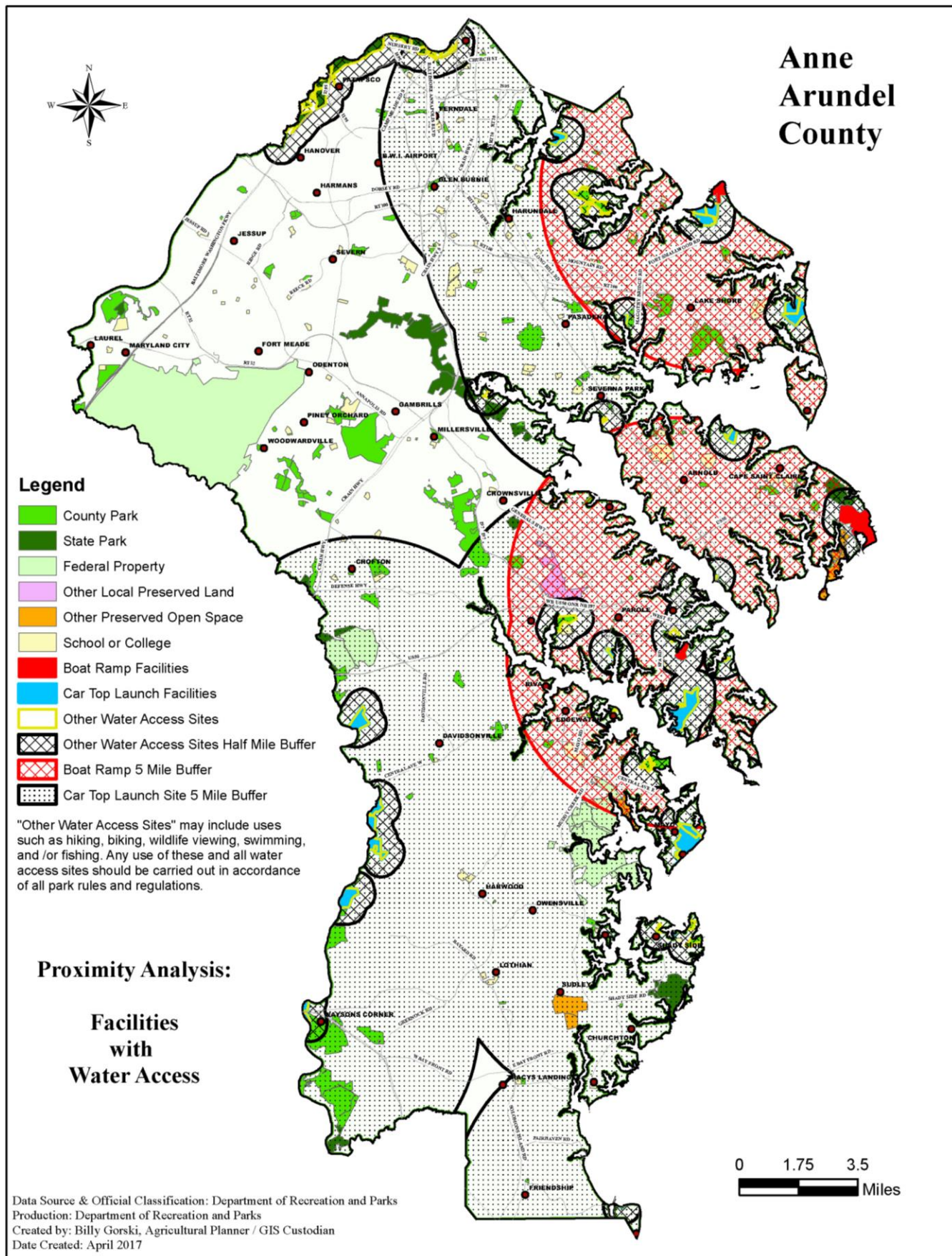
The Proximity Analysis maps suggest the following conclusions about the County's recreation and park system:

- Overall, a substantial portion of County residents are within ½ mile of at least one park or recreation facility. Notable gaps in relatively densely populated areas include north of Fort Meade, and near Hanover and Harmans. All of the rural Southern Planning Area is within 5 miles of at least one park or recreation facility;
- Most of the County, except for the Western Planning Area, is reasonably close to public water access facilities (i.e., within 5 miles of a ramp or car-top launch site). The relative lack of such access in the West is largely a function of geography: there are few navigable waterbodies in this part of the County, although additional car-top launch locations could be considered along the Patuxent River;
- Most of the County (except for a portion of the Southern Planning Area) is within 5 miles of one or more existing or planned regional trails. The County's most heavily populated areas (i.e., Annapolis, Glen Burnie, Severna Park, Odenton, and Crofton), are generally within ½ mile of at least one such trail; and
- Athletic fields and indoor recreation facilities tend to be clustered, leaving gaps throughout the County—most notably in relatively densely populated areas in the Northern and Western Planning Areas. This is consistent with the observations documented throughout this LPPRP, and reflects the difficulty of finding, purchasing, and constructing these facilities.

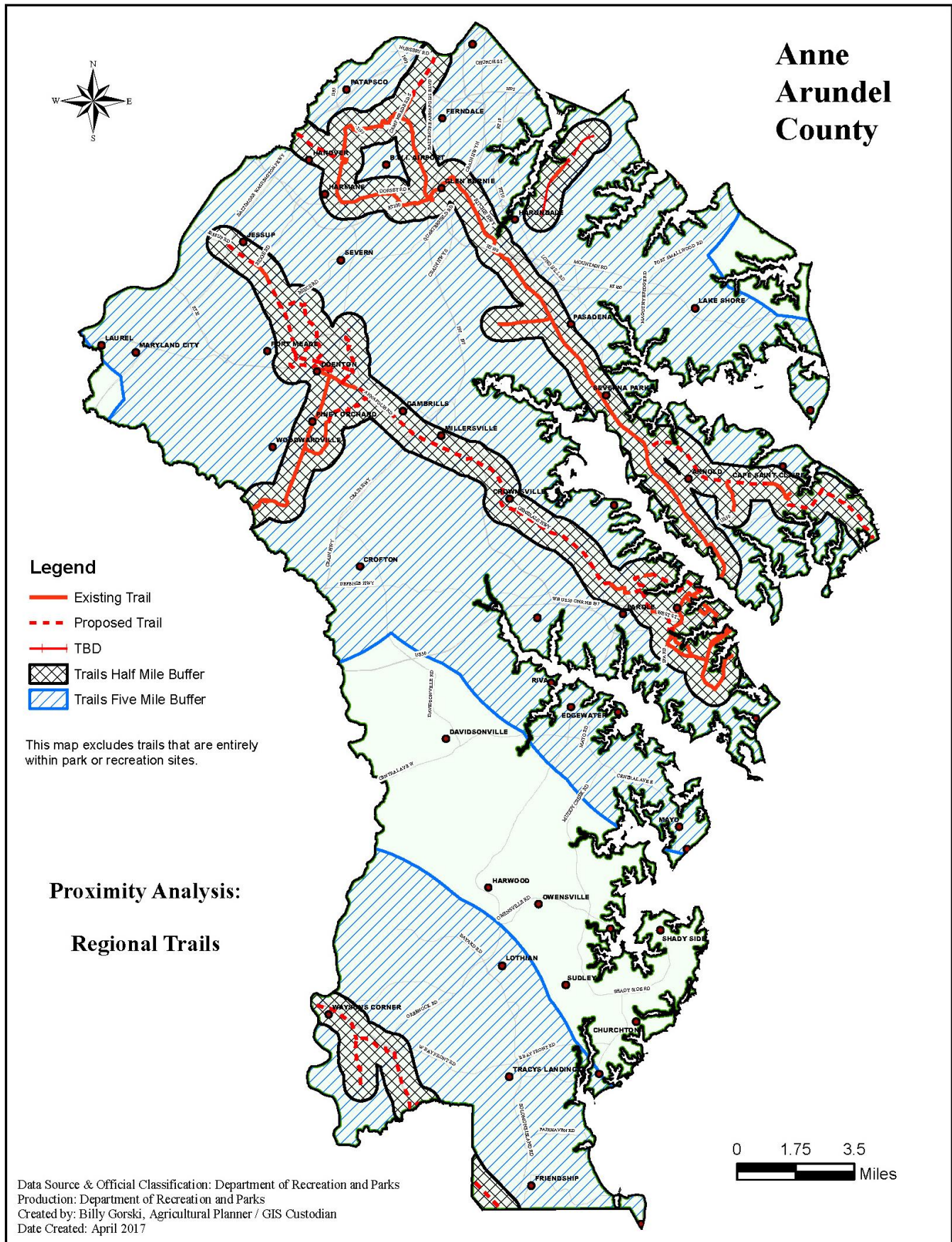
Map III-3. Proximity Analysis—Overview



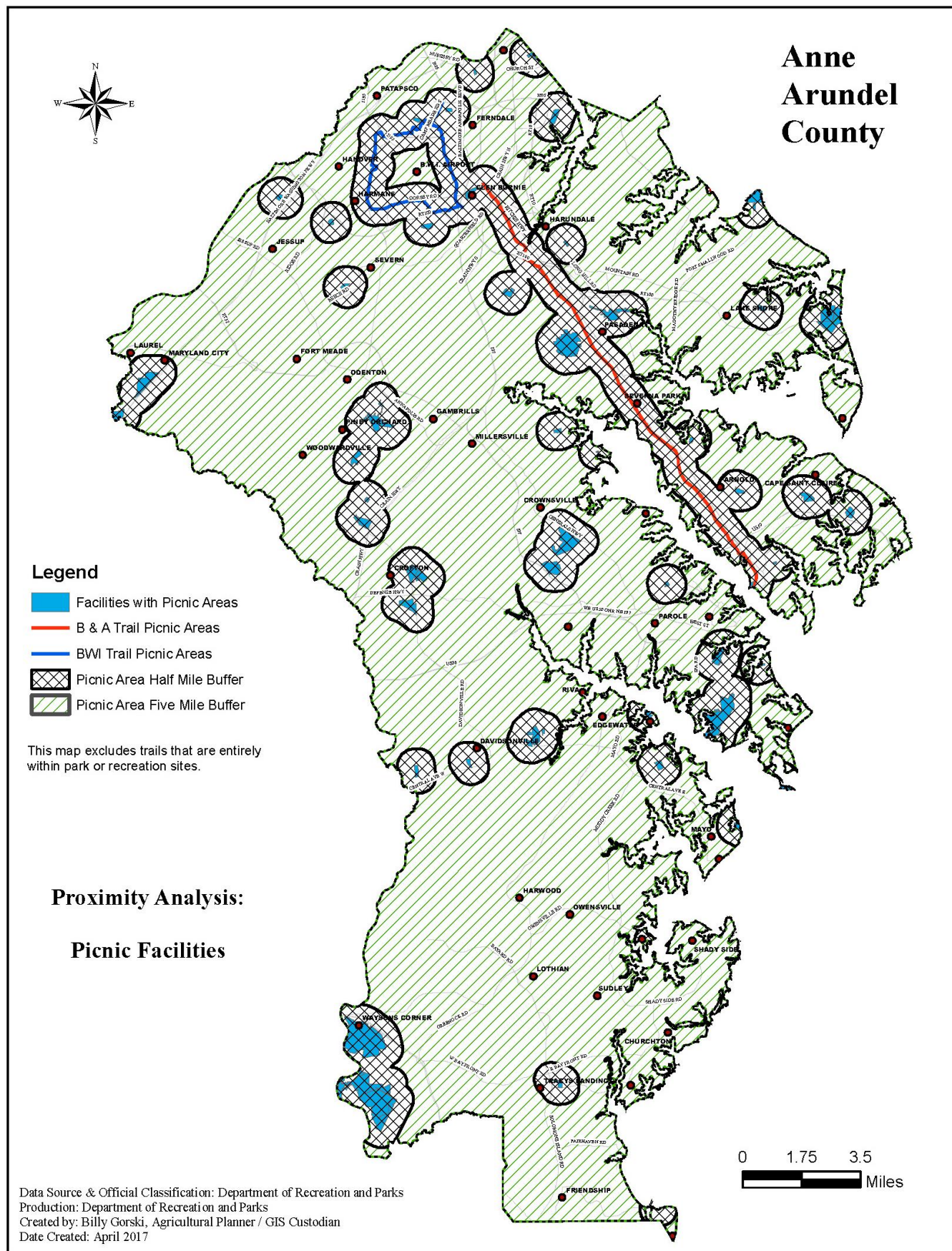
Map III-4. Proximity Analysis—Water Access



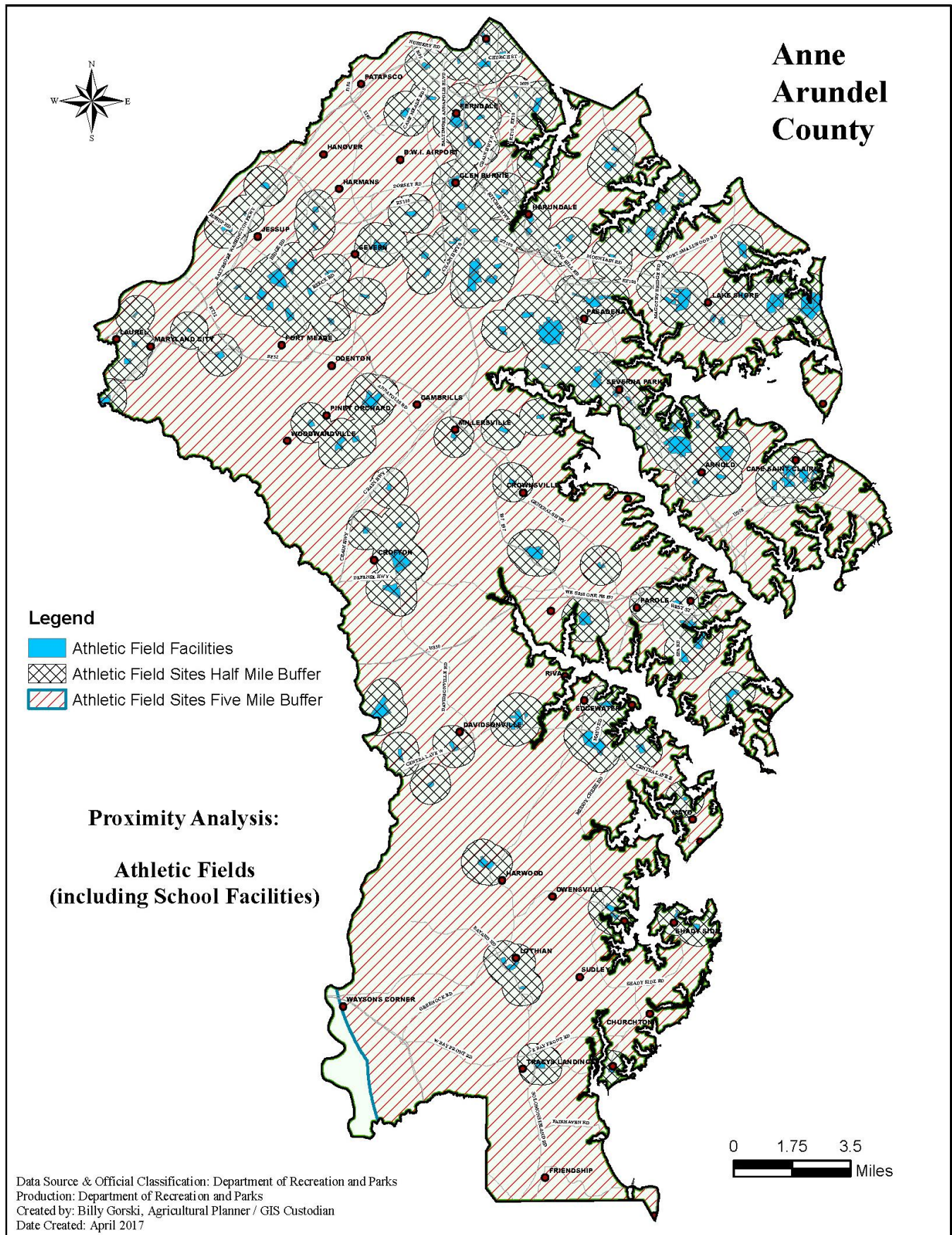
Map III-5. Proximity Analysis—Trails



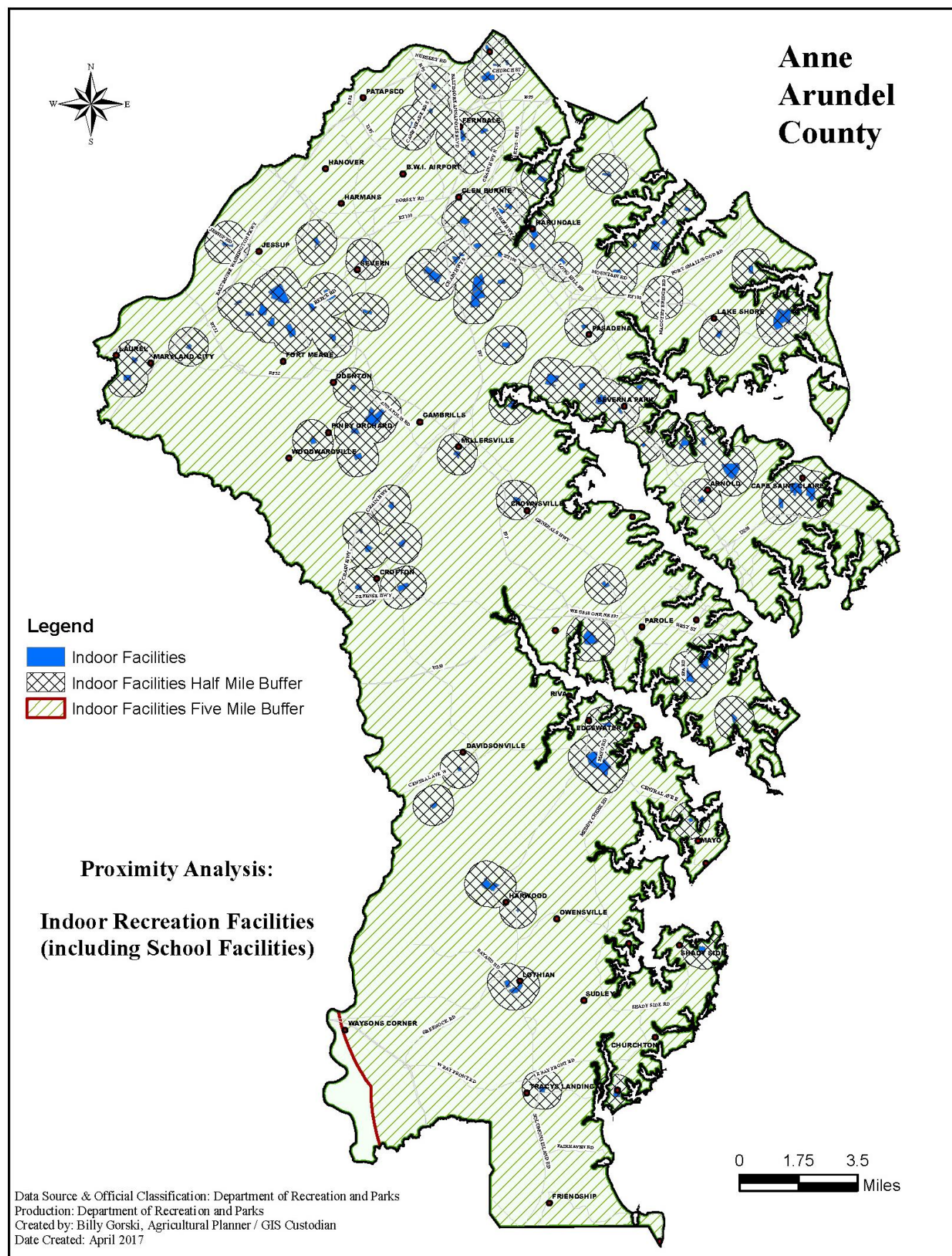
Map III-6. Proximity Analysis—Picnic Facilities



Map III-7. Proximity Analysis—Athletic Fields



**Map III-8. Proximity Analysis—Indoor Recreation Facilities**



Overall, as documented throughout this LPPRP, Anne Arundel County provides a diverse and well-distributed system of parks and recreation facilities, in addition to unique State and Federal parks and recreational lands (i.e., Sandy Point State Park and the Patuxent NWR). The County acknowledges spatial gaps in some specific types of facilities. These gaps reflect the County's geography and settlement patterns, as well as limitations in land availability and budget. Many of the County's priorities for recreation and park facility development (see Section C) respond to the gaps identified in the Proximity Analysis.

#### *b. Park Equity Analysis*

The Park Equity Analysis evaluates the degree to which parks and recreation facilities are accessible to populations that are typically underserved by such resources, including areas of high population density, high concentrations of poverty, and high concentrations of children.

Leading up to the 2017 round of statewide LPPRP revisions, DNR prepared an Equity Analysis GIS dataset. Map III-9 depicts this dataset. Areas shown as having the greatest need for park and recreation facilities (i.e., the areas of High and Medium-High Need) include:

- Annapolis-Parole;
- Ferndale-Brooklyn Park;
- Areas north of Fort Meade;
- Glen Burnie and areas to the south;
- Laurel-Maryland City; and
- Waugh Chapel, north of Crofton;

These areas are generally home to the County's highest population density and lowest-income residents. This is consistent with the Proximity Analysis, which also showed gaps for certain kinds of facilities (i.e., athletic fields, water access) in this area. Many of the County's priorities for recreation and park facility development (see Section C) respond to the gaps identified in the Proximity Analysis.

Age is also an important equity consideration in the County's recreational facilities and programming. Athletic fields and restrooms at new and retrofitted facilities are accessible by paved pathways with gradual slopes. The Department offers numerous senior recreation

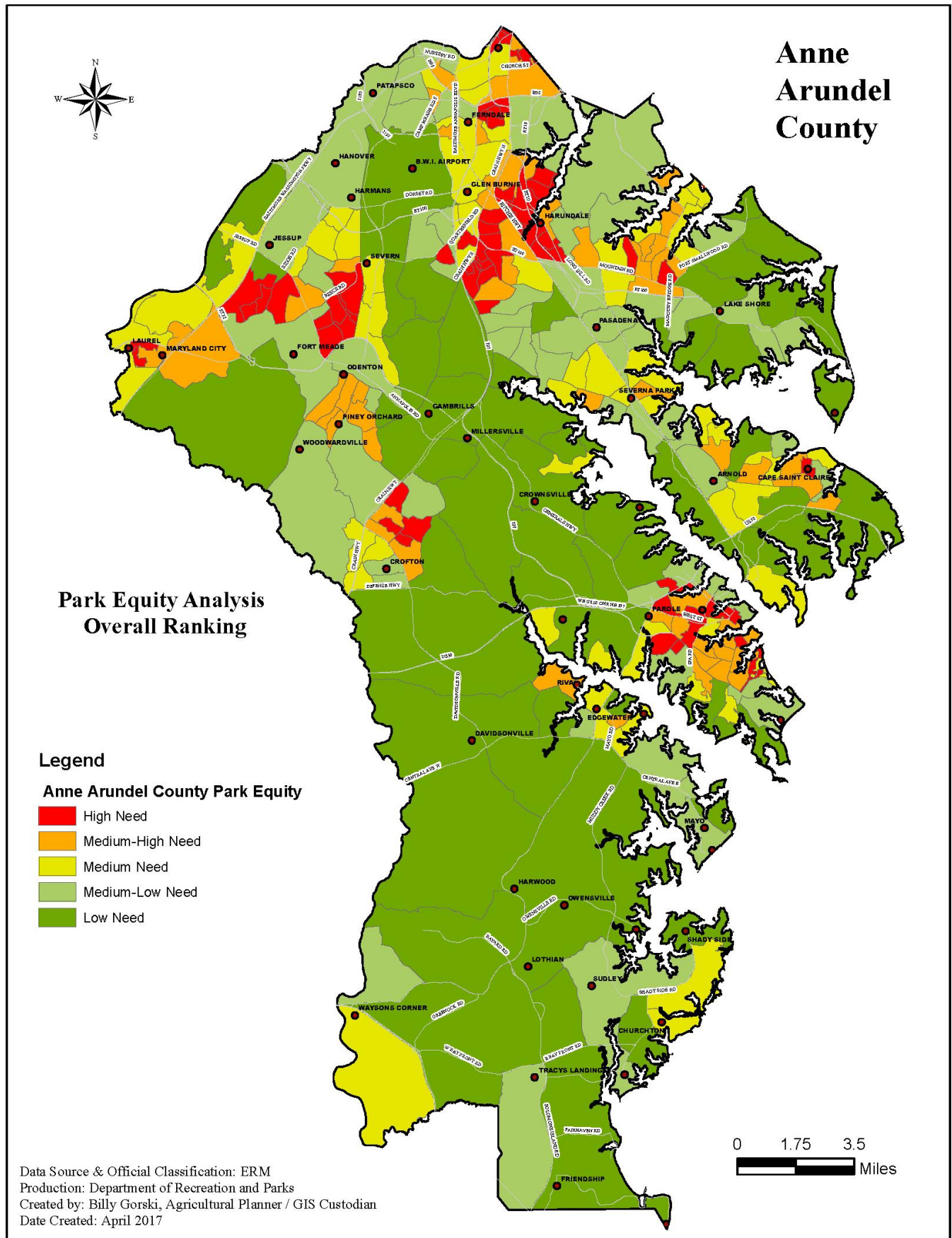
programs at swim centers and indoor recreation facilities. As discussed in section C, the Department is pursuing both a new indoor-outdoor tennis center and a program to provide more pickleball courts (both of which are particularly demanded by older residents). The County's extensive Trail system addresses the walking, jogging, and biking needs of the senior community.

### **5. Policy Considerations**

Policy considerations play an important role in determining how the results of the needs analysis should be expressed in the County's priority capital project recommendations in Section C, below. This LPPRP establishes the following policies to guide capital project recommendations:

1. Make the maintenance and rehabilitation of existing parks a priority over the development of new parks. Many of the County's parks are 30 to 40 years old, and have deteriorated to the point where routine maintenance cannot make them serviceable.  
  
As part of this effort facilities in poor or even derelict condition will be reviewed and repaired, removed, or potentially repurposed (converted to other uses).
2. Fixing parking deficiencies at existing parks and recreation facilities is a priority. This includes adding new parking if vehicle parking is negatively impacting neighborhoods near parks.
3. Increase facilities supply by enhancing existing assets rather than developing new assets. This means emphasizing projects like synthetic turf fields, lights, and drainage that allow existing facilities to be used more frequently or for longer periods of time.
4. Prioritize the development of indoor sports facilities to meet the demand for indoor basketball and other indoor/court sports. This could include enhancement of facilities at existing schools (i.e., constructing separate access and restrooms, so gymnasiums can be used without affecting school staffing or functions) or, where fiscally justified, construction of new community recreation centers.

Map III-9. Park Equity Analysis—Overall Needs



5. Complete the development of the planned trails described in Section B.1.d, and also emphasize the construction of small connectors, such as those between trails and schools or other common destinations for non-motorized travelers. Investment in these small linkages can greatly improve overall trail connectivity, enhancing both the recreational and transportation function of the County's trail system.
6. When identifying new parks and recreation facilities, emphasize locations that address gaps identified by the Proximity Analysis and Park Equity Analysis.
7. As new facilities are built or rehabilitated, green building and landscape technologies will be considered as a Department. The County has committed to achieving Leadership in Energy and Environmental Design (LEED) Silver rating on all new buildings over 10,000 square feet.
8. School Recreation Parks are an important component of the County's parks and recreation system. The Department will continue to work with AACPS on shared use of these facilities, including developing policies, procedures, and agreements that maximize the availability of these facilities to both the Department and AACPS.
9. Public-private partnerships may be a suitable way to develop some kinds of recreation facilities, including reuse/adaptation of existing buildings. The County is working with private groups to evaluate opportunities for using public land and private dollars. Examples include special use facilities like BMX/skate parks and indoor facilities for activities such as basketball, volleyball, and tennis.
10. Addressing the recreation and related health needs of the County's growing elderly population is an important priority. As discussed above, the Department of Recreation and Parks and the Department of Aging and Disabilities cooperate on an on-going basis, but a formal planning effort to identify address the needs of the aging population and those with special needs is warranted.

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## C County Priorities

This section describes the County's park and recreation priorities for meeting its land acquisition, facility development and rehabilitation needs through 2031 and beyond.

State guidance for preparation of the 2013 and previous LPPRP documents emphasized a statewide acreage benchmark. State guidance for the 2017 LPPRP deemphasizes specific numerical goals, in favor of goals that reflect the unique context of each jurisdiction.

Table III-14 lists the County's specific priorities. In developing these priorities, consideration was given to need relative to:

- The results of the supply and demand analysis (including public input);
- Policy considerations set forth in Section B.4.
- Countywide needs versus relative needs in the different Planning Areas—including the need to ensure that all areas of the County are adequately served;

- Specific needs in the City of Annapolis;
- Efficiency of recreation service delivery with respect to location and use;
- Potential for meeting recreational facility needs through joint use, especially at public schools; and
- The relationship of projects to State and County goals set forth in Section A.

The projects are in three time-frames and in three groups of projects<sup>8</sup>. The time frames are short range (2018 to 2021), mid-range (2022 to 2026), and long-range (2027 and beyond). The project groupings are: acquisition and development projects, development projects with no associated acquisition, and rehabilitation projects.

Table III-14 is a similar to long-range CIP, and contains more projects than will likely be

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<sup>8</sup> These time frames and groupings are required by the State's LPPRP guidelines.

Table III-14 Land Acquisition, Development, and Rehabilitation Recommendations

| Project   | Location or Planning Area | Description of Recommendations   | Estimated Total Cost (\$1,000's) | In Current County or City CIP <sup>(1)</sup> | Acres to be Acquired | Estimated Short-Range (2018-2021) Cost (\$1,000s) |                     |       | Estimated Mid-Range (2022-2026) Cost (\$1,000s) |                     |       | Estimated Long-Range (2027 and beyond) Cost (\$1,000) |                     |       |
|---|---------------------------|--|----------------------------------|--|----------------------|---|---------------------|-------|---|---------------------|-------|---|---------------------|-------|
|   |                           |  |                                  |  |                      | Acquisition                                       | Capital Development | Rehab | Acquisition                                     | Capital Development | Rehab | Acquisition   | Capital Development | Rehab |
| LAND ACQUISITION AND DEVELOPMENT PROJECTS       |                           |  |                                  |  |                      |   |                     |       |   |                     |       |   |                     |       |
| City Trail Connections                          | City of Annapolis         | Connect pedestrian/ bike trails to finish the trail network throughout the City.   | \$1,548                          | Y  |                      | \$1,548   |                     |       |   |                     |       |   |                     |       |
| Glen Burnie Community Park                      | Northern                  | Acquire and develop a community park to provide multi-purpose sport fields, dog park and playground.   | \$4,800                          | N  | 30                   | \$1,800   | \$3,000             |       | \$3,600   |                     |       | \$9,250   |                     |       |
| Greenways, Parkland and Open Space Acquisition  | Countywide                | This multi-year capital project will be used to acquire land, which satisfies one or more of the following objectives: addresses local or state Greenway objectives, protects sensitive natural resources, provides an addition to an existing park/trail and/or satisfies County park, recreation and preservation needs as identified in one or more of the following plans: the Land Preservation, Park and Recreation Plan, the Greenway Master Plan, the General Development Plan and the Small Area Plans. | \$16,300                         | P  | 750                  | \$3,450   |                     |       |   |                     |       |   |                     |       |
| Jessup Elementary School-Recreation Cooperative | Northern                  | Evaluate passive recreation opportunities in forested area adjacent to the school to include hiking trails; develop facilities if feasible.  | \$100                            | N  |                      |   | \$100               |       |   |                     |       |   |                     |       |
| Jessup Park Expansion                           | Northern                  | Acquire land adjacent to Jessup Park, if feasible, and expand facilities to meet the public need. If acquisition of land is not feasible, pursue additional parkland in the Jessup area.   | \$4,200                          | N  | 30                   | \$1,200   |                     |       | \$3,000   |                     |       |   |                     |       |
| Linthicum/BWI Fields                            | Northern                  | Acquire & develop a new site or develop existing sites for additional athletic fields.   | \$4,100                          | N  | 20                   | \$1,600   |                     |       | \$2,500   |                     |       |   |                     |       |
| North/East Areas Indoor Sports Facility         | Northern, Eastern         | Acquire site with existing warehouse type building or acquire land and construct an indoor sports facility and related parking.  | \$7,000                          | N  | 5                    |   |                     |       | \$2,000   |                     |       | \$5,000   |                     |       |
| Pasadena/Marley Neck                            | Northern                  | If environmental conditions at Stoney Creek Park (see facility development project) prohibit active recreation, seek additional parkland (athletic fields) in the Pasadena-Marley Neck Area.   | \$4,750                          | N  | 50                   | \$3,000   |                     |       | \$1,750   |                     |       |   |                     |       |
| South County Athletic Fields                    | Southern                  | Acquire land and develop athletic fields in the Edgewater or surrounding area to address the current and future growth in youth sports.  | \$5,750                          | N  | 70                   |   |                     |       |   |                     |       | \$1,750   | \$4,000             |       |
| South County Boat Ramp                          | Southern                  | Acquire land and develop a boat ramp and parking for trailer boats.  | \$2,000                          | N  | 20                   | \$1,000   | \$1,000             |       |   |                     |       |   |                     |       |
| Water Park and Aquatic Center                   | Countywide                | Feasibility study, acquisition, design and construction of an outdoor water park and an indoor aquatic center to address the demand for swimming facilities in the County. The water park will have a county-wide focus and the indoor aquatic center will have a west area focus, therefore one or two sites may be required.   | \$21,500                         | N  | 20                   |   | \$100               |       | \$1,400   | \$10,000            |       | \$10,000  |                     |       |
| West Area Athletic Complex                      | Western                   | Acquire, design and construct an athletic complex in the western planning area to address BRAC related growth.   | \$7,500                          | N  | 50                   |   |                     |       | \$4,000   | \$1,750             |       | \$1,750   |                     |       |
| West / South Area Indoor Sports Facility        | Southern, Western         | Acquire site with existing warehouse type building or acquire land and construct an indoor sports facility and related parking.  | \$7,000                          | N  | 5                    |   |                     |       | \$2,000   | \$5,000             |       |   |                     |       |
| West Area Community Park                        | Western                   | Acquire land adjacent to West Area Community Park or pursue acreage in same area to address the growth in population.  | \$3,200                          | N  | 15                   | \$1,200   |                     |       |   |                     |       | \$2,000   |                     |       |
| Acquisition Cost                                |                           |  | \$37,250                         |  |                      | \$13,250  |                     |       | \$13,000  |                     |       | \$11,000  |                     |       |
| Facility Development Cost                       |                           |  | \$52,498                         |  |                      |   | \$5,748             |       |   | \$24,000            |       |   | \$22,750            |       |
| Sub Total , Land Acquisition and Development    |                           |  | \$89,748                         |  | 1,065                |   |                     |       |   |                     |       |   |                     |       |

|   |                              |  | Estimated<br>Total Cost<br>(\$1,000's) | In Current<br>County or<br>City CIP <sup>(1)</sup> | Acres to<br>be<br>Acquired | Estimated Short-Range (2018-2021)<br>Cost (\$1,000s) |                        |       | Estimated Mid-Range (2022-2026)<br>Cost (\$1,000s) |                        |       | Estimated Long-Range (2027 and<br>beyond) Cost (\$1,000) |                        |       |
|---|------------------------------|--|--|--|----------------------------|--|------------------------|-------|--|------------------------|-------|--|------------------------|-------|
| Project   | Location or<br>Planning Area | Description of Recommendations   |  |  |                            | Acquisition  | Capital<br>Development | Rehab | Acquisition  | Capital<br>Development | Rehab | Acquisition  | Capital<br>Development | Rehab |
| FACILITY DEVELOPMENT PROJECTS                           |                              |  |  |  |                            |  |                        |       |  |                        |       |  |                        |       |
| Bacon Ridge Natural Area in South River Greenway Access | Eastern                      | Design and construct parking and trails to facilitate public access to the South River Greenway.   | \$1,000                                | N  |                            |  | \$1,000                |       |  |                        |       |  |                        |       |
| Bay Head Park (Parking)                                 | Eastern                      | Provide a secondary entrance and additional parking with storm water management upgrades.  | \$800                                  | N  |                            |  |                        |       |  | \$800                  |       |  |                        |       |
| Beverly Triton Beach Park                               | Southern                     | Provide parking and passive recreation opportunities sensitive to neighboring communities.   | \$2,806                                | Y  |                            |  | \$2,806                |       |  |                        |       |  | \$2,000                |       |
| Boat Ramp Development                                   | Countywide                   | Construct boat ramps within existing county parks or acquire land as needed using the Greenway and Parkland Acquisition Project  | \$4,720                                | Y  |                            |  | \$2,950                |       |  | \$1,770                |       |  |                        |       |
| Broadneck Park Upgrades                                 | Northern                     | Add field lights, irrigation and remove deteriorated structure.  | \$450                                  | N  |                            |  | \$450                  |       |  |                        |       |  |                        |       |
| Broadneck Peninsula Trail                               | Eastern                      | Design and construct phases III, IV and V of the Broadneck Trail   | \$11,880                               | Y  |                            |  | \$11,880               |       |  |                        |       |  |                        |       |
| Broadneck Peninsula Trail Rt 2 Bridge                   | Eastern                      | Design and construct a bridge over Route 2 to connect the Broadneck and B & A Trails   | \$8,000                                | N  |                            |  | \$8,000                |       |  |                        |       |  |                        |       |
| Brooklyn Park Upgrades                                  | Northern                     | Add field lights and security lighting.  | \$450                                  | N  |                            |  |                        |       |  | \$450                  |       |  |                        |       |
| Carrs Wharf Pier  | Southern                     | Replace 300' pier which is used for fishing, crabbing and car top boating  | \$778                                  | Y  |                            |  | \$778                  |       |  |                        |       |  |                        |       |
| Central Avenue Park                                     | Southern                     | Design and construct athletic fields, parking and other community recreation facilities  | \$3,000                                | N  |                            |  |                        |       |  |                        |       |  | \$3,000                |       |
| Community Center, North                                 | Northern                     | Design and construct the replacement of the North County Recreation Center at the current site, or a new location to include facilities for recreation, sports, fitness, senior programs, arts and crafts,health, community meetings and public safety. This project will have significant private funding support. Additional land if needed will be acquired under the Greenways, Parkland, and Open Space project | \$10,500                               | N  |                            |  | \$10,500               |       |  |                        |       |  |                        |       |
| Community Center, South                                 | Southern                     | Design and construct the replacement of the South County Recreation Center at the current site, or a new location to include facilities for recreation, sports, fitness, senior programs, arts and crafts, health, community meetings and public safety. Additional land if needed will be acquired under the Greenways, Parkland, and Open Space project  | \$10,500                               | N  |                            |  | \$10,500               |       |  |                        |       |  |                        |       |
| Crownsville Area Park                                   | Eastern                      | Design and construct athletic fields, playground and parking.  | \$3,000                                | N  |                            |  |                        |       |  |                        |       |  | \$3,000                |       |
| USNA Dairy Farm Park                                    | Western                      | Construct Phase I, design and construct Phase II, III and IV.  | \$22,705                               | P  |                            |  | \$6,270                |       |  | \$16,435               |       |  |                        |       |
| Dog Parks   | Countywide                   | Develop dog parks in locations throughout the County. Based on the supply demand model, the top candidate planning areas are the West and North.   | \$1,500                                | N  |                            |  | \$300                  |       |  | \$600                  |       |  | \$600                  |       |
| Facility Irrigation                                     | Countywide                   | Upgrade, replace or add irrigation on athletic fields in County parks to include master control system.  | \$3,750                                | Y  |                            |  | \$1,250                |       |  | \$1,250                |       |  | \$1,250                |       |
| Fort Smallwood / Harry and Jeanette Weinberg Park       | Northern                     | Design and construct phases II and III in accordance with the Master Plan, plus additional beach facilities.   | \$20,639                               | P  |                            |  | \$9,239                |       |  | \$4,600                |       |  | \$6,800                |       |
| Hancock's Resolution Historic Site                      | Northern                     | Design and construct visitor's center and barn   | \$1,277                                | Y  |                            |  | \$1,277                |       |  |                        |       |  |                        |       |
| Homeport Farm Park                                      | Eastern                      | Design and construct passive park facilities and cartop boat launch  | \$2,500                                | P  |                            |  | \$500                  |       |  |                        |       |  | \$2,000                |       |
| Indoor Ice Rinks  | Countywide                   | Conduct a feasibility study to further evaluate the supply and demand for indoor ice facilities. Consider public-private partnerships to address any deficit.  | \$100                                  | N  |                            |  | \$100                  |       |  |                        |       |  |                        |       |
| Indoor Swim Center, South                               | Southern                     | Design and construct an indoor swim center to include lap lanes, recreational swim area, dive wells, and slides.   | \$15,500                               | N  | 10                         | \$500  | \$15,000               |       |  |                        |       |  |                        |       |
| Indoor Swim Center, West                                | West                         | Design and construct an indoor swim center to include lap lanes, recreational swim area, dive wells, and slides.   | \$15,500                               | N  | 10                         | \$500  | \$15,000               |       |  |                        |       |  |                        |       |
| Lake Shore Athletic Complex                             | Northern                     | Design and construct Phase II at Lake Shore to include a dog park, multi-purpose practice field, a concession/restroom building, and equipment storage building  | \$3,000                                | N  |                            |  |                        |       |  |                        |       |  | \$3,000                |       |
| Lake Shore Trail Study                                  | Northern                     | Conduct a feasibility study for a Trail or bike lane to connect north and south Lake Shore.  | \$100                                  | N  |                            |  | \$100                  |       |  |                        |       |  |                        |       |

| Project  | Location or Planning Area | Description of Recommendations  | Estimated Total Cost (\$1,000's) | In Current County or City CIP <sup>(1)</sup> | Acres to be Acquired | Estimated Short-Range (2018-2021)<br>Cost (\$1,000s) |                     |       | Estimated Mid-Range (2022-2026)<br>Cost (\$1,000s) |                     |       | Estimated Long-Range (2027 and beyond) Cost (\$1,000) |                     |       |
|--|---------------------------|---|----------------------------------|--|----------------------|--|---------------------|-------|--|---------------------|-------|---|---------------------|-------|
|  |                           |   |                                  |  |                      | Acquisition  | Capital Development | Rehab | Acquisition  | Capital Development | Rehab | Acquisition   | Capital Development | Rehab |
| Lake Waterford Dredging and Shoreline Rehabilitation | Eastern                   | Perform dredging and shoreline rehabilitation   | \$500                            | N  |                      |  | \$500               |       |  |                     |       |   |                     |       |
| Loopers Field  | Northern                  | Design and construct additional parking, a concession/restroom building, pathways, press box and scoreboards.   | \$3,800                          | Y  |                      |  | \$3,800             |       |  |                     |       |   |                     |       |
| Matthewstown-Harmans Park                            | Northern                  | Develop multi-purpose field, pathways, playground, picnic pavilions and parking   | \$3,000                          | Y  |                      |  | \$3,000             |       |  |                     |       |   |                     |       |
| Mayo Beach Park Improvements                         | Southern                  | Design and construct park improvements in accordance with the new master plan   | \$1,045                          | N  |                      |  | \$1,045             |       |  |                     |       |   |                     |       |
| Mayo - Edgewater Trail Study                         | Southern                  | Conduct a feasibility study for providing a trail or bikeway from Mayo to Edgewater.  | \$100                            | N  |                      |  |                     |       |  | \$100               |       |   |                     |       |
| Mayo - Glebe Heights WRF Parks                       | Southern                  | Design and construct recreation facilities in accordance with the park master plan  | \$8,388                          | N  |                      |  | \$8,388             |       |  |                     |       |   |                     |       |
| Millersville Park Tennis Center                      | Eastern                   | Design and construct an indoor-outdoor tennis facility under the terms of a public - private partnership with the Tennis Alliance of Anne Arundel County  | \$7,650                          | Y  |                      |  | \$7,650             |       |  |                     |       |   |                     |       |
| Outdoor Track and Field Facilities                   | Countywide                | Conduct a feasibility study to site a track and field facility in each of the four Planning Areas. Consider existing and future park sites. Incorporate design and construction into the new parks or add to existing parks.  | \$1,700                          | N  |                      |  | \$100               |       |  | \$800               |       |   | \$800               |       |
| Parking Area Expansion                               | Countywide                | Remedy parking deficiencies within existing parks. Construct additional parking if feasible. Acquire adjacent property if needed using the Greenway Parkland and Open Space Capital Project. If above options are not feasible, relocate recreation facilities to other sites to allow for expanded parking. Acquire land at other locations to accommodate the relocation of facilities. | \$6,000                          | N  |                      |  | \$4,000             |       |  |                     |       |   |                     |       |
| Peninsula Park Expansion                             | Eastern                   | Design and construct additional lighted fields and parking.   | \$2,000                          | N  |                      |  | \$2,000             |       |  |                     |       |   |                     |       |
| Rockhold Creek Park Equestrian Facilities            | Southern                  | Construct horse trailer parking, a restroom building and parking to provide a riding facility for County equestrians.   | \$400                            | N  |                      |  | \$400               |       |  |                     |       |   |                     |       |
| Sands Road Park                                      | Southern                  | Design and construct community recreation facilities at the former Sands Road landfill site.  | \$3,000                          | N  |                      |  |                     |       |  |                     |       |   | \$3,000             |       |
| Solley Cove Park and boat ramp                       | Northern                  | Master plan, design & construct Solley Cove Park to include a boat ramp and community recreation facilities   | \$5,000                          | P  |                      |  | \$1,000             |       |  | \$3,000             |       |   | \$1,000             |       |
| South Shore Trail                                    | Eastern                   | Design and construct phases III, IV and V from Waterbury Road to Annapolis  | \$16,080                         | P  |                      |  | \$6,537             |       |  | \$14,150            |       |   |                     |       |
| South Shore Trail                                    | Western                   | Construct Phase II from Sappington Station to MD Route 3.   | \$5,485                          | P  |                      |  | \$5,485             |       |  |                     |       |   |                     |       |
| South River Farm Park                                | Southern                  | Develop park in accordance with the advisory committee master plan.   | \$7,638                          | N  |                      |  |                     |       |  | \$3,819             |       |   | \$3,819             |       |
| Spriggs Farm Park on the Magothy                     | Eastern                   | Master plan, design and construct passive recreation facilities and possible boat ramp.   | \$3,000                          | N  |                      |  | \$600               |       |  | \$200               |       |   | \$2,200             |       |
| Spriggs Farm Park Shoreline Restoration              | Eastern                   | Create a living shoreline and soft launch   | \$1,000                          | Y  |                      |  | \$1,000             |       |  |                     |       |   |                     |       |
| Stoney Creek Park                                    | Northern                  | Master plan, design & construct a community park to include phase one athletic fields, and phase two car top boat launch, trails, playground, picnic facilities and other park amenities based on public input.   | \$5,000                          | N  |                      |  | \$3,000             |       |  |                     |       |   | \$2,000             |       |
| Synthetic Turf Fields                                | Countywide                | Install synthetic turf in strategic locations throughout the County to address the growth in youth sports programs  | \$6,000                          | N  |                      |  | \$2,000             |       |  | \$2,000             |       |   | \$2,000             |       |
| Truxtun Park Pool                                    | City of Annapolis         | The project will replace the outdoor swimming pool and bath house at Truxton Park   | \$2,730                          | Y  |                      |  | \$2,730             |       |  |                     |       |   |                     |       |
| Water Access Program                                 | Countywide                | Evaluate existing waterfront parks and provide access and parking for fishing and car top boating, or acquire and renovate existing facilities.   | \$4,025                          | P  |                      |  | \$1,340             |       |  | \$1,340             |       |   | \$1,340             |       |
| Wayfinding Sign Program                              | City of Annapolis         | Continue and expand this program for the City's trail system.   | \$396                            | Y  |                      |  | \$396               |       |  |                     |       |   |                     |       |
| WB&A Trail - Bridge over Patuxent River              | Western                   | Construct bridge over Patuxent as a cooperative project with Prince George's County and the State of Maryland.  | \$7,508                          | Y  |                      |  | \$7,508             |       |  |                     |       |   |                     |       |
| Sub Total, Facility Development                      |                           |   | \$250,502                        |  | 20                   | \$1,000  | \$160,379           |       |  | \$51,314            |       |   | \$37,809            |       |

|  |                              |  | Estimated<br>Total Cost<br>(\$1,000's) | In Current<br>County or<br>City CIP <sup>(1)</sup> | Acres to<br>be<br>Acquired | Estimated Short-Range (2018-2021)<br>Cost (\$1,000s) |                        |          | Estimated Mid-Range (2022-2026)<br>Cost (\$1,000s) |                        |          | Estimated Long-Range (2027 and<br>beyond) Cost (\$1,000) |                        |          |
|--|------------------------------|--|--|--|----------------------------|--|------------------------|----------|--|------------------------|----------|--|------------------------|----------|
| Project  | Location or<br>Planning Area | Description of Recommendations   |  |  |                            | Acquisition  | Capital<br>Development | Rehab    | Acquisition  | Capital<br>Development | Rehab    | Acquisition  | Capital<br>Development | Rehab    |
| FACILITY REHABILITATION PROJECTS               |                              |  |  |  |                            |  |                        |          |  |                        |          |  |                        |          |
| Arundel Swim<br>Center Renovations             | Eastern                      | Design and construct necessary renovations to the building and pool systems<br>originally constructed in 1988  | \$3,924                                | Y  |                            |  |                        | \$3,924  |  |                        |          |  |                        |          |
| B & A Ranger<br>Station<br>Rehabilitation      | Northern                     | Rehabilitate the B&A Ranger Station to address structural, mechanical and cosmetic<br>deficiencies   | \$737                                  | Y  |                            |  |                        | \$737    |  |                        |          |  |                        |          |
| Downs Park<br>Amphitheater                     | Northern                     | Replace existing amphitheater  | \$673                                  | Y  |                            |  | \$673                  |          |  |                        |          |  |                        |          |
| Downs Memorial<br>Park Resurfacing             | Northern                     | Resurface roads, courts, trails and parking lots.  | \$750                                  | Y  |                            |  |                        | \$750    |  |                        |          |  |                        |          |
| Eisenhower Golf<br>Course                      | Eastern                      | Construct new clubhouse, golf car shed and renovate fairways, greens, cart paths and<br>tee boxes.   | \$5,000                                | Y  |                            |  | \$1,500                | \$3,500  |  |                        |          |  |                        |          |
| Facility Lighting                              | Countywide                   | Repair, upgrade or replace existing field and court lighting systems and light<br>additional fields and courts where needed to meet demand.  | \$7,416                                | P  |                            |  |                        | \$2,616  |  |                        | \$2,400  |  |                        | \$2,400  |
| Hot Sox Park<br>Rehabilitation                 | Southern                     | Renovate existing historic baseball field to include reconstruction of the bleachers and<br>dugouts, new backstop and fencing, upgrade parking lot and add a picnic pavilion and<br>grills   | \$2,190                                | Y  |                            |  |                        | \$2,190  |  |                        |          |  |                        |          |
| Lake Waterford<br>Park Building<br>Renovation  | Eastern                      | Renovate existing building to better accommodate programming and operational<br>needs, including additional facilities for special needs populations.  | \$1,000                                | N  |                            |  |                        |          |  |                        | \$1,000  |  |                        |          |
| Park Renovation                                | Countywide                   | Repair, improve, reconstruct and redevelop existing County parks and school<br>recreation areas.   | \$45,000                               | P  |                            |  |                        | \$15,000 |  |                        | \$15,000 |  |                        | \$15,000 |
| Pickleball Courts                              | Countywide                   | Renovate or replace existing basketball and tennis courts to accommodate pickleball.<br>If courts are not available in a specific Planning Area, develop new courts to meet the<br>current demand. Identify at least one site to serve as a tournament venue with at least<br>eight (8) courts. Consider the conversion of tennis courts where both sports can be<br>accommodated at the same park, or if two parks in close proximity have tennis courts<br>consider converting one site to pickleball. | \$1,200                                | N  |                            |  |                        | \$400    |  |                        | \$400    |  |                        | \$400    |
| Quiet Waters Park                              | Eastern                      | Upgrades and renovations at this regional park.  | \$1,500                                | N  |                            |  |                        | \$1,500  |  |                        |          |  |                        |          |
| Renovations to<br>Athletic Field               | City of<br>Annapolis         | Rehabilitate fields in the City of Annapolis as needed for safe play   | \$600                                  | N  |                            |  |                        | \$200    |  |                        | \$200    |  |                        | \$200    |
| Randazzo Athletic<br>Complex<br>Rehabilitation | Western                      | Re-develop Randazzo Athletic Complex to accommodate youth football; fields,<br>parking, playground and field house upgrades  | \$3,720                                | Y  |                            |  |                        | \$3,720  |  |                        |          |  |                        |          |
| School- Outdoor<br>Recreation Facilities       | Countywide                   | Design and construct playing fields, upgrade existing fields, rehabilitate tennis,<br>basketball courts and other recreation amenities to accommodate after-school<br>activities on school properties or on adjacent county-owned land   | \$4,905                                | Y  |                            |  |                        | \$1,625  |  |                        | \$1,625  |  |                        | \$1,625  |
| Shoreline Erosion<br>Control                   | Countywide                   | Address shoreline erosion problems in County parks that border the Chesapeake Bay<br>and its tributaries.  | \$4,200                                | P  |                            |  |                        | \$1,400  |  |                        | \$1,400  |  |                        | \$1,400  |
| Skate Park Facilities                          | Countywide                   | Evaluate opportunities to convert unused court facilities to skate parks. Consider<br>private funding if available. Resurface courts and install equipment.  | \$300                                  | N  |                            |  |                        | \$100    |  |                        | \$100    |  |                        | \$100    |
| Trail Resurfacing                              | Countywide                   | Resurface trails throughout the County to include the B&A Trail and paved trails<br>within County parks.   | \$1,800                                | P  |                            |  |                        | \$600    |  |                        | \$600    |  |                        | \$600    |
| Truxton Park Skate<br>Park                     | City of<br>Annapolis         | Renovate the skatepark facility at Truxton Park  | \$150                                  | Y  |                            |  |                        | \$150    |  |                        |          |  |                        |          |
| Truxton Park Trail<br>Improvements             | City of<br>Annapolis         | Stabilize and renovate 2500 linear feet of woodland trails.  | \$200                                  | Y  |                            |  |                        | \$200    |  |                        |          |  |                        |          |
| Truxton Park Tennis<br>Courts                  | City of<br>Annapolis         | Renovate the tennis court complex  | \$500                                  | N  |                            |  |                        | \$500    |  |                        |          |  |                        |          |
| Sub Total, Facility Rehabilitation             |                              |  | \$85,735                               |  |                            |  | \$2,173                | \$39,112 |  |                        | \$22,725 |  |                        | \$21,725 |
| Grand Total, All Projects                      |                              |  | \$425,985                              |  | 1,085                      | \$14,250   | \$169,300              | \$39,112 | \$13,000   | \$75,314               | \$22,725 | \$11,000   | \$60,559               | \$21,725 |

Notes:  
<sup>(1)</sup>(Y:yes, N: no, P:partial

completed through 2031. The intent is to list all the desired projects in one place, for use in developing the annual capital budget and CIP. Over time, as priorities change, projects may move from the short range to the medium or long range, or vice versa. New projects could also be proposed, but would not necessarily require that the LPPRP be revised.

## **1. Acquisition and Development Projects**

Land acquisition projects total approximately 1,065 acres in 12 projects. Approximately 315 acres would be for specific recreation projects. The two largest acquisitions would be approximately 70 acres for new South County Athletic Fields in Edgewater or the surrounding area, 50 acres for athletic fields in the Pasadena-Marley Neck area (if environmental conditions prevent additional athletic fields at Stoney Creek Park), and 50 acres for a new West Area Athletic Complex. This complex is envisioned as having multi-use athletic facilities suitable for supporting recreational league play and tournaments.

Approximately 10 acres would be for land on which to develop indoor sports facilities to meet the demand for basketball and other indoor/court sports. Two facilities are envisioned, one to serve the North and East and one to serve the West and South.

Other recreation acquisitions would be for new parks and recreation facilities, and additions/expansions to existing parks, including:

- Northern Planning Area:
  - a new community park (Glen Burnie Community Park);
  - Expansion of Jessup Park or acquisition of other land in the Jessup area; and
  - additional athletic fields in the Linthicum/BWI area;
- Southern Planning Area:
  - a boat ramp and associated parking; and
  - a new indoor swimming center; and
- Western Planning Area;
  - a new indoor swimming center; and
  - a community park, possibly in the Odenton/Fort Meade vicinity.

The remaining 750 acres would be for the multi-year Greenways, Parkland and Open Space Acquisition program. This program potentially satisfies multiple objectives: addressing local or state greenway objectives, protecting sensitive natural resources, providing additions to existing parks/trails, and/or satisfying County park, recreation, and preservation needs as identified in one or more adopted plans.

The program includes a feasibility study for a water park and aquatic center. The water park would serve county-wide needs while the aquatic center would have a western area focus (therefore, two sites may be needed).

There remains interest in developing a “destination” park facility to draw visitors from all over the County. Such a facility might include water features (lazy river, splash park) as well as a large playground to accommodate large numbers of children (100+) at one time. The potential for such a facility should be explored as part of the larger acquisition projects described in this section of the plan.

## **2. Facility Development Projects**

Facility development projects are on land already owned or leased by the County, the Board of Education, or the City of Annapolis, or where no additional land acquisition would be required. The recommendations include 42 projects. Highlights include the following:

- Development or completion of two large County parks:
  - A park and athletic complex at the U.S. Naval Academy Dairy Farm property; and
  - Fort Smallwood/Harry and Jeanette Weinberg Park.
- Development of new community parks: Crownsville Area Park, Mayo-Glebe Heights, Glen Burnie Park, and Stoney Creek Park. In particular, Stoney Creek Park could serve a broad portion of northern Anne Arundel County. While initial development could focus on athletic fields, the full facility could (depending on the outcome of the proposed master plan) provide water access and other amenities.

- New development or additions/upgrades of athletic fields and related park facilities:
  - Broadneck park;
  - Brooklyn Park;
  - Central Avenue Park;
  - Lake Shore Athletic Complex;
  - Loopers Field;
  - Matthewstown-Harmans Park;
  - Peninsula Park; and
  - Sands Road Park.
- Passive recreation development, such as trails, water access, living shorelines, fishing, parking for access:
  - Bacon Ridge Natural Area (South River Greenway);
  - Beverly Triton Beach Park;
  - Homeport Farm Park;
  - Mayo Beach Park;
  - South River Farm Park;
  - Solley Cove Park; and
  - Spriggs Farm Park on the Magothy.
- Continued phased development of County and City of Annapolis trail systems:
  - Broadneck Peninsula Trail;
  - Marley Neck Corridor Trail;
  - South Shore Trail;
  - WB&A Trail;
  - Wayfinding signage program for the City of Annapolis trail system; and
  - Feasibility studies for a Lake Shore trail and a Mayo-Edgewater trail.
- Development of specialty projects and facilities:
  - Carr’s Wharf pier replacement;
  - Hancock’s Resolution visitor center;
  - Lake Waterford dredging and shoreline rehabilitation;
  - Truxtun Park Pool (City of Annapolis);
  - Millersville indoor tennis center;
- Countywide and programmatic projects:
  - Construction of additional boat ramps;
  - Feasibility study for one outdoor track and field facility in each Planning Area;
  - Synthetic turf fields at strategic locations throughout the County;
  - Upgraded irrigation for athletic fields;
  - Dog parks, particularly in the Western and Northern Planning Areas;
  - Additional opportunities for water access, fishing and car top boating (including, but not limited to) Solley Cove Park, Spriggs Farm Park on the Magothy, and Stoney Creek Park); and
  - Parking Area Enhancements. This project expands parking areas in parks where parking is inadequate. If parking cannot be accommodated due to space limitations or environmental constraints, the Department will evaluate three options: 1) Remove one or more recreation facilities within the park and replace with parking. 2) Acquire land adjacent to the park, if available, and construct additional parking. 3) Acquire land in the same service area and relocate some of the recreational features of the existing park to that location, thereby reducing the need for parking at the existing facility lacking sufficient parking.

In addition to the County and City projects described above, the City of Annapolis has identified the need for pedestrian and bicycle facilities associated with the City’s ongoing Forest Drive/Eastport Sector Study. These projects (which could also include rehabilitation of existing facilities), would include trails and paths that would enable safer movement within the Forest Drive corridor, as well as safer access to Quiet Waters Park. These items are not specifically listed in Table III-14.

#### *a. School Recreation Parks*

The Department of Recreation and Parks works closely with Anne Arundel Public Schools including extensive joint use of facilities and grounds for community use, and before and after school care at 119 School Recreation Parks. New and renovated school facilities offer opportunities for increased recreational use by the public.

The 2016 Educational Facilities Master Plan for AACPS notes that total school enrollment in 2015 was approximately 80,400, a 4.5 percent increase since 2012 (exceeding the previous

projection of 77,400), Enrollment is projected to exceed 88,000 students by 2025.

Planned capital projects comprise new schools, replacements, modernizations, and additions. The school system's CIP includes construction of a Crofton-area high school, construction/renovation of four elementary schools, and design and/or feasibility studies for four other elementary schools. Additional projects include improvements to playground equipment and athletic stadiums, and gym additions.

To increase indoor recreation opportunities, the County has been funding middle school-sized gymnasiums at elementary schools at an average cost of \$1.2 million per gymnasium. The County has indicated that its preference is for these gymnasiums to be designed with separate restrooms and entrances, so they can be operated independently of the rest of the school building, to avoid the need to hire AACPS staff to monitor recreation activities.

#### *b. Tennis Center at Millersville Park*

The 2013 LPPRP indicated a need to upgrade County tennis facilities and to have courts in groups of 5 or more to address the growth in United States Tennis Association (USTA) league play. While Table III-11 shows a countywide surplus, many courts are in poor repair and in small clusters (one, two or three courts only in neighborhood and community parks), making them unsuitable for league play, tournament play, or youth development.

In 2015, as recommended in the 2013 LPPRP, the County conducted a feasibility study for an indoor-outdoor tennis facility. This study indicated that Anne Arundel County has one indoor tennis court available to the public while surrounding counties such as Howard and Prince Georges have 17 and 33 respectively.

The participation in USTA league play continues to grow in Anne Arundel County, yet during the fall and winter, County players travel to other jurisdictions to find available indoor courts. The cost and specialized nature of a facility, such as this, lends itself to a public-private partnership as proposed by The Tennis Alliance of Anne Arundel County. To that end, the current Five Year Capital Improvement

Program includes the design and construction of an indoor-outdoor tennis center at Millersville Park, an undeveloped park centrally located in the County to best serve county residents.

Similar to tennis, many sports are rapidly becoming year-round activities as youth coaches and adult leagues seek out indoor facilities for player development and game/match play.

#### *c. Boat Ramps*

The County's overall intent is to establish at least one boat ramp on each shore of each major river in the County. In 2016 the County constructed the first County owned boat ramp at Fort Smallwood. This two lane ramp with 46 trailer parking spaces has had a very successful first year of operation. In addition to the Fort Smallwood ramp, a second County ramp located at Discovery Village in Shadyside is currently in design and will be operational in 2018.

In 2016 the Department secured a consultant to evaluate eight waterfront parks to determine the feasibility of launch facilities for trailer boats. The following five sites were deemed feasible:

- Solley Cove Park;
- Beachwood Park;
- Spriggs Farm Park on the Magothy;
- Quiet Waters Park; and
- South River Farm Park.

One or more boat ramps on the Severn River and West/Rhode River are also needed, although potential sites have not been identified.

In addition to the County's program to identify boat ramp sites on all major rivers, the Water Access Commission has recommended that the County evaluate the potential to acquire existing ramp facilities or develop partnerships with private marinas and communities for enhanced public use.

#### *d. Pickleball*

Pickleball is a sport that combines elements of tennis, badminton, and ping-pong. The sport is played both indoors and outdoors on a badminton-sized court with a slightly modified tennis net. The game is played with a paddle and a plastic ball with holes, and accommodates both

singles (2 players) and doubles (4 players) play, similar to tennis.

Pickleball is experiencing significant and rapid growth internationally and in communities across the United States (for example, The Villages retirement community in Florida has 196 pickleball courts within 29 recreation centers, and is continuing to develop more facilities). Demand for pickleball facilities in the County has also grown substantially since publication of the 2013 LPPRP, and thus warrants considerable attention.

In an attempt to quickly provide pickleball facilities, the County has experimented with painting a secondary set of lines on a number of tennis courts, thereby accommodating both pickleball and tennis. Courts currently serving this dual purpose are listed below:

- Carrie Weedon Science Center (1)
- Cypress Creek park (3)
- Lake Waterford Park (2)
- Rolling Knolls ES (1)
- Sawmill Creek Park (2)
- Waterbury Park (1)

The City of Annapolis has installed dual purpose tennis and pickleball lines at the Truxton Park tennis complex, and also conducts pickleball programs through the Pip Moyer Recreation Center. Private entities such as the Severna Park Community Center, Benfield Sports Center, and Heritage Harbour also provide pickleball courts.

Unfortunately dual-purpose court lines have created tension among some tennis and pickleball players, due to limited court time. There are also questions about the compatibility of the two sports sharing the same facilities. The additional set of court lines presents confusion for players, and compromises the use of these facilities as a tournament venue for either sport. Some tennis players comment that the louder sound made by ball-paddle contact in pickleball is incompatible with the level of focus typically required for tennis. Pickleball players find similar distractions posed by tennis.

The Department will continue to provide shared outdoor facilities; however, it is becoming more and more apparent that these games may each require dedicated facilities. One way to provide

dedicated facilities would be the conversion of some County-managed tennis courts to pickleball courts. With this option, the courts may be side by side, however the court lines would be specific to each game, thereby avoiding competition for court time. A second option would be to add pickleball courts to existing community parks, providing as much separation as possible without imposing on adjacent residential neighbors

This plan recommends a capital project to plan, design, and construct pickleball courts throughout the County to address the growing participation in this sport without reducing the inventory of heavily used tennis facilities.

#### *e. Community Centers*

As described in section B.5, and as reflected in Table III-10 and the public surveys described in Section B.2.a, Community Centers (indoor facilities that accommodate recreation and general purpose activities) are an important part of the County's overall recreational system. Public schools provide some of these functions; however, the availability of schools for recreational and community functions is limited. To address this need, the County plans to replace the existing North County and South County Community Centers with new facilities that can support multiple community services.

#### *f. Indoor Ice Rinks*

As described in section B.3.a, the Department has received requests for a planning study to determine the number of indoor ice hockey facilities in the County and the potential to add facilities to meet current and future demand. This LPPRP recommends preparation of such a study in the near future. The study should include existing private facilities, and should determine whether or not new or expanded facilities are warranted, perhaps as a public-private partnership. The study should not be limited to ice hockey, but should examine facility needs and potential funding sources for all ice rink activities, including figure skating, recreational skating, and sled hockey.

*g. Boathouse*

Rowing and paddling are increasingly popular recreational activities in the County; however, there is no public boathouse to support these uses. A public boathouse would provide a space to help users develop their skills with training, instructional programs, and workshops. It would also serve as an adaptive boating facility, to provide water access to disabled users. This LPPRP recommends preparation of a study to identify the location, size, and programming for such a facility. The study should include options for public-private partnerships, and should consider locating the boathouse facility on public land or within a private marina.

### 3. Facility Rehabilitation

The Department's limited resources often make it difficult to keep pace with needed repairs and maintenance activities at Anne Arundel County's extensive network of parks and recreation sites.

A major component of the CIP over the next fifteen plus years will be the rehabilitation and replacement of existing facilities. Many of the County's parks are 30-40 years old and have deteriorated beyond the point where routine maintenance is sufficient or cost-effective. The long range CIP presented in Table III-14 includes several projects directly associated with the park rehabilitation effort, such as:

- **Park Renovations.** The Park Renovation project is funded annually in the Recreation and Parks capital budget. This project allows for the repair or replacement of park elements such as playgrounds, picnic shelters, fencing, courts, roads, pathways, bleachers, backstops, and building repairs.
- **Individual Park Rehabilitation Projects.** Specific rehabilitation projects such as those at Downs Park and Quiet Waters Park Rehabilitation are budgeted as individual capital projects to allow for rehabilitation or replacement of major elements that are too comprehensive to be covered under the Park Renovation account, or under operating budget appropriations.
- **Cultural-Historic Resource Projects.** The cultural-historic resource structures

identified on page III-12 fall within one or more of the following categories:

- Previously stabilized or rehabilitated;
- Currently programmed for rehabilitation as part of a future capital project (i.e., Hot Sox Park, Fort Smallwood Concession, Linthicum Walks Homestead (Park Renovation Account);
- Have undergone emergency protective measures through the Park Renovation Capital Project;
- Require a condition assessment and recommendation of treatment; and/or
- Require a capital project or appropriation of funds in the Park Renovation Project if preservation and or rehabilitation actions are recommended.

The long range CIP presented in Table III-14 includes individual capital projects for improvements at Hancock's Resolution, Hot Sox Park, Fort Smallwood Park, and the USNA Dairy Farm Park. The Park Renovation capital project is programmed for an annual appropriation of \$1.5 million. This account also assists with stabilization and rehabilitation of historic structures and historic area site improvements.

- **Lake Waterford Park** activity building renovation.
- **Facility Lighting.** The Facility Lighting project is also funded annually, similar to the Park Renovation Project. This project has typically been used to expand the number of lighted athletic fields; however, for the foreseeable future, it will primarily be used to replace lighting systems that are 30 to 40 years old. Total replacement is often the only way to achieve necessary lighting levels and meet wind load requirements. Replacing antiquated lighting systems will continue to be a major objective over the next ten years.
- **School Park Outdoor Recreation.** School-Outdoor Recreation Facilities capital fund allows for the rehabilitation or replacement of facilities shared by the Department of Recreation and Parks and the Board of Education. It can also be used to expand

school-recreation areas. Projects are limited to outdoor improvements, and generally do not include the installation of lights. Projects are prioritized cooperatively with the Board of Education annually.

- **Trail Resurfacing.** This capital project provides funds to restore and upgrade trails. The B&A Trail is a specific priority, and is in need of major repairs and resurfacing, as well as rehabilitation and replacement of subsurface culverts. Many interior trails within County Parks have similar age-related deterioration.

Other facility rehabilitation projects include:

- Arundel Swim Center renovations to the building and pool systems originally constructed in 1988;
- Shoreline erosion control in County parks bordering the Chesapeake Bay and its tributaries;
- Evaluation of opportunities to convert underused outdoor basketball or tennis court facilities to skate parks or other uses, based on demand.
- Continued investment in City of Annapolis playing fields.

#### **4. Relationship of Priorities to Needs**

The priorities outlined in Table III-14 and described above respond directly to identified needs, as described in this section.

##### *a. Acquisition*

The acquisition program totals approximately 1,065 acres. The acquisition program is balanced between park land and athletic fields (approximately 315 acres or one third of the total) and open space and natural resource land (approximately 750 acres or two thirds). Land acquisitions are proposed primarily in the Northern, Southern and Western Planning Areas.

##### *b. Development*

The recommended development program responds to the recreation needs identified in the needs analysis (see Section B.3 above), and specifically respond to the needs of each Planning Area.

##### *i. Primary Needs*

Primary identified countywide needs are for:

- Indoor basketball courts (gyms);
- Multipurpose fields for team sports;
- Baseball / softball diamonds;
- Water access for boating and other water-based recreation; and
- Trails.

#### **Indoor Basketball Courts**

The demand for indoor basketball courts (gyms) will be met partially by the two proposed indoor athletic complexes, and partially by the ongoing program to provide middle-school sized gyms at elementary schools. While these facilities alone will not meet all the demand for indoor recreation, a portion of the demand is met at private schools, colleges and other gyms whose facilities are not included in the recreation inventory (Appendix A).

#### **Multipurpose Fields**

The demand for multi-purpose fields will be partially met through a combination of new fields (approximately 20 are proposed) as well as the facility lighting, synthetic turf, and irrigation/drainage projects. Lighting allows fields to be used at night, and synthetic turf allows play when natural turf cannot sustain high levels of use. Irrigation and drainage projects also increase supply and create better playing surfaces.

#### **Baseball/Softball Diamonds**

Approximately nine new baseball/softball diamonds are proposed to help meet projected demand. Facility lighting projects will also help increase supply. Where possible, new fields should be built with 90-foot diamonds to meet the current shortage.

#### **Water Access**

Anne Arundel has more than 500 miles of waterfront on the Chesapeake Bay and its tributaries. Many people seek to live in Anne Arundel County because of its vast waterfront and are then surprised to find the extent to which this public resource has become privatized and unavailable to the majority of the public. In recent years, County government has begun to

address this inadequacy. Public waterfront land has been inventoried. Access policies have been changed and capital projects undertaken to create or improve access. New communication tools have been developed to guide the public to access points. In 2016, the County Executive established a Water Access Commission to provide advice and recommendations for achieving its water access goals which include:

- Boat access, such as boat ramps, soft (cartop) launches, and campsites with water access supporting motorized and non-motorized craft;
- Swimming access;
- Fishing access, such as piers, bank fishing facilities, and parking areas adjacent to access areas; and
- Access to waterfront areas for viewing the body of water, wildlife, and shoreline areas, such as nature trails, hiking and biking trails, waterfront trails, boardwalks, and observation decks.

The Water Access Commission's January 2018 policy recommendations are provided in Appendix E. In summary, these recommendations include:

- Increasing the County's supply of publicly-accessible boat ramps through new construction; consideration of partnerships with or acquisition of existing private ramps; and evaluation of Quiet Waters Park as well as the site of a potential Annapolis Boating Center, which could include a boathouse to support paddle sports and accessible boating (see Section C.2.g).
- Improve communication protocols, website information, and wayfinding signage to enable users to find water access locations.
- Allow swimming at Mayo Beach Park, evaluate swimming at Jonas Green Park, and provide Health Department water testing at all public water access points.

Establish a workgroup to evaluate ways to establish a Chesapeake Region Accessible Boating facility (either separately, or as part of the boathouse discussed above and in Section C.2.g) in the County.

As described in Sections D.1 and D.2 The long-range CIP (Table III-14) includes a new boat ramp in South planning area, line items to site and develop additional boat ramps, and the Water Access Program, which includes the evaluation of existing waterfront parks to provide public access and parking for fishing and car top boating.

### **Trails**

Demand for trails is addressed in the program by the continued development of the County's trail system, including the Broadneck Trail, South Shore Trail, and the WB&A Trail.

#### **ii. Secondary Needs**

Secondary identified countywide needs are for:

- Indoor swimming;
- Dog parks;
- Picnic pavilions;
- Fishing from piers.

The CIP includes an aquatics center in the Western Planning Area to help meet demand for indoor swimming. Renovation of the Truxtun Park outdoor pool in the City of Annapolis will also help meet swimming demand. Some of the demand for indoor swimming will continue to be met at colleges, such as Anne Arundel Community College, private schools, and at other locations such as Fort Meade. These facilities are not included in the recreation inventory, Appendix A.

Dog parks are proposed at existing and new parks based on demand. The largest demand is in the Northern Planning area. Picnic pavilions are relatively low-cost facilities and are provided at new and rehabilitated parks as opportunities arise. The greatest need is in the Northern and Western Planning areas. Enhanced fishing opportunities will be explored at Stoney Creek Park, Solley Cove Park, and Spriggs Farm Park.

### **5. Funding**

The overall program has an estimated cost of approximately \$426 million. Of this total, approximately \$90 million would be for acquisition and associated facility development, \$250 million for facility development projects, and \$86 million for rehabilitation projects. The

cost estimates are in 2017 dollars, based on knowledge of recent land acquisitions, real estate values in different parts of the County, and recent facility development and rehabilitation costs. Funding necessary to accomplish the project priorities will be leveraged to the maximum extent possible, using a combination of available revenue sources: general and capital County and City of Annapolis funds, general obligation bonds, Program Open Space, and other State and Federal programs, grants and donations.

Over the 15 year period to 2031, the total program cost averages \$28.4 million per year.

By comparison, the approved FY17 and FY18 County Recreation and Parks capital budgets have averaged \$26.22 million over those two years.

It should also be noted that the actual program costs in future capital budgets and CIPs may be lower than estimated in Table III-14. The intent of Table III-14 is to list all the desired projects in one place for use in developing future annual capital budget and CIPs. Table III-14 therefore contains more projects than will likely be completed through 2031. Over time, as priorities change, projects may move from the short range to the medium or long range or vice versa.

## CHAPTER IV: AGRICULTURAL LAND PRESERVATION

### Introduction

Agricultural preservation in Anne Arundel County serves a dual role of providing a direct economic benefit as well as preserving the quality of life reflected in a rural environment. The County's agricultural preservation program focuses on maintaining agriculture as a viable and sustainable economic sector and on preserving agriculture as a key element of South County's rural character. The program also recognizes the environmental benefits of well-maintained agricultural lands, especially improved water quality through reduced sediment and nutrient discharges.

This chapter evaluates Anne Arundel County's goals, policies, and implementation strategies to achieve State and County goals for preserving agricultural land.

Benefiting from productive land and an excellent location in proximity to navigable rivers and creeks of the Chesapeake Bay and the Patuxent River, Anne Arundel County has been an agricultural community for over 350 years. Agriculture continues to be an important component of the local economy, a key element of the landscape, and a defining aspect of Anne Arundel County life especially in South County.

In the 17th and 18th centuries, Anne Arundel County was a strong agricultural region with tobacco as its chief crop. Reliance on tobacco as the major cash crop lessened throughout the County by the late 18th century, as socioeconomic changes brought on by the Civil War forced local farmers to diversify their crops. Farmers in the southern portion of the county shifted to crops such as corn, wheat, hay, and fruit, although tobacco remained important. Farmers in the northern portion of the County found their location close to Baltimore and prevalent sandy soils ideal for truck farming. Anne Arundel County peas, beans, strawberries, and cantaloupes became famous throughout the eastern seaboard. Canning and fertilizer plants

opened in northern Anne Arundel County in support of these crops.

Rapid population growth after World War II, especially in the northern part of the County, resulted in the conversion of agricultural land converted to other uses. Today, very little agricultural land remains in the northern part of the County. Agriculture remains a dominant element of the South County landscape.

The USDA Census of Agriculture defines a farm as "any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, in the census year." The 2012 Census of Agriculture counted slightly over 28,100 acres of land in farms in Anne Arundel County, down four percent from about 29,200 acres in 2007 (Table IV-1). This was a small decline compared to the 2002-2007 period, which saw a 17 percent from 35,200 acres in 2002.<sup>1</sup> The decline from 2007-2012 is similar to the earlier period from 1997 to 2002, when there was a three percent decline. By comparison, in 1959, there were approximately 81,000 acres in farms countywide.

The number of farms decreased slightly between 2007 and 2012, from 381 to 377 farms (4 fewer farms). By comparison, the County lost 55 farms (from 432 to 377) between 2002 and 2007. While the decline in farms and farmland is a continuing concern, the low recent rate of loss indicates a welcome stability in the farm economy and farmland base.

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<sup>1</sup> The Census of Agriculture (29,200 acres in farms) uses a different methodology for estimating agricultural acreage than the County (32,278 acres, as cited in Chapter II).

**Table IV-1: Selected Agricultural Statistics**

|   | 2012          |             | 2007          |             | Change 2007 to 2012 |            |
|---|---------------|-------------|---------------|-------------|---------------------|------------|
|   | Number        | Percent     | Number        | Percent     | Number              | Percent    |
| <b>Number and Acreage of Farms</b>            |               |             |               |             |                     |            |
| Land in County (acres)                        | 266,200       |             | 266,200       |             |                     |            |
| Number of farms                               | 381           |             | 377           |             | (4)                 | -1%        |
| Land in farms (acres)                         | 28,111        | 11%         | 29,244        | 11%         | (1,133)             | -4%        |
| Average farm size (Acres)                     | 74            |             | 78            |             | (4)                 | -5%        |
| <b>Land in farms by land use (acres)</b>      |               |             |               |             |                     |            |
| Cropland                                      | 14,742        | 52%         | 16,339        | 56%         | (7,525)             | -32%       |
| Woodland                                      | 7,162         | 25%         | 6,384         | 22%         | (389)               | -6%        |
| Pastureland                                   | 3,609         | 13%         | 4,123         | 14%         | 2,116               | 105%       |
| House lots, buildings, ponds, roads           | 2,598         | 9%          | 2,398         | 8%          | (176)               | -7%        |
| <b>Total</b>                                  | <b>28,111</b> | <b>100%</b> | <b>29,244</b> | <b>100%</b> | <b>5,974</b>        | <b>17%</b> |
| <b>Market Value of Production \$ millions</b> |               |             |               |             |                     |            |
| Crops   | \$16.5        |             | \$16.2        |             | \$0.3               |            |
| Grains, oilseeds, dry beans/peas              | \$5.4         | 27%         | \$2.8         | 15%         | \$2.6               | 93%        |
| Nursery, greenhouse, flowers, sod             | \$9.3         | 47%         | \$11.0        | 57%         | \$(1.7)             | -15%       |
| Other crops, hay                              | \$0.5         | 3%          | \$1.0         | 5%          | \$(0.5)             | -50%       |
| Vegetables                                    | \$0.9         | 5%          | \$0.9         | 5%          | 0                   | 0%         |
| Other   | \$0.3         | 2%          | \$0.5         | 3%          | \$(0.2)             | -40%       |
| Cut Christmas tree/short rotation woody crops | (D)           |             | (D)           |             |                     |            |
| Tobacco                                       | (D)           |             | (D)           |             |                     |            |
| Livestock                                     | \$3.1         | 16%         | \$2.9         | 15%         | \$0.2               | 7%         |
| <b>Total</b>                                  | <b>\$19.7</b> |             | <b>\$19.1</b> | <b>100%</b> | <b>\$0.6</b>        | <b>3%</b>  |
| <b>Land used for Major Crops</b>              |               |             |               |             |                     |            |
| Soybeans (acres)                              | 4,422         | 30%         | 3,696         | 23%         | 726                 | 20%        |
| Corn (acres)                                  | 4,427         | 30%         | 4,021         | 25%         | 406                 | 10%        |
| Forage (acres)                                | 3,215         | 22%         | 4,476         | 27%         | -1261               | -28%       |
| Wheat (acres)                                 | 1,227         | 8%          | 1,139         | 7%          | -88                 | -8%        |
| <b>Livestock Inventory</b>                    |               |             |               |             |                     |            |
| Cattle & Calves (number)                      | 1,170         |             | 1,221         |             | (51)                | -4%        |
| Horses, ponies (number)                       | 1,791         |             | 1,413         |             | 378                 | 27%        |
| <b>Principal Operator Primary Occupation</b>  |               |             |               |             |                     |            |
| Farming                                       | 219           | 57%         | 187           | 50%         | 32                  | 17%        |
| Other   | 162           | 43%         | 190           | 50%         | -28                 | 15%        |

Source: USDA, 2007 and 2012 Censuses of Agriculture.

Note: USDA total land area differs from acreages given in Chapter 2. (D) Cannot be disclosed due to small number.

Some other key points from Table IV-1 are as follows:

- Average farm size continues a slow decrease; currently 74 acres as compared to 78 acres in 2007 and 82 acres in 2002.
- Cropland accounts for 52 percent of land in farms.
- Over half of the “principal operators” counted in the census reported farming as their primary occupation.
- The market value of nursery and greenhouse products account for 47% of the total market value of agricultural products.
- The number of horses and ponies increased sharply from 2007 -2012, while the number of cattle continues to decrease.<sup>2</sup>
- Agricultural product market value increased by 3%, between 2007 and 2012. The market value of grains almost doubled, while the market value of nursery/greenhouse products dropped by 15%.
- The leading crops in terms of acreage are hay, corn, and soybeans.

<sup>2</sup> In 2010 a Maryland equine census was conducted, separate from the USDA census. Using a different survey methodology, it reported 4,500 horses, ponies etc. with a value of \$39.7 million (8<sup>th</sup> in the state).

## Tobacco

Tobacco is now an insignificant crop in Anne Arundel County. Funded by a legal settlement with the tobacco industry at the end of the 1990s, in 2001 the State of Maryland initiated the Tobacco Buyout Program to offer monetary incentives to growers who produced tobacco in 1998 to forever cease tobacco production for human consumption.

The Program entered into contracts with 64 growers in Anne Arundel County representing approximately 4,204 acres. Under the contract, the grower agreed to remain in agriculture for the ten years of the payment. During that time, landowners who took the Buyout and wished to place their land in a County or State farmland protection program, received a 10 percent bonus.

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## A. Goals and Objectives

### 1. General Development Plan

#### a. Overall Goals and Objectives

The 2009 General Development Plan's (GDP) agricultural goal is to:

*Increase the amount of protected land in the County in order to preserve open space and rural areas and protect natural resources.<sup>3</sup>*

Supporting policies are as follows:

- Acquire approximately 3,150 additional acres of land for open space and natural resource land protection by year 2020 (p. 46).
- Preserve 80% of undeveloped land within the Priority Preservation Area (PPA) through protective easements in order to meet the State's PPA protection goal (p. 145).

A related goal is to:

*Preserve the character of the County's rural areas.<sup>4</sup>*

The supporting policy is:

*Maintain the Rural Land Use designation and Rural Agricultural (RA) zoning as the primary mechanism for preserving the rural character of South County and other rural areas.*

#### b. Small Area Plans

As discussed in Chapter II, following the 1997 GDP, the County developed detailed small area plans (SAPs) for each of 16 areas of the County. Agriculture is discussed extensively in the South

County SAP adopted in September 2001. The 2009 GDP states that the County will continue to implement the SAP recommendations over the coming years.

The vision of the South County SAP is to "Keep South County Rural". The vision has three components, one of which relates to agricultural preservation:

*The agricultural, rural, and historical qualities of South County will be preserved.*

The following SAP statements amplify this agricultural component:

- The area's fields and woodlands, low density and small scale development; rural roads; quiet, slow pace and its remaining historic resources will all be preserved.
- Continuation of an active, sustainable farm industry in South County will be a high economic priority of the County.
- Residential and commercial development will be managed in ways that will maximize opportunities for sustained agricultural use, the retention of woodland and open space areas, and will be appropriate to the historic rural context of South County.
- The area will strive to achieve a realistic economic balance that will allow the addition of new businesses while sustaining its existing agricultural industry.

The South County SAP contains a detailed and thorough set of recommendations for maintaining the rural economy. Table IV-8 (at

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<sup>3</sup> Chapter 3, Balanced Growth and Sustainability page 46.

<sup>4</sup> Chapter 4, Community Preservation and Enhancement.

the end of this chapter) summarizes these recommendations and their current status.

*c. Agricultural and Woodland Preservation Program Goals*

In 1990 the County created an Agricultural and Woodland Preservation Program that established voluntary agricultural and woodland districts and the purchase of conservation easements. The program's goal, established in 1993, was to preserve 20,000 acres of farm and forest through easement acquisitions.

*i. Agricultural and Woodland Preservation Program Goal Validation*

The 2013 LPPRP concluded that the County's goal of achieving permanent preservation of 20,000 acres of farmland remained a reasonable goal to work towards, given the substantial amount of land already preserved, continued strong interest in agricultural preservation, the presence of *de facto* protected lands (lands that are not eligible for the preservation programs described in Section B, but that cannot be further subdivided), and the pool of land that could potentially be protected.

Since 2013, the County has continued to fund land preservation through the County's Agricultural and Woodland Preservation Program in addition to matching funds support for MALPF and the Rural Legacy Program easements. Sufficient acreage exists to potentially meet the 20,000 acre goal within the Priority Preservation Area (PPA) and Rural Legacy Area (RLA) (see Section B.1), and additional easements could also be purchased on eligible farmland outside the PPA/RLA.

The success of the County's Agricultural and Woodland Preservation Program has been validated by the State's decision to re-certify the County's agricultural land preservation program.

These findings, combined with the protections provided by the County's rural zoning and Growth Tiers (see Section B.4.a) show that the goal of 20,000 acres of permanently preserved farmland remains valid.

*ii. Agricultural and Woodland Preservation Program Goal Implementation*

To achieve the preservation goal, the County should adopt revised program regulations for the Agricultural and Woodland Preservation Program. Under the County Code, the Agricultural and Woodland Preservation Program regulations must be adopted by the County Council. The current regulations date to 1999. Updating these regulations was established as a goal in the 2013 LPPRP.

Updated regulations would enable the County to correct outdated code references and to put in place policies that have been discussed over the years and/or were recommended in the GDP (page 145). Examples include:

- Revise the preservation easement purchase priority rating system to grant extra points to properties located in the PPA.
- Revise the permitted uses on an agricultural easement property to include accessory uses on minimal acreage that will not interfere with farming operations, as well as other rural economy uses.

**2. Consistency with State of Maryland Goals**

The State of Maryland's goals for agricultural land preservation are shown in the box below.

County goals are consistent with the State's goals. The South County SAP goals cited above closely correspond to the Maryland goals 1-4. The Agricultural and Woodland Preservation Program's goal to preserve 20,000 acres of farm and forest, in combination with the County's land use plan, supports goals 3 and 5 by seeking to establish contiguous blocks of agricultural land and woodlands within an area that supports the farm economy.

The Program has protected significant contiguous blocks of agricultural land and woodlands in South County, consistent with State goal #3. The South County SAP's emphasis on landscape preservation is consistent with State Goal # 2.

The State goals detailed in Goal #6 below are supported by the County's agricultural land preservation implementation program, described in the next section.

### **2017 State of Maryland Goals for Agricultural Land Preservation**

1. Permanently preserve agricultural land capable of supporting a reasonable diversity of agricultural production.
2. Protect natural, forestry, and historic resources and the rural character of the landscape associated with Maryland's farmland.
3. 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.
4. Limit the intrusion of development and its impacts on rural resources and resource-based industries.
5. 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.
6. Work with local governments to achieve the following:
  - 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-at-large.

## **B. Current Implementation Program and Progress Since 2013 the LPPRP**

Several programs and mechanisms operate in Anne Arundel County to achieve agricultural land preservation goals. The County's policies and programs focus on maintaining agriculture as a viable sector within the County's economy and on preserving agriculture as a key element of the rural character of South County.

### **1. Designated Preservation Areas**

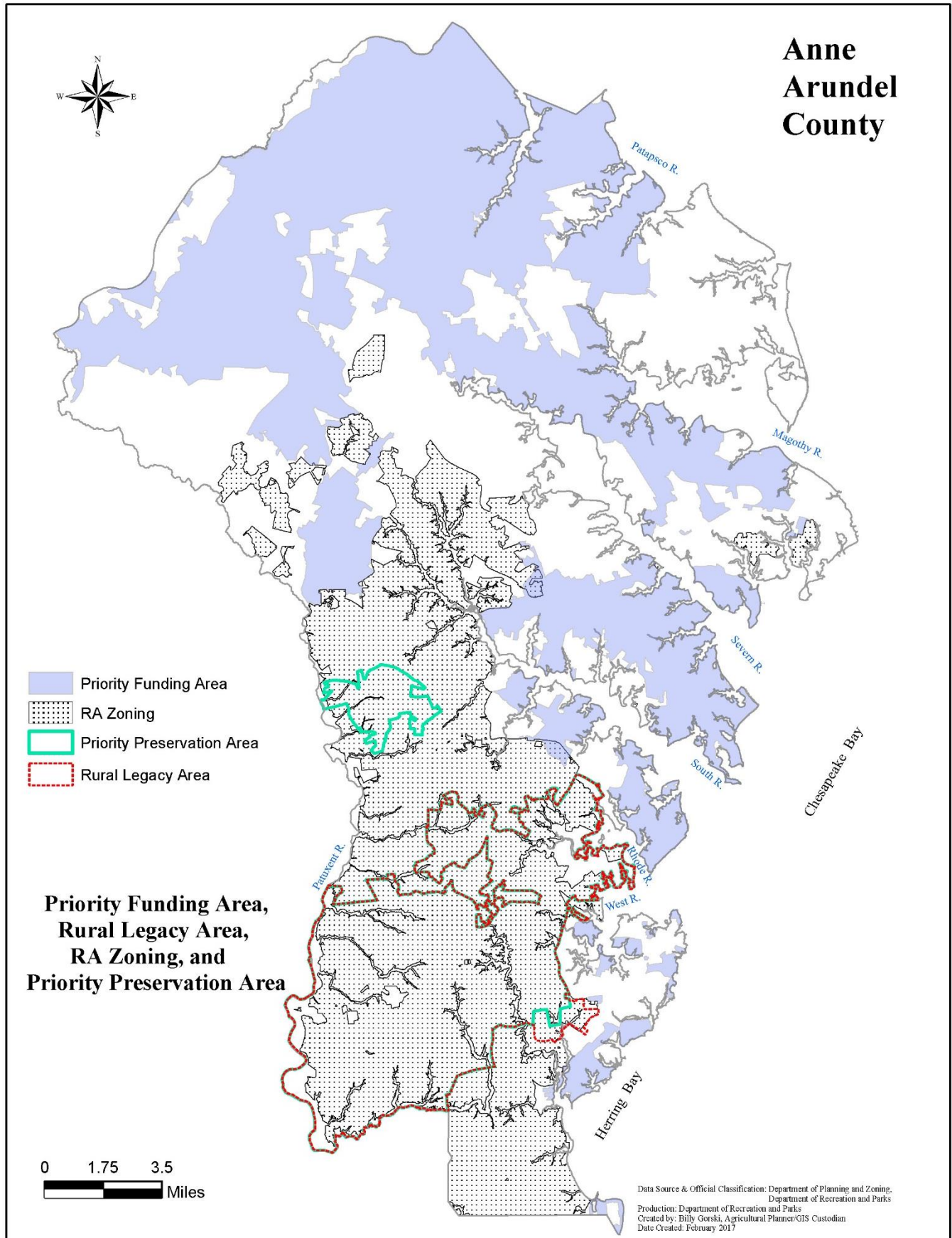
The County has two designated agricultural land preservation areas: the Anne Arundel South Rural Legacy Area (RLA) and the County's Priority Preservation Area (PPA) (Map IV-1).

The RLA was proposed by the County and approved by the State in 1998, as a 32,550-acre portion of South County. The Rural Legacy Program, run by the Maryland Department of Natural Resources (DNR), consists of two concepts: delineating a specific geographic area of a county in need of focused land conservation efforts, and acquiring easements from willing landowners within that area.

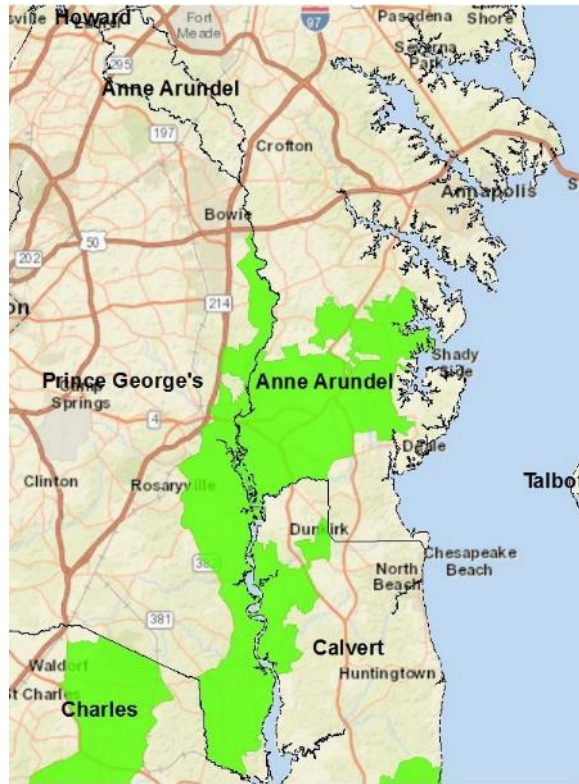
Key goals of the RLA are to complete a greenway of gently rolling farmland, preserving views from some of the County's most scenic and historic roads, and to protect multiple other scenic, historic and natural resources. The Anne Arundel RLA is part of a multi-county swath of land designated for preservation. It connects to the Patuxent RLA that extends through Prince George's County along the Patuxent River, and to the North Calvert RLA (Map IV-2).

The County's Priority Preservation Area (PPA) was established in the 2009 GDP, and included the entire RLA, plus two additional areas totaling approximately 7,000 acres. The PPA responded to the Maryland Agricultural Stewardship Act of 2006, which authorized counties to include a PPA element in their comprehensive plans. The establishment of a PPA is mandatory for counties such as Anne Arundel that have a State-certified agricultural

Map IV-1 *Agricultural and Woodland Preservation Areas*



#### Map IV-2 Regional Rural Legacy Areas



Rural Legacy Areas shown in green shade

land preservation program.<sup>5</sup> The State requires that a PPA meet the following criteria:

- The area must contain productive agricultural or forest soils or be capable of supporting profitable agricultural and forestry enterprises;
- The area must be governed by local policies that stabilize the agricultural or forest land base so that development does not convert or compromise agricultural and forestry resources;
- The area must be large enough to support the kind of agricultural operations that the County seeks to preserve; and
- The area must include an acreage goal for land to be preserved through easements and zoning in the PPA equal to at least 80% of the remaining undeveloped land in the area.

<sup>5</sup> In April 2015, MDP and the Maryland Agricultural Land Preservation Foundation recertified Anne Arundel County's agricultural land preservation program through 2018.

In 2014, the County requested and DNR approved expansion of the RLA so that its boundaries match the PPA. The County's combined PPA and RLA include approximately 39,430 acres of land in two separate areas (including 37,381 acres in the RLA), as shown on Map IV-1. Preserving land is the key goal of both the RLA and the PPA. The key differences between the RLA and PPA are:

- The PPA's goal is to protect 80% of remaining undeveloped land and is focused on profitable agriculture and forestry.
- RLA's preservation goals are broader in that they are also focused on other scenic, historic and natural resources.

These goals are complementary for Anne Arundel's PPA/RLA, giving the County a clearly focused geographical area in which to focus its land preservation efforts.

The PPA and RLA both lie within the 2009 GDP's Rural land use area (see Map II-6). The GDP describes the Rural area as follows:

*This area is characterized by rural residential land use and limited local commercial uses. Residential uses are primarily single family homes, and clustering is encouraged in residential subdivisions in order to preserve the rural character by retaining large expanses of open space. Preservation of agricultural uses and rural economy uses is also encouraged. It is also located within the Rural Sewer Service Area and is served by private septic and well systems.*

According to the County's Master Plan for Water Supply and Sewerage Systems Effective May 20, 2012, the Rural Service Area encompasses 131,361 acres of the County land outside of designated sewer service areas. There are no plans to extend public utilities into the Rural Service Area in the foreseeable future.

Rural and agricultural character and land use are implemented largely through the County's lower density rural zoning districts, and through the County's Growth Tiers, both of which are described in Section B.4.a.

## 2. Easement Acquisition Mechanisms

The primary easement acquisition mechanisms for farmland are the Maryland Agricultural Land Preservation Foundation (MALPF), the County's Agricultural and Woodland Preservation Program, and the Rural Legacy Program. Table IV-2 summarizes the recent activities of these preservation programs. Map IV-3 shows preserved lands in Anne Arundel County; Appendix F provides a detailed inventory of these lands.

As shown in Map IV-3, the vast majority of the agricultural program activity is in South County, south of US 50/301. Another small concentration is on the Broadneck Peninsula south of US 50/301. One easement is also found in the Severn River watershed near the intersection of I-97 and MD 32.

### a. Maryland Agricultural Land Preservation Foundation (MALPF)

MALPF is a purchase of development rights program. Anne Arundel County has participated in the MALPF program since 1980. As of December 2016, Anne Arundel County had permanently preserved 5,399 acres through MALPF easements (Table IV-2). As shown in Figure IV-1, the sale of MALPF easements has generally slowed since the 1980s.

Until 2008 the MALPF preservation program was a two-step process involving the creation of temporary Agricultural Preservation Districts, followed by sale of permanent easements from within those districts. MALPF now uses a one-step easement process, with a 50-acre minimum easement size, and no district program.

Anne Arundel County maintains its own Agricultural Preservation District program, as described in Section 2.B.e.

### b. Agricultural and Woodland Preservation Program

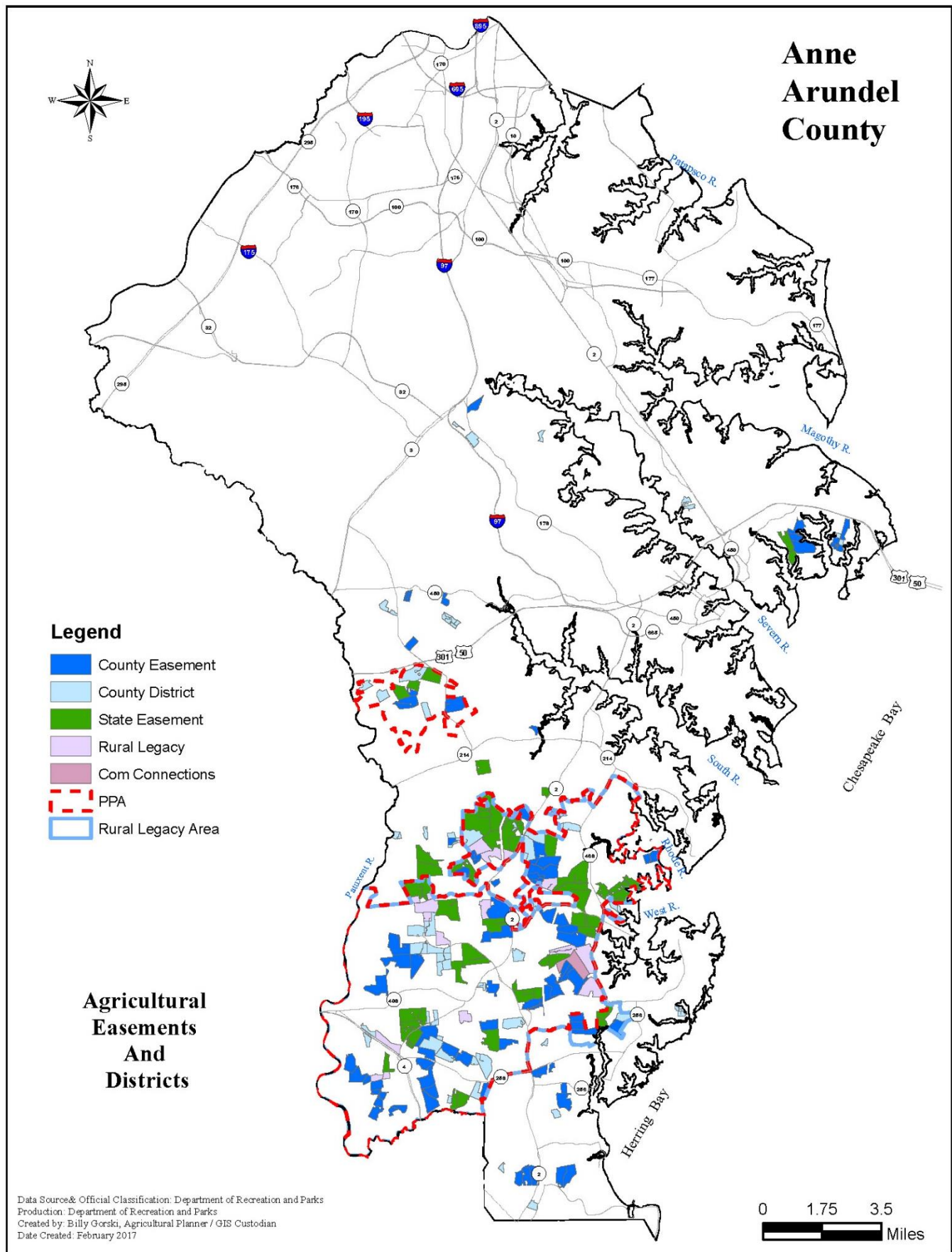
The County's Agricultural and Woodland Preservation Program was created in 1990 to supplement the MALPF program and offer an alternative for agricultural preservation that recognized the County's small farms. As with MALPF, properties must comprise at least 50 acres to be eligible for the County's program.

As of December 2016, the County had permanently preserved a total of 6,118 acres through this program (Table IV-2). As shown in Figure IV-1, easement acquisition through the Agricultural and Woodland Preservation Program peaked from 2000 to 2004. Since 2009, few easements have been purchased, due to lower State funding levels and diminished landowner interest.

In 1999 an Installment Purchase Agreement (IPA) option was added to stimulate interest and add value to the program. In recent years, low interest rates, combined with the IPA option's 30-year repayment term, made the IPA option unattractive to potential sellers. Shorter IPA terms are not cost-effective for the County. These conditions led to minimal participation since approximately 2011. As a result, the IPA option was discontinued in 2016, and the County Agricultural and Woodland Preservation Program began offering cash at settlement.

**Table IV-2: Summary of Protected Agricultural Lands**

| Preservation Type                                  | Total Acres Preserved |               |                  |               |                  |
|--|-----------------------|---------------|------------------|---------------|------------------|
|  | December 2006         | December 2011 | Change 2006-2011 | December 2016 | Change 2011-2016 |
| <b>Permanently Protected (Easement )</b>           |                       |               |                  |               |                  |
| Maryland Agricultural Land Preservation Foundation | 4,317                 | 4,773         | 456              | 5,399         | 626              |
| County Agriculture and Woodland Protection         | 5,390                 | 6,118         | 728              | 6,118         | 0                |
| South Rural Legacy Area                            | 855                   | 1,111         | 256              | 1,460         | 349              |
| <b>Total Permanently Protected</b>                 | <b>10,562</b>         | <b>12,002</b> | <b>1,440</b>     | <b>12,977</b> | <b>975</b>       |
| County Districts (not permanent)                   | 2,637                 | 2,176         | (461)            | 3,004         | 828              |



*c. Rural Legacy Area*

As of December 2016, a total of 1,460 acres had been permanently preserved in Anne Arundel County through the Rural Legacy program, including 349 acres since 2012 (Table IV-2).

*d. Land Trusts and Other Private Conservation efforts*

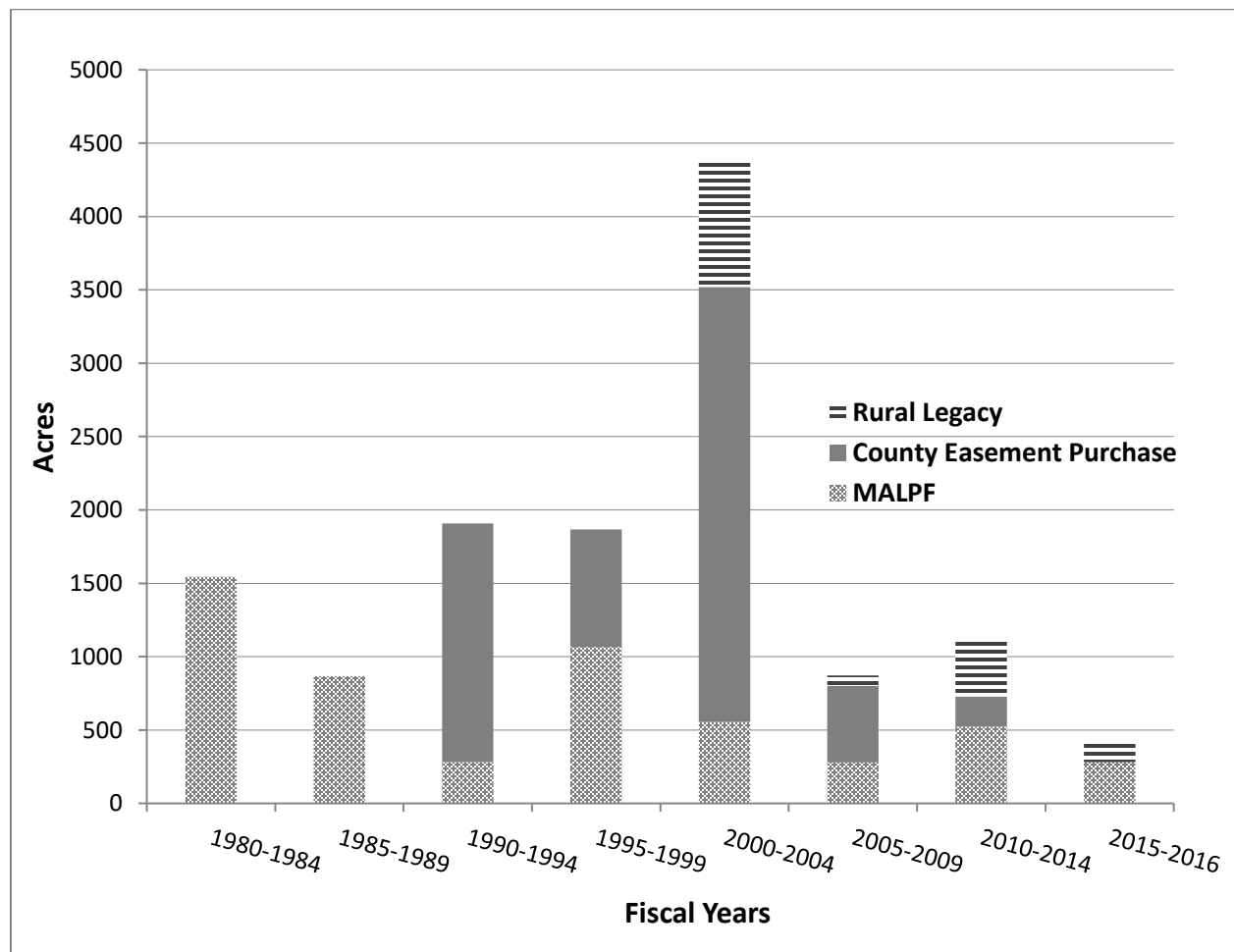
Anne Arundel County has a number of local land trusts and the Maryland Environmental Trust (MET), a statewide land trust, is also active. The focus of these trusts, however, is on natural resource land conservation. Chapter V discusses their contribution to land preservation.

*e. Temporary Agricultural Districts*

The County's District Program remains in effect. Entering the District Program requires a 10-year commitment to not exercise development rights. In exchange, participants receive a tax credit. Regulations for the program are provided in §17-10-203 of the County Code.

As of the end of 2016, 3,004 acres were enrolled in the County's District program, an increase of 828 acres since 2011, and 637 acres since 2006. The increase is due to applications from landowners who were previously in MALPF Districts.

**Figure IV-1    Agricultural Preservation 1980 to 2016**



### 3. Funding for Acquisition

Placing conservation easements on private land from willing owners is the chief mechanism for permanently protecting agricultural land in Anne Arundel County. As discussed in the previous section, these easements have been purchased through MALPF, the County's Agricultural and Woodland Preservation Program, or Maryland's Rural Legacy program. Local funds used to match State dollars are generated from a number of sources.

Overall since 1980 approximately \$65.6 million has been spent in the County on agricultural land preservation, including 60 percent from County sources, 39 percent from the State and 1 percent from the federal government. Table IV-3 and Figure IV-2 summarize this funding since 1980.

As shown in Table IV-3, County expenditures comprised the largest share of overall acquisition funding between 1992 and 2011. After 2011, interest in the County Program diminished due to reduced interest in the IPA option and decreases in State funding.

Figure IV-2 and Table IV-3 Funds depict actual agricultural preservation expenditures, which are different from budget allocations. Expenditures may be less than allocated funds due to multiple factors, such as landowner interest, the availability of state matching funds, or delays in the easement purchase transactions.

Whereas expenditures have varied considerably over the years, County budget allocations for agricultural preservation (not depicted in Figure IV-2 or Table IV-3) have been relatively consistent. After 2000, the County *increased* its annual budget allocation for agricultural preservation to \$3 million per year, and maintained this amount through 2011, when IPA option participation decreased substantially (see Section B.2.b). The County retained bonding authority of up to \$5 million through fiscal year 2015-16, when the County decided to return to cash payments instead of IPA.

Starting in fiscal year 2017-18, the appropriation for the County program is \$1.5 million per year, in addition to MALPF and RL matching funds (including \$1.3 million matching MALPF funds

for each of the state's 2-year MALPF funding cycles).

#### *a. Maryland Agricultural Land Preservation Foundation (MALPF)*

When agricultural land in Maryland is sold for development, a small percentage of the transaction value is paid to recapture the preferential taxation rate the land enjoyed due to its previous agricultural use. This revenue is split between the State and the county in which the sale occurred, and is intended for farmland preservation.

Anne Arundel County and other counties with an agricultural preservation program that is certified by Maryland Department of Planning and Maryland Department of Agriculture (MDA) may hold back 75 percent of revenues collected to be used to purchase easements within three years.

Since 1992, the County has used approximately \$5.9 million in agricultural transfer taxes towards the MALPF program (to match State funds) and the County Agricultural and Woodland Preservation Program. Since 1980, a total of approximately \$22.5 million has been spent under the MALPF program in Anne Arundel County to preserve 5,399 acres.

#### *b. County Agricultural and Woodland Preservation Program*

The County began its Agricultural and Woodland Preservation Program in 1990. Since 1992, 6,118 acres have been preserved under the County's program, with an average purchase price of \$5,253 per acre. Spending on the program has totaled \$32.1 million from four sources, as described below.

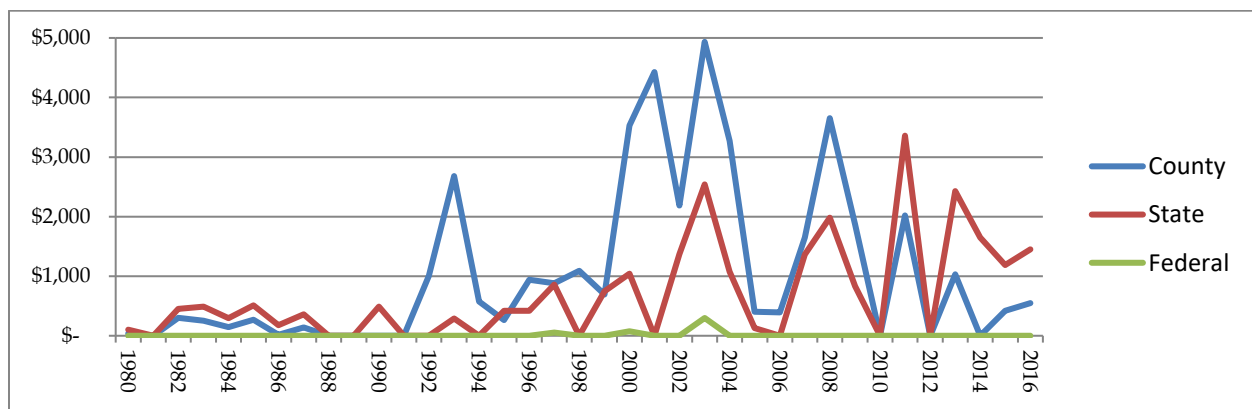
##### *i. County General Fund appropriations*

This was the primary funding source in the early years of the program, but declined as a funding source after 2000, as other funding sources became available.

**Table IV-3: Agricultural Preservation Expenditures Summary (\$ thousands)**

| Fiscal Year          | State           | MALPF<br>County | Federal      | County Agriculture &<br>Woodland Program | Rural Legacy<br>State | County         | Total           |
|----------------------|-----------------|-----------------|--------------|--|-----------------------|----------------|-----------------|
| 1980                 | \$102           | \$40            |              |  |                       |                | \$142           |
| 1981                 |                 |                 |              |  |                       |                |                 |
| 1982                 | \$449           | \$299           |              |  |                       |                | \$748           |
| 1983                 | \$488           | \$254           |              |  |                       |                | \$743           |
| 1984                 | \$295           | \$144           |              |  |                       |                | \$439           |
| 1985                 | \$509           | \$268           |              |  |                       |                | \$777           |
| 1986                 | \$176           | \$17            |              |  |                       |                | \$193           |
| 1987                 | \$358           | \$141           |              |  |                       |                | \$499           |
| 1988                 |                 |                 |              |  |                       |                |                 |
| 1989                 |                 |                 |              |  |                       |                |                 |
| 1990                 | \$487           |                 |              |  |                       |                | \$487           |
| 1991                 |                 |                 |              |  |                       |                |                 |
| 1992                 |                 |                 |              | \$1,002                                  |                       |                | \$1,002         |
| 1993                 | \$290           | \$121           |              | \$2,559                                  |                       |                | \$2,971         |
| 1994                 |                 |                 |              | \$577                                    |                       |                | \$577           |
| 1995                 | \$416           | \$265           |              |  |                       |                | \$681           |
| 1996                 | \$416           | \$167           |              | \$773                                    |                       |                | \$1,357         |
| 1997                 | \$859           | \$605           | \$53         | \$279                                    |                       |                | \$1,795         |
| 1998                 |                 |                 |              | \$1,092                                  |                       |                | \$1,092         |
| 1999                 | \$746           | \$241           |              | \$453                                    |                       |                | \$1,439         |
| 2000                 | \$1,042         | \$234           | \$78         | \$3,297                                  |                       |                | \$4,652         |
| 2001                 |                 |                 |              | \$4,426                                  |                       |                | \$4,426         |
| 2002                 |                 |                 |              | \$2,185                                  | \$1,372               |                | \$3,557         |
| 2003                 | \$712           | \$224           | \$299        | \$3,888                                  | \$1,828               | \$822          | \$7,773         |
| 2004                 |                 |                 |              | \$3,272                                  | \$1,073               |                | \$4,345         |
| 2005                 |                 |                 |              | \$402                                    | \$127                 |                | \$530           |
| 2006                 |                 |                 |              | \$391                                    |                       |                | \$391           |
| 2007                 | \$1,363         |                 |              | \$1,648                                  |                       |                | \$3,010         |
| 2008                 | \$1,981         | \$670           |              | \$2,547                                  |                       |                | \$5,198         |
| 2009                 |                 |                 |              | \$1,863                                  | \$834                 | \$6            | \$2,703         |
| 2010                 |                 |                 |              |  |                       |                |                 |
| 2011                 | \$1,381         | \$611           |              | \$1,487                                  | \$1,902               |                | \$5,380         |
| 2012                 |                 |                 |              |  |                       |                |                 |
| 2013                 | \$2,427         | \$1,030         |              |  |                       |                | \$3,457         |
| 2014                 |                 |                 |              |  | \$1,650               |                | \$2,068         |
| 2015                 |                 |                 |              |  | \$1,186               | \$418          | \$1,192         |
| 2016                 | \$1,450         | \$542           |              |  |                       | \$6            | \$1,993         |
| <b>Total</b>         | <b>\$15,949</b> | <b>\$5,872</b>  | <b>\$429</b> | <b>\$32,141</b>                          | <b>\$9,971</b>        | <b>\$1,253</b> | <b>\$65,615</b> |
| <b>Pct. of total</b> | <b>24%</b>      | <b>9%</b>       | <b>1%</b>    | <b>49%</b>                               | <b>15%</b>            | <b>2%</b>      | <b>100%</b>     |

**Figure IV-2: Agricultural Preservation Expenditures Summary (\$1,000s)**



ii. County Installment Purchase Agreement (IPA) bonds

Beginning in 2000 IPA bonds began to replace general fund appropriations, with the intent of devoting \$3 million per year in annual tax revenues to the program. Under the IPA program the County promised to pay the purchase price for an easement, as well as the interest that has accrued on the outstanding purchase price, in installments on specified dates in the future. The intent of the IPA program was to allow the County to make more easement purchases and at a faster pace than possible via cash-at-settlement.

As described in Section B.2.b, interest in the IPA program ceased due to market conditions, and the IPA program was discontinued in 2016.

iii. Agricultural Transfer Tax

Agricultural transfer taxes are collected by the State when farmland (including woodland) anywhere in the County is sold and converted to another land use. This tax is a primary source of funding for the statewide agricultural land preservation program, and a portion of these taxes are dedicated for the County's Agricultural and Woodland Preservation Program. For example for fiscal years 2012 through 2016, approximately \$1.3 million were directed to the County's program.

iv. Other revenues

Other revenues to the County's program are small and come from a variety of sources such as grants, tobacco buyout funds, and federal sources.

c. *Rural Legacy*

Between 2002 and 2016 the state awarded approximately \$10.6 million in Rural Legacy funds to the Anne Arundel RLA. The County provided matching funds from the County General Fund of \$1.25 million for these awards (Table IV-3). The average purchase price for the 1,460 acres preserved under the Rural Legacy program was \$7,687 per acre.

d. *Federal Funds*

Since 1998 the Federal government has made relatively small amounts of funds available for the purchase of development rights on farmland through the Farmland Preservation Program of the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS). NRCS funding is awarded on a competitive basis; as a result, Anne Arundel County has joined with other Maryland counties and the State to win dollars to partially fund easement purchases. Between 1997 and 2003, Anne Arundel County received approximately \$430,000 which was applied to purchase MALPF easements.

e. *Tax Credit Program*

Since 1990 the County has offered a 10-year real property tax credit to landowners who participate in the County or MALPF district or easement program<sup>6</sup>. The credit is 100 percent on land and up to \$250,000 of assessed value of structures. In FY 2016, the value of these credits (in terms of forgone County revenue) was \$554,080 (\$329,003 on easement properties and \$225,077 on district properties).

**4. Land Use Management Authority**

a. *Zoning*

The General Development Plan's land use element is implemented primarily through the County's Zoning Ordinance and Subdivision Regulations. The key zoning district is the County's Rural Agricultural (RA) zoning district, which comprises approximately 80,100 acres or 30 percent of the County.

In 2005, as part of comprehensive changes to the Zoning and Subdivision Codes, the County adopted protective zoning in this district that permits major residential subdivisions only at density of one dwelling unit per 20 acres. One additional dwelling unit is permitted for residual acreage over 10 acres. For parcels over 50 acres, one additional dwelling unit is permitted for every 50 acres.

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<sup>6</sup> The tax credit for State districts/easements was instituted in 1989; for County districts/easements in 1990.

In accordance with the Maryland Sustainable Growth and Agricultural Preservation Act of 2012, the County Office of Planning and Zoning administratively adopted Growth Tiers on June 17, 2013. The PPA/Rural Legacy Area is all in Tier 4, in which major subdivisions (more than five lots) are prohibited. Minor subdivision are permitted in Tier 4 (up to a maximum of five lots), and must use on-site septic systems; public sewer systems are not available in Tier 4. The RA zoning and Tier 4 subdivision restrictions protect rural character and agricultural land.

*b. Right to Farm*

Anne Arundel County adopted a right to farm ordinance in 2004 (Bill 58-04), to encourage the protection of the County's agricultural and forest lands. The ordinance was intended to prevent nuisance lawsuits, which may arise from residential growth in agricultural areas, and to protect the economic viability of farming in the County.

## **5. Farming Support**

Agriculture agencies and support entities serving Anne Arundel County are important partners in preserving agricultural industries. These include federal, state, and county agencies—such as the United States Department of Agriculture (USDA) and MDA—as well as quasi-governmental organizations that support farming, such as the Anne Arundel Soil Conservation District (SCD).

The County Agricultural Preservation Advisory Board is established in §17-10-202 of the County Code, and has broad responsibilities, including

- Advising the County concerning the establishment of agricultural districts and purchases of easements;
- Making recommendations to the County Executive concerning budget and appropriation requests;
- Promoting preservation of agriculture; and
- Preparing and reviewing recommendations concerning County policies and programs for agricultural and woodland preservation.

The Maryland Farm Bureau is a private non-profit organization that promotes and protects agriculture and rural life. Anne Arundel County has an active local branch of the state bureau.

The University of Maryland Extension (UME) (formerly Maryland Cooperative Extension), is a statewide, informal educational system, administered through the College of Agriculture and Natural Resources at the University of Maryland College Park. UME maintains an office at the former Naval Academy Dairy Farm in Gambrills. Anne Arundel County Government has a thirty year lease with the Federal Government on the 857 acre property.

*a. Anne Arundel Economic Development Corporation (AAEDC)*

The AAEDC recognizes that agriculture is a significant contributor to the economic health and quality of life in Anne Arundel County. Agriculture and Environment is one of AAEDC's six strategic initiatives.

Under that initiative, AAEDC has participated in the County's Agri-Tourism Work Group in helping to prepare language for the County Code regarding agri-tourism. Specifically, the Work Group has developed a definition of "agri-tourism", identified specific agri-tourism activities that could be included as allowable uses in certain zoning districts, and defined Building Code requirements related to agri-tourism activities. The resultant draft Code language was introduced to the County Council in Spring 2017, with final adoption expected by mid-2017.

Since 2002 AAEDC's Agricultural Advisory Committee (formerly the Agricultural Development Advisory Committee) has been instrumental in expanding the County's farmers' markets and in creating a stronger position for agribusiness. The Agricultural Advisory Committee is comprised of AAEDC representatives, farmers, and representatives from Anne Arundel County Public Schools, MDA, the County's Department of Recreation and Parks, the Soil Conservation District, and the Farm Bureau.

The Agricultural Advisory Committee's Initiatives to support agriculture include:

- Helping to organize the County's seven farmers markets;
- Offering assistance with permitting to agricultural businesses;
- Supporting or organizing events such as the Summer Farm Series and Ag Education Day provide publicity for farms;
- Publishing the Harvest Guide, available in print and on-line, as a directory to farms and farm products in the County;
- As part of the Southern Maryland Meats program, placing freezer display cases selling local meats in two county businesses. Six agricultural businesses are certified to sell meats at retail operations;
- Supporting the Anne Arundel County Equipment Rental Program, which makes farm equipment available to rent to farms in the five Southern Maryland counties; and
- Establishing the Anne Arundel County Agricultural Scrap Tire Program, which allows county farms to bring agricultural tires to a designated location for recycling—a necessary service, since the county landfills do not accept agricultural tires.

*b. Farmers' Markets*

There are ten farmers markets in Anne Arundel County, including one in the City of Annapolis:

- Annapolis area: Riva Road/ Harry S. Truman Parkway;
- Annapolis area: Anne Arundel Medical Center;
- Annapolis area: Department of Natural Resources);
- City of Annapolis: (Compromise Street – City of Annapolis);
- Crofton: Crofton Country Club;
- Fort Meade;
- Hanover: Arundel Preserve;
- Lothian: Greenstreet Gardens;
- Piney Orchard; and
- Severna Park

Coupon programs for seniors and for Women, Infants and Children (WIC) allow eligible participants to purchase local produce. The County also encourages local restaurants to purchase fresh produce from local farms.

*c. School Programs*

An agriculture pilot program was initiated at Southern High School in 2010, in partnership with the Farm Bureau, Maryland Agriculture Education Foundation and AAEDC. The pilot program, now accredited through the National Council for Agricultural Education's Curriculum for Agricultural Science Education (CASE), offers classes in agriculture, plant science and biotechnology. A Future Farmers of America Chapter was also re-established at the school in 2011. A second CASE program exists at Phoenix Academy in Annapolis.

**Table IV-4: South County Small Area Plan (SAP) Recommendations for Maintaining the Rural Economy**

| Recommendation (see SAP for full text)  | Status/Response   |
|---|---|
| Fund the County's Agricultural Preservation program to ensure preserving a total of 20,000 acres by 2007, with an ultimate goal of 40,000 acres.  | County has retained its long-range goal of 20,000 acres. The timeline obviously needs to be extended, but the goal remains a valid one that the County will continue to move towards.   |
| Consider amending the Agricultural Preservation Program to reduce the eligible farm size from 50 acres to any size parcel that permits more than one residential dwelling unit.   | The County has decided to retain 50 acres as the minimum eligible farm size. Since policy is to have a dwelling unit on land entering the program, with the May 2005 zoning amendments few if any parcels below 50 acres would have development rights to sell.   |
| Appoint an Agricultural Commission or expand the authority of the Agricultural Board to assist with all aspects of relevant agricultural programs, including preservation, marketing and promotion.   | The County Agricultural Preservation Advisory Board has this authority under the Code and is active in these areas. The Anne Arundel Economic Development Corporation has an Agricultural Advisory Committee that assists the County in marketing and promotion.  |
| <p>Establish a rural economic development function within county government either through the existing Anne Arundel Economic Development Corporation or by creating a new Rural Economic Development Corporation. This effort should include:</p> <ol style="list-style-type: none"> <li>Implement an agricultural lending program with local financial institutions.</li> <li>Provide incentives and encouraging financial institutions to offer low interest rate loans to farmers.</li> <li>Structure financing to promote investment in new crops and methods.</li> <li>Offer grants to encourage alternate types of agriculture.</li> <li>Act as a clearinghouse for information for farmers to locate sources of grant money and to assist farmers in preparing grant applications.</li> <li>Educate and encourage enrollment in programs that offer compensation for the adoption of environmental and other methods that reduce crop yields below optimum economic levels.</li> <li>Create program(s) in addition to the purchase of development rights that provide income generation for farmers.</li> <li>Provide assistance in conducting market research.</li> <li>Assist farmers in finding new and better markets for the products produced in Anne Arundel County.</li> <li>Organize a Land Lease Data Bank where owners of farmland can list land available for lease to other farmers.</li> <li>Represent agricultural interests before state agencies to educate them on agricultural concerns and potential impact of proposed legislation and rules.</li> <li>Provide a program to assist tobacco growers to transition to more diversified crops.</li> </ol> | <p>Agricultural business interests are now part of the Anne Arundel Economic Development Corporation – the County's economic development arm.</p> <ol style="list-style-type: none"> <li>Agricultural lending is available through AAEDC's Small Business Administration loans.</li> <li>Loans are available through the Maryland Agricultural and Resource-Based Industry Development Corporation (MARBIDCO), and private lenders such as MidAtlantic Farm Credit.</li> <li>Anne Arundel County is a member of the Southern Maryland Agricultural Development Commission (SMADC) which encourages alternate types of agriculture.</li> <li>Grants are offered through SMADC.</li> <li>AAEDC assists farmers with grants and grant applications.</li> <li>This is mostly done through the Anne Arundel Soil Conservation District.</li> <li>Programs such as Southern Maryland Meats are available through SMADC.</li> <li>AAEDC currently relies on its Agricultural Advisory Committee to advise on market conditions.</li> <li>This is accomplished through AAEDC's promotions and SMADC's programs.</li> <li>SMADC runs the Maryland FarmLINK program that helps farmers <a href="#">sell or buy farmland</a>, <a href="#">mentor novice farmers</a> and find important farming <a href="#">news and information</a>.</li> <li>SMADC, the Anne Arundel County Farm Bureau, and the Maryland Dept. of Agriculture represent agricultural interests before state agencies.</li> <li>SMADC manages the region's tobacco transition program.</li> </ol> |
| Encourage and support the establishment of an Anne Arundel County Farmland Trust.   | The County's focus has been on preservation of the family farm through the Agricultural and Woodland Preservation Program. Support for a trust could be considered in the future.   |

| Recommendation (see SAP for full text)  | Status/Response   |
|---|---|
| <p>Provide assistance in promoting the profitability of the agricultural industry. The County should provide assistance in promoting the viability of the agricultural industry through:</p> <ul style="list-style-type: none"> <li>a. Facilitating the establishment of a central farm product distribution hub where farmers can deliver products for pickup by consumers and wholesalers.</li> <li>b. If feasible, promoting farmers offering locally grown and processed foods by establishing a small cooperative processing operation.</li> <li>c. Foster the expansion of farmers' markets.</li> </ul> | <ul style="list-style-type: none"> <li>a. The idea of a central farm product distribution system or service has merit. Distribution in the County is currently private, including a limited number of Consumer Supported Agriculture operations .</li> <li>b. AAEDC would likely support a commercial kitchen, provided there was farmer interest and support.</li> <li>c. Farmers' markets have been expanded. Some, such as the one on Harry S. Truman Parkway have grown in size and scope.</li> </ul> |
| <p>Permit publicly owned lands to be used for agricultural production.</p>  | <p>This has been done, such as Rockhold Creek Farm and the former Navy Dairy Farm. Land at Kinder Farm Park is used for community gardens. Through collaboration between the County, Grow Annapolis and AACPS, edible gardens exist at several public schools.</p>  |
| <p>Encourage the Agricultural Extension Service to locate a highly qualified county extension agent in South County.</p>  | <p>Agent currently has offices in Gambrills. Also serves Prince George's County. Moving to an agricultural area would be desirable.</p>   |
| <p>Recognize the need for farmers to build ponds in wetland areas fed from streams providing irrigation for the conversions to profitable specialty crops.</p>  | <p>County does not support this recommendation; not protective of wetland resources and problematic from a permitting standpoint.</p>   |
| <p>Work for some of the tobacco settlement money to be set aside in a low or no interest revolving fund that would finance many of the above activities.</p>  | <p>Some money was set aside for use in helping to transition farms from tobacco. Funds are administered through SMADC.</p>  |
| <p>Educate Anne Arundel County residents on the importance of the agriculture industry to the County's economic vitality and diversity.</p>   | <p>These efforts are ongoing .</p>  |

## CHAPTER V NATURAL RESOURCES LAND CONSERVATION

### Introduction

This chapter evaluates Anne Arundel County's strategies to achieve State and County goals for protecting and conserving natural resource lands. Such lands contain forests, wetlands, floodplains, shorelines, streams, stream buffers, and other sensitive natural features.

Natural resource lands provide significant benefits. They help maintain the rural character of large parts of the County and the physical attractiveness of developed areas. They provide

wildlife habitat, filtration for air and water pollutants, and opportunities for resource-based recreation. They form the natural framework around which the built environment is planned and developed, and provide flood, erosion and sediment control. Natural resource lands require few government services, provide opportunities for ecotourism, and enhance property values in developed areas.

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### A. Planning Context and Goals

This section discusses County plans related to natural resource conservation, and the interrelationships between the State's and County's goals for natural resource land conservation.

#### 1. General Development Plan

As noted in Chapter II, Environmental Stewardship is one of the GDP's four overarching themes. Goals set forth in Chapter 5 (Environmental Stewardship) are:

- Achieve or exceed Federal and State mandated water quality standards in all watersheds in the County.
- Preserve and protect sensitive areas including streams and their buffers, floodplains, Natural Heritage Areas, steep slopes, tidal and nontidal wetlands, and unique watersheds.
- Preserve, protect, and enhance the designated Greenways network as well as forest cover countywide.
- Improve air quality.
- Reduce noise pollution.
- Promote prudent use of mineral resources and responsible reclamation of mining sites.

Policies and actions provide additional detail on these goals.

The County's Water Resources Plan (GDP Chapter 10) outlines a mitigation plan that is consistent with the watershed protection goals

and policies set forth in the Environmental Stewardship chapter.

#### 2. Comprehensive Planning Context

The GDP's vision and goals establish the countywide framework for integrating natural resource conservation with land use policies. The framework has six basic elements, discussed in detail below:

- Designated growth areas;
- Designated conservation areas;
- Small area planning;
- Watershed management;
- Greenway protection; and
- Sensitive resource protection.

##### a. *Designated growth areas*

As described in Chapter II, the key Comprehensive Plan goal is to balance growth and sustainability by conserving areas that are mostly rural, agricultural, and open space, and concentrating development in suitable areas that have existing or planned public facilities, with a special focus on the Town Center Growth Management Areas located in Glen Burnie, Odenton, and Parole.

Concentrating development in designated growth areas limits development in other areas, thereby facilitating conservation of contiguous natural resource areas in rural parts of the County.

*b. Designated conservation areas*

As noted in Chapter II, the County's designated conservation areas are (see section B.2 below and also Map II-9):

- The Priority Preservation Area;
- Greenways, as identified in the County's Greenways Master Plan;
- Portions of the County's open space zoning district that are not in the Greenways network; and
- The Resource Conservation Area portions of the Chesapeake Bay Critical Area.

*c. Small Area Planning*

As discussed in Chapters II, III and IV, 16 Small Area Plans (SAPs) covering the entire county were adopted between 2000 and 2004, as amendments to the GDP (see Map II-5).

Each SAP has a natural resources element that guides decisions made by the Office of Planning and Zoning and the Department of Public Works, Watershed Protection and Restoration Program.

The major themes related to natural resource lands that emerged from the SAP process, and that were common to most, were as follows:

- Preserve and connect open spaces and greenways.
- Improve stormwater management to reduce and, where possible, eliminate the negative environmental impacts of stormwater runoff.
- Restore degraded and polluted areas including reversal of industrial and toxic pollution.
- Complete watershed management plans and implement a watershed approach to stormwater management, planning, and permitting.
- For the west side SAPs, establish a Patuxent River Greenway.
- Create outreach education programs for residents and businesses.
- Effectively monitor County environmental enforcement and Countywide environmental planning.

Many of the SAPs contain goals and vision statements related to natural resource land conservation. Examples are provided below.

- **South County SAP:** The area will be enhanced through the preservation, protection, expansion and restoration of its existing natural resources. High priority is placed on protecting the area's natural resources, including its wetlands, shorelines, woodlands, fields, wildlife, and their habitats.
- **Deale/Shady Side SAP:** The preservation and restoration of wetlands, wildlife habitat, water quality and all natural resources are of primary importance.
- **Broadneck SAP:** The citizens' Vision for the Broadneck Peninsula is first and foremost to preserve the unique residential and close-to-nature character of its communities, while making specific improvements that encourage the revitalization of existing commercial areas. The challenge is to channel anticipated growth in ways that are beneficial to the whole community; encourage the preservation of green spaces, beautiful waterways, and historic and scenic roads; maintain excellent schools; protect local roads from excessive traffic growth; link neighborhoods and community resources with walking and bicycle trails; and improve recreation facilities.

*d. Watershed management*

Watershed management is implemented by the Watershed Protection and Restoration Program within the Department of Public Works. The program is described in Section B.4 below.

*e. Greenway protection*

Maryland's Green Infrastructure initiative focuses on identifying large, contiguous blocks of ecologically significant natural areas (hubs) and linking them with natural corridors to create an interconnected network of natural resource lands across the state.

The Green Infrastructure initiative has evolved over the years into a program called Maryland GreenPrint that identifies Targeted Ecological Areas preferred for Statewide Program Open

Space funding based on their high ecological value.

Anne Arundel County's award-winning 2002 Greenways Master Plan used five criteria in assessing land as potential greenways: habitat value; size; connections to other land with ecological value; future potential (the potential to create greenways where they did not currently exist); and national and countywide trails.

The Greenways Master Plan is an identification, decision-making, implementation, and management tool, and is part of the County's comprehensive planning framework. By identifying the future greenways network, it serves as the basis for decision-making on land acquisition, subdivision review, and natural resource protection programs by State and County agencies as well as by local land trusts and watershed organizations.

*f. Sensitive resource protection*

Section B.4 describes the County's comprehensive approach to sensitive resource protection.

### **3. Consistency with State Goals**

Anne Arundel County's goals for natural resource land conservation are consistent with the State's goals. Table V-1 lists the Maryland DNR 2017 goals for natural resource conservation, and shows the alignment of these state goals with the related goals, policies, and actions from the County's 2009 GDP.

The County used the Small Area Planning process to identify lands and waterways that support important natural resources and ecological functions, as per State goal #1. As noted above, several of the SAPs contain goals related to natural resource land conservation, and some incorporate natural resource land considerations into their vision statements.

Through the Greenways Master Plan, the County synthesized its natural resource and open space inventories with DNR's inventory of green infrastructure, consistent with State goals 2 and 3.

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## **B. County Implementation Program and Progress Since the 2013 LPPRP**

This section discusses major components of the County's implementation program for natural resources conservation.

These components, along with the implementation programs described in Chapters III and IV for recreation and agricultural land preservation, respectively, support the State's goals for natural resource land conservation.

### **1. Designated conservation areas**

The County's designated conservation areas, listed in Section A.2.b, total approximately 117,200 acres or approximately 44 percent of the County's land area.<sup>1</sup>

Development is not completely precluded in these conservation areas. Based on 2014 land cover data, approximately 21,700 acres (18.5 percent) within the designated conservation areas are developed.

*a. Greenways*

In 2010, the Department of Recreation and Parks and the Office of Planning and Zoning completed a Greenways Implementation Report that summarized progress on implementation of the Greenways Master Plan since 2002.

The network, which is shown in Map V-1, covers approximately 72,417 acres, equivalent to 27 percent of Anne Arundel County's total land area. Ultimately, the County's goal is to preserve and protect as much of the land within the greenways network as possible. As of 2016, approximately 48,587 acres, or 67 percent, of the network was protected. By comparison, 51 percent of the network was protected in 2002, and 62 percent was protected in 2009.

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<sup>1</sup> This total of 117,200 acres accounts for overlap among the areas (land is counted once only).

**Table V-1 State and County Goals for Natural Resources Land Conservation**

**State Goals**

Key terms in bold

**Corresponding County Goals, Policies or Actions from the 2009 GDP**

GDP Goals are **bold**; GDP policies are in *italics*; GDP actions are in normal font.

Asterisk (\*) indicates material from Chapter 3 of the GDP. All other material is from Chapter 5.

|   |  |
|---|--|
| <p>1. <b>Identify, protect and restore lands and waterways</b> in Maryland that support important aquatic and terrestrial natural resources and ecological functions, through combined use of the following techniques:</p> <ul style="list-style-type: none"> <li>○ Public land <b>acquisition</b> and stewardship;</li> <li>○ Private land conservation <b>easements</b> and stewardship practices through purchased or donated easement programs;</li> <li>○ Local land use management plans and procedures that conserve natural resources and environmentally sensitive areas and <b>minimize impacts</b> to resource lands when development occurs;</li> <li>○ Support <b>incentives</b> for resource-based economies that increase the retention of forests, wetlands or agricultural lands;</li> <li>○ <b>Avoidance of impacts</b> on natural resources by publicly funded infrastructure development projects; and</li> <li>○ Appropriate <b>mitigation</b> response, commensurate with the value of the affected resource.</li> </ul> | <ul style="list-style-type: none"> <li>● Increase the amount of protected land in the County in order to preserve open space and rural areas and protect natural resources.*</li> <li>● Offset future land use and zoning intensifications by acquiring or otherwise retaining additional land for preservation where feasible.*</li> <li>● Partner with local land trusts to increase promotion and marketing of preservation mechanisms such as conservation easements.*</li> <li>● Preserve and protect sensitive areas including streams and their buffers, floodplains, Natural Heritage Areas, steep slopes, tidal and nontidal wetlands, and unique watersheds.</li> <li>● Protect stream buffers as a means of reducing stormwater runoff impacts and improving water quality in local tributaries.</li> <li>● Evaluate current stream buffer requirements in the Stormwater Design Manual and expand buffer requirements either Countywide or in select subwatersheds as needed to achieve watershed planning goals.</li> <li>● Where modifications to development are approved in sensitive areas, evaluate the possibility of requiring a fee to be paid and placed in a natural resource restoration fund.</li> <li>● Consider revisions to development regulations that would disallow modifications to forest conservation requirements or stream buffer requirements in high priority subwatersheds.</li> <li>● Consider use of County reforestation funds to purchase environmentally sensitive properties for protection.</li> <li>● <i>Minimize disturbance to floodplains</i></li> <li>● Use FEMA’s updated Digital Flood Insurance Rate Maps, when available, to review and refine the OS (Open Space) zoning district Countywide.</li> <li>● Explore participation in FEMA’s Community Rating System.</li> <li>● Reduce the amount of disturbance to steep slopes adjacent to and within sensitive areas.</li> <li>● Review and update if necessary, the steep slopes criteria in the County. Consider a definition of steep slopes as 15% or greater if slopes occur within 100 feet of a stream.</li> <li>● Develop additional programs for wetland creation and enhancement.</li> <li>● Provide for more rigorous enforcement of wetland protection in development areas.</li> <li>● Identify wetland sites for mitigation banking and establish a County wetland bank. Wetland mitigation should correspond in form and function to that which was destroyed or lost.</li> <li>● Use forest mitigation banks to promote reforestation, greenways protection, and good forest management practices.</li> </ul> |
|---|--|

## State Goals

Key terms in bold

## Corresponding County Goals, Policies or Actions from the 2009 GDP

GDP Goals are **bold**; GDP policies are in *italics*; GDP actions are in normal font.

Asterisk (\*) indicates material from Chapter 3 of the GDP. All other material is from Chapter 5.

- 
- |   |  |
|---|--|
| <p>2. <b>Focus conservation and restoration activities on priority areas</b> according to a strategic framework such as the Targeted Ecological Areas (TEAs) in GreenPrint.</p>   | <ul style="list-style-type: none"><li>• <b>Preserve, protect, and enhance the designated Greenways network as well as forest cover countywide.</b></li><li>• <i>Establish an interconnected network of protected corridors of woodlands and open space in accordance with the goals of the Greenways Master Plan.</i></li><li>• Prioritize properties for the purpose of targeting funds for greenways acquisitions, building on the priorities established in the 2002 Greenways Master Plan and the 2006 Land Preservation, Parks, and Recreation Plan.</li><li>• Prioritize the use of funds for acquisition of conservation land to give highest priority to properties within the greenway network. Encourage the placement of greenways into permanent conservation easements.</li><li>• Establish a proactive outreach program to “market” the Greenways Plan. Work with local land trusts, Riverkeepers, and other environmental groups to promote the benefits of conservation easements and other preservation tools.</li><li>• For private properties located in the Greenways network that choose to develop, encourage cluster development and placement of the remaining open space under conservation easements. Assess potential revisions to the Subdivision code to require clustering on these properties.</li><li>• Modify the forest conservation regulations as needed to improve the effectiveness of mitigation, in order to better achieve preservation of continuous and connected hubs and corridors of forested areas. Potential revisions to evaluate include a requirement that, in those subwatersheds ranked highest priority for preservation, forest mitigation must occur in the same subwatershed.</li></ul> |
| <p>3. <b>Conserve and restore species of concern and important habitat types</b> that may fall outside of designated green infrastructure (examples include: rock outcrops, karst systems, caves, shale barren communities, grasslands, shoreline beach and dune systems, mud flats, non-forested islands, etc.).</p> | <ul style="list-style-type: none"><li>• In accordance with the 2006 Land Preservation, Parks and Recreation Plan, pursue the acquisition of additional land for preservation. Target properties in the Greenways network, the Rural Legacy Area, in subwatersheds identified as high priority for preservation in a Watershed Management Plan, and in other areas suitable for passive recreation or natural resource protection.</li><li>• <i>Protect the Jabez Branch and other unique watersheds from adverse impacts.</i></li><li>• Develop a Jabez Branch Overlay Zone and incorporate regulations into the County Code as needed.</li><li>• Evaluate whether environmental overlay zones should be established for other subwatersheds in the County in addition to the Jabez Branch.</li><li>• <i>Ensure maximum protection of the County’s green infrastructure, non-tidal wetlands, designated wildlife refuges and other natural resource areas, even in areas designated as mixed use, in town centers or in areas designated for growth.</i></li><li>• When reviewing proposed development in areas designated for mixed use or transit-oriented development, in town centers and in other designated growth areas, ensure that adequate protection is provided for the County’s green infrastructure, non-tidal wetlands, wildlife refuges and forested areas in order to retain a high quality of life, preserve water quality, and maintain such areas as desirable places to live.</li></ul>   |
-

## State Goals

Key terms in bold

## Corresponding County Goals, Policies or Actions from the 2009 GDP

GDP Goals are **bold**; GDP policies are in *italics*; GDP actions are in normal font.

Asterisk (\*) indicates material from Chapter 3 of the GDP. All other material is from Chapter 5.

- 
- |  |   |
|--|---|
| <p>4. <b>Develop a more comprehensive inventory</b> of natural resource lands and environmentally sensitive areas to assist state and local implementation programs.</p>                   | <ul style="list-style-type: none"><li>• Complete Round 1 physical, chemical, and biological assessments for all streams within the County. Remaining: Patapsco Non-Tidal, Patapsco Tidal, Bodkin, Little Patuxent, Middle Patuxent, West River, Rhode River, and Herring Bay.</li><li>• Re-evaluate water quality monitoring as needed for affected streams that were previously evaluated as part of required monitoring for County restoration projects (e.g. Towsers Branch).</li><li>• Continue to maintain and update the County's impervious and Landcover GIS coverage. Improve the scale of the coverage to support a more refined parcel level pollutant loading model and a fair basis for assessing stormwater fees in the event such fees are assessed in the future.</li><li>• Assess all stream reaches and subwatersheds within the County and prioritize them for restoration and preservation.</li><li>• Develop and update the current and ultimate development stormwater and septic pollutant loadings at the subwatershed scale for all watersheds in the County.</li><li>• Create a database of property protected under Forest Conservation easements, and evaluate alternatives for a more comprehensive approach to forest conservation.</li></ul> |
| <p>5. <b>Establish measurable objectives</b> for natural resource conservation and an integrated state/local strategy to achieve them through state and local implementation programs.</p> | <ul style="list-style-type: none"><li>• <i>Acquire approximately 3,150 additional acres of land for open space and natural resource land protection by year 2020.*</i></li><li>• <b>Achieve or exceed Federal and State mandated water quality standards in all watersheds in the County.</b></li><li>• Continue correspondence with the Maryland Department of the Environment (MDE) to reach agreement on the assessment methods, goal setting protocols, and development and effectiveness of watershed implementation plans.</li><li>• <i>Wetlands: Continue established policy of no net loss and strive for overall gain of tidal and nontidal wetlands.</i></li></ul>  |
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## State Goals

Key terms in bold

## Corresponding County Goals, Policies or Actions from the 2009 GDP

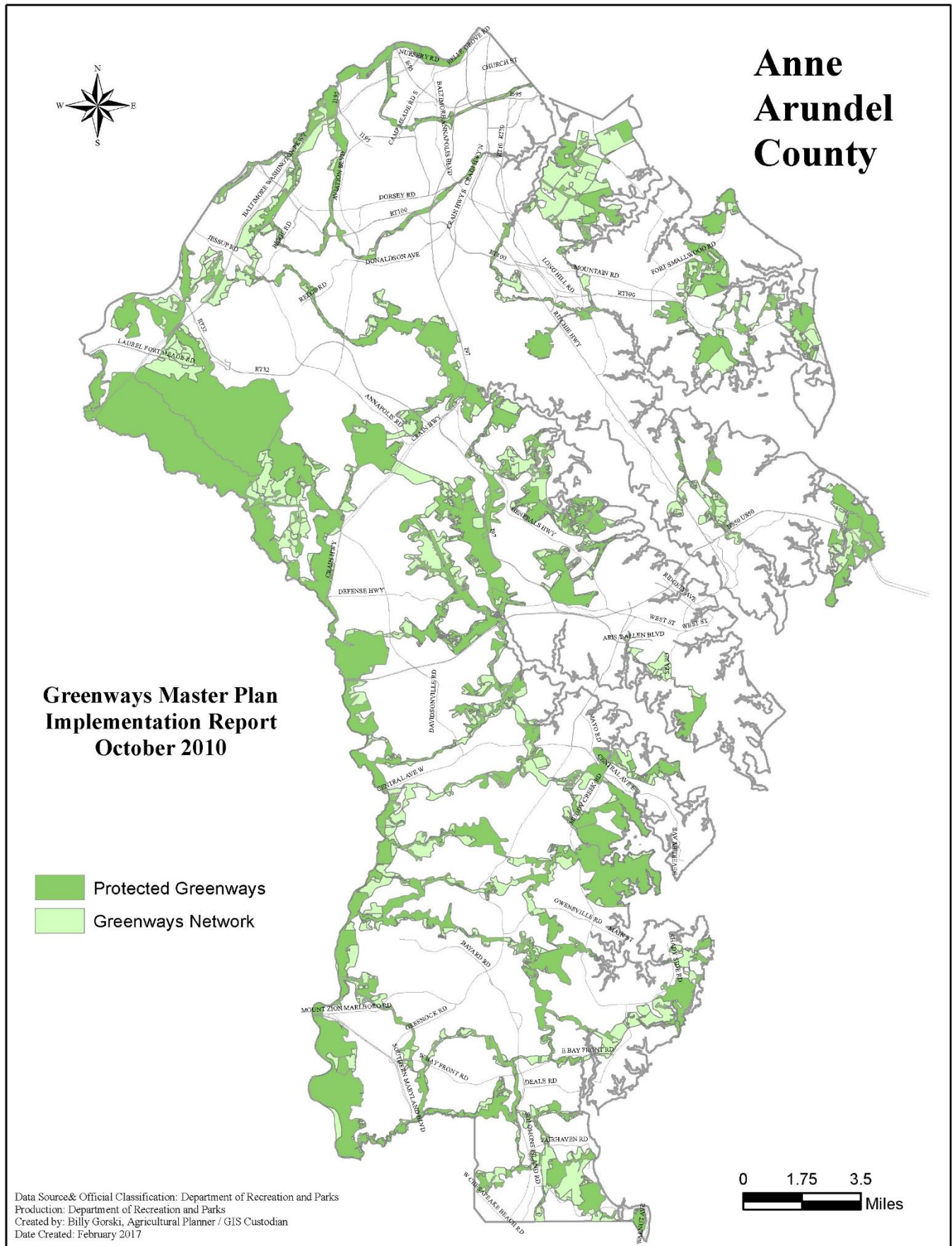
GDP Goals are **bold**; GDP policies are in *italics*; GDP actions are in normal font.

Asterisk (\*) indicates material from Chapter 3 of the GDP. All other material is from Chapter 5.

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|   |   |
|---|---|
| 6. <b>Assess</b> the combined ability of state and local programs to achieve the following:   | • <i>Maintain a proactive watershed planning program that integrates land use planning and water resource protection. In addition, maintain a proactive environmental monitoring program that will assess the effectiveness of stormwater management practices and watershed restoration actions and track progress toward meeting water quality standards.</i>               |
| • Expand and connect forest, farmland and other natural lands as a network of contiguous green infrastructure;  |   |
| • Protect critical terrestrial and aquatic habitats, biological communities and populations;  | • Identify potential restoration/preservation opportunities and conduct cost/ benefit studies to assess the effectiveness of implementation in meeting Total Maximum Daily Load (TMDL) regulatory requirements. Conduct implementation feasibility studies and develop concept restoration plans for select projects. Recommend implementation through CIP and grant funding. |
| • Manage watersheds in ways that protect, conserve and restore stream corridors, riparian forest buffers, wetlands, floodplains and aquifer recharge areas and their associated hydrologic and water quality functions; | • Use the County's Watershed Management Tool and watershed assessment data to review stormwater management plans and flood studies associated with development projects and zoning applications.  |
| • Adopt coordinated land and watershed management strategies that recognize the critical links between growth management and aquatic biodiversity and fisheries production; and   | • Utilize information and results from watershed assessment work to recommend revisions or enhancement to the County's stormwater management standards, codes, and regulations.   |
| • Support a productive forestland base and forest resource industry, emphasizing the economic viability of privately owned forestland.  | • Use the Watershed Management Tool to track forest cover in each watershed with a goal of preventing the loss of forest cover. Use the State's recent Stormwater Management Act and its focus on reducing impervious areas to create more opportunities for forest conservation.   |
|   | • Establish an ongoing system for tracking the status of properties in the greenways network, and prepare periodic status reports on additional land acquisitions or conservation easements within the Greenway network.  |

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*b. Open Space Zoning*

Anne Arundel County's Open Space zoning district comprises 100-year floodplains, wetlands, parkland, and other open space. Approximately 37,000 acres are zoned open space; almost 14 percent of the County. A limited set of land uses is permitted in the Open Space district, including farming, for example, but excluding new residential development.

*c. Chesapeake Bay Critical Area Resource Conservation Area*

The Critical Area's Resource Conservation Area (RCA) is extensive in Anne Arundel County, covering approximately 21,900 acres. RCAs are particularly extensive in South County along the Chesapeake Bay and the Patuxent River, in the Broadneck Peninsula and in Lake Shore (Map II-9). Approximately 11,320 acres, 52 percent of the RCA in Anne Arundel County, is currently protected from development by ownership, easement, or zoning<sup>2</sup>.

An important aspect of the County's Critical Area Program is providing natural parks that give opportunities for people to interact with the environment without disturbing natural processes. Natural parks in Anne Arundel County's Critical Area include:

- Patuxent River Greenway properties;
- Magothy Greenway Natural Area;
- Jug Bay Wetlands Sanctuary. Environmental education programs here include canoe trips, a fish survey, pond and stream exploration, marsh ecology and identification of species;
- Jack Creek Park;
- Shady Cove Natural Area; and
- Back Creek Nature Park (City of Annapolis).

In addition, several of the County's regional parks have large natural areas in the RCA, including Downs Park, Quiet Waters Park, Fort Smallwood Park, and Harry & Jeanette Weinberg Park.

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<sup>2</sup> Parks, resource lands, agricultural easements, open space zoning; MET and MHT easements; and bog overlay zoning district – merged to avoid double counting.

The state and federal governments also own land in the Critical Area, including Patapsco Valley State Park, the Patuxent Research Refuge and the Smithsonian Environmental Research Center. These lands are discussed in more detail in Section B.2.

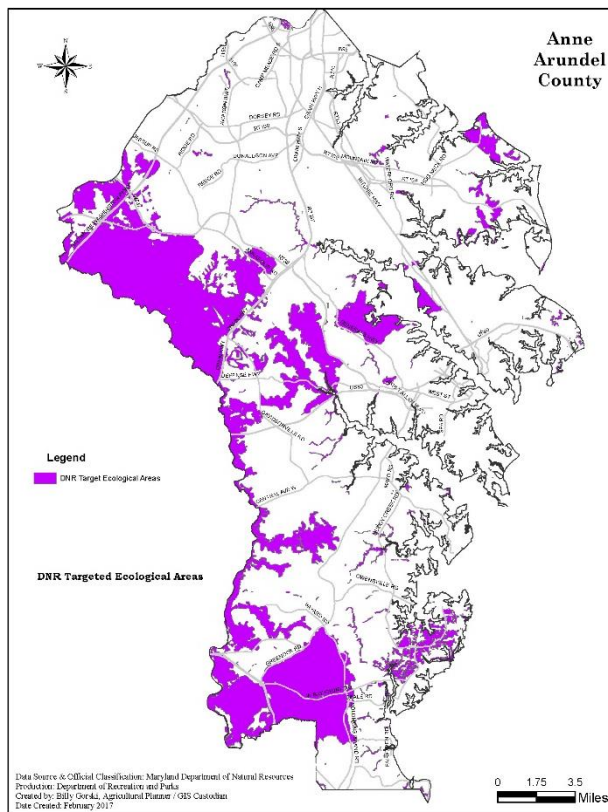
*d. Comparison with State Targeted Ecological Areas*

As discussed in Section A.2.e, the State's Targeted Ecological Areas are preferred for Statewide Program Open Space funding based on their ecological value. Map V-2 shows these areas in Anne Arundel County. Map V-3 shows the County's designated conservation areas.

Map V-4 compares the state's Targeted Ecological Areas with the County's designated conservation areas. For ease of reading the map, the County's Greenways, Open Space Zoning, RCA, and Priority Preservation Area (PPA) are merged and shown in green. The state's Targeted Ecological Areas are in purple. Using GIS, the Targeted Ecological Areas are placed underneath the County's designated conservation areas so that the only purple areas showing on the map are those Targeted Ecological Areas that are not County designated conservation areas. There are 12 of these "mismatch" areas, as labeled on Map V-4.

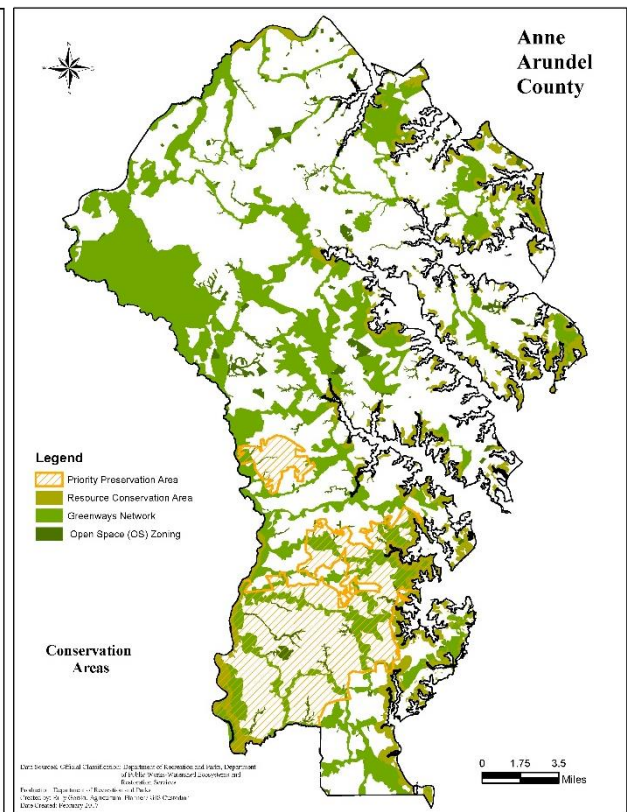
The County's designated conservation areas are generally consistent with the State's GreenPrint conservation priorities, as evidenced by the small extent of mismatch areas on Map V-4. The justification for these mismatches is as follows:

- **Area 1:** Approximately half of this area is developed with rural residential lots. It is adjacent to but not part of the PPA.
- **Area 2:** This area contains scattered rural residential development in and around Shady Side.
- **Area 3:** This site contains an active sand and gravel operation.
- **Area 4:** This site contains several uses, including an active sand and gravel operation and a proposed rubble landfill.
- **Area 5:** This area has been subdivided as the Stonegate Forest subdivision.



**Map V-2 State Targeted Ecological Areas**

- **Area 6:** This area appears to be on property of the Patuxent Research Refuge.
- **Area 7:** These are isolated areas on the National Security Agency site, with little ecological value.
- **Area 8:** This area is mostly comprised of the Laurel Racing Association property and is of little ecological value.
- **Area 9:** This area is the site of Blobs Park and has an approved development plan.
- **Area 10:** This area is almost completely developed with only some fragmented open space or wooded corridors.
- **Area 11:** This area is developed residentially.
- **Area 12:** This area is almost completely developed with only some fragmented open space or wooded corridors.



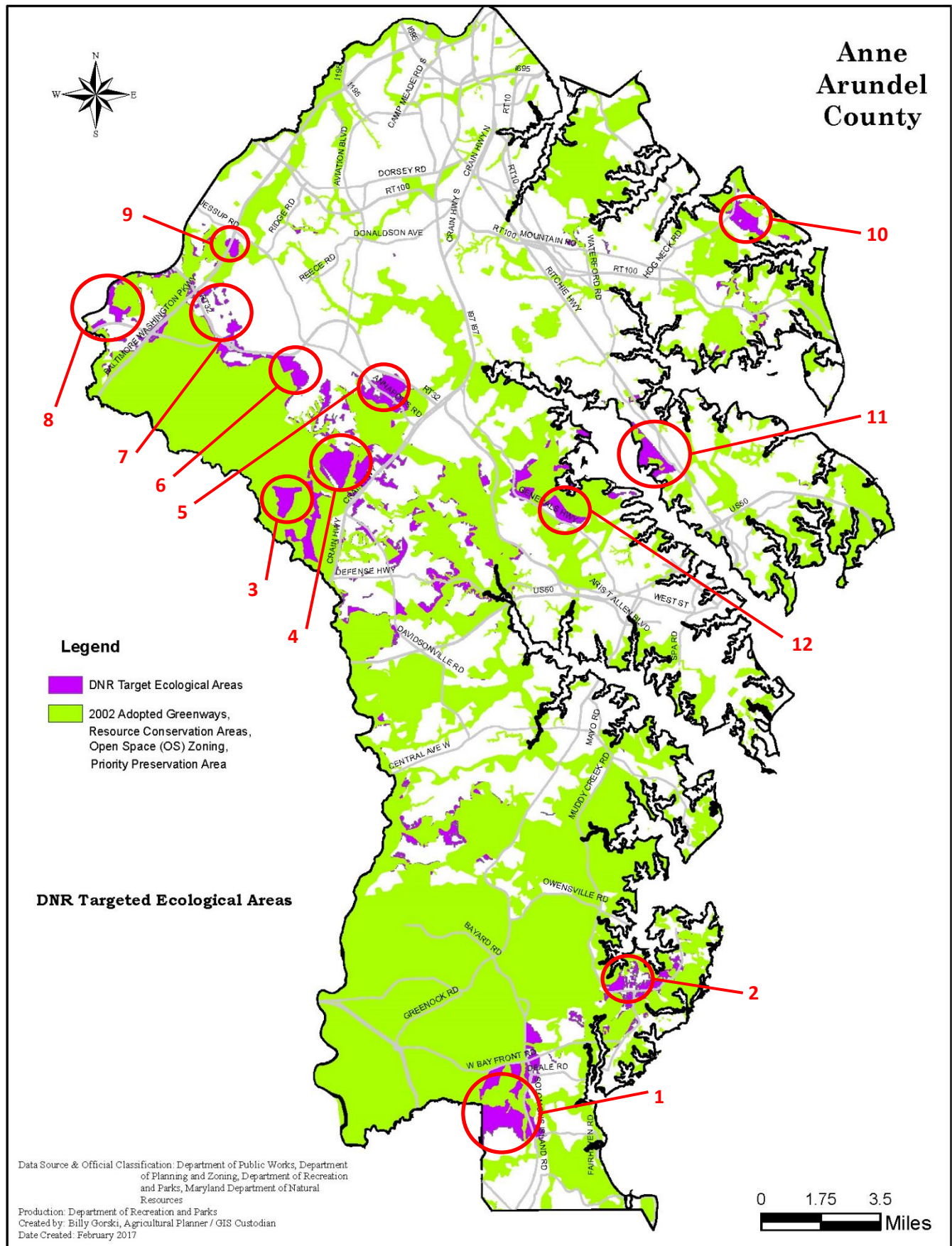
**Map V-3 County Designated Conservation Areas**

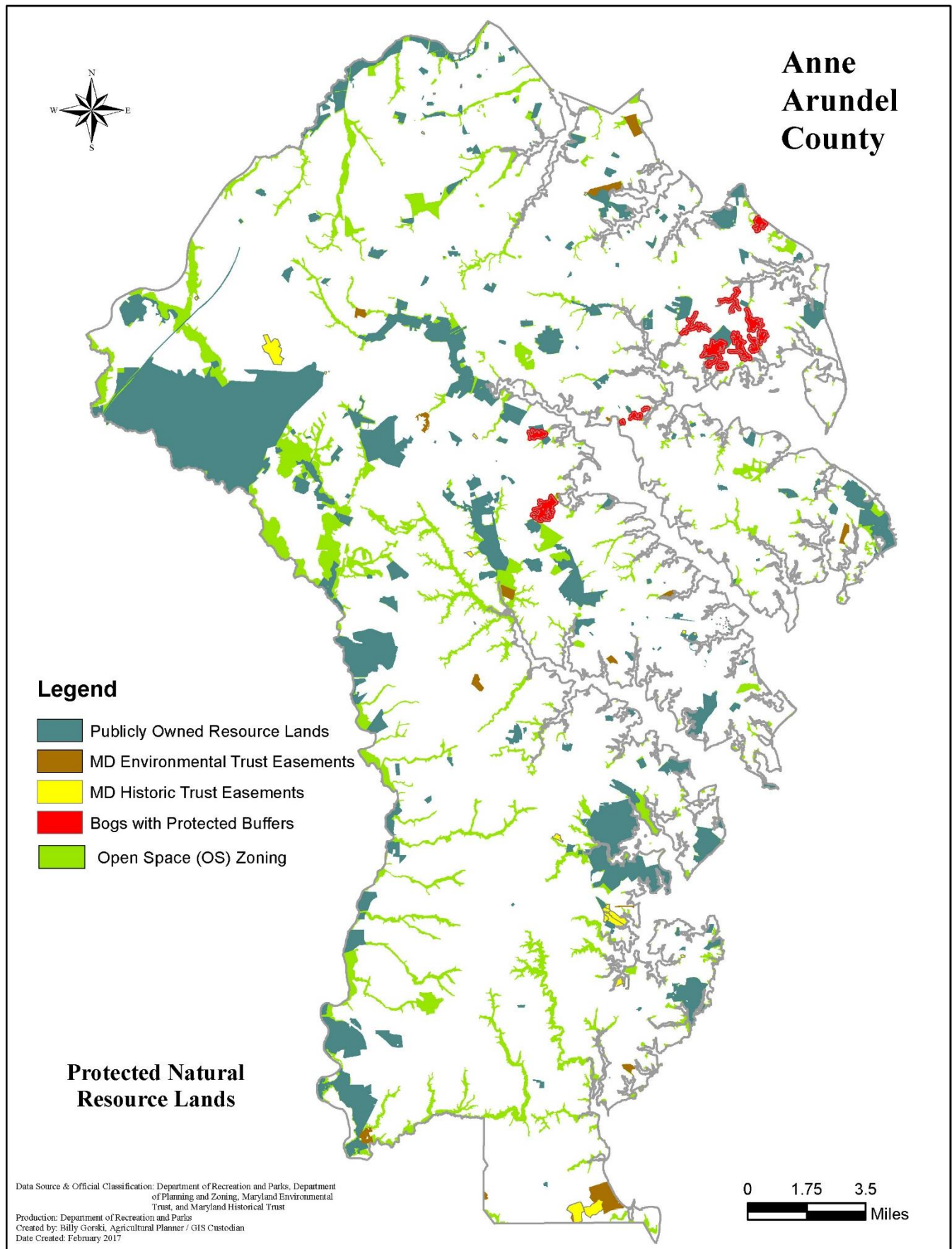
## 2. Protected Natural Resource Land

Approximately 47,600 acres of natural resource land in Anne Arundel County are protected through ownership, easement, open space zoning or bog protection zoning. This acreage is approximately 18 percent of the County's land area (see Table V-2, Map V-5, and Appendix G).

This LPPRP uses the word "protected" generally, to mean "protected from development". The County acknowledges that this does not always equate to natural resource protection; however, it is an appropriate proxy.

The County's Recreation and Open Space Inventory (see Appendix A) includes approximately 25,400 acres of natural resource land under ownership by federal, state, and local governments, approximately 9.6 percent of the County's land area. These lands are located in six general areas:





**Table V-2 Protected Natural Resource Lands**

| <b>Category</b>                                       | <b>Acres</b>  |
|---|---------------|
| <b><i>Under Ownership</i></b>                         |               |
| Anne Arundel County <sup>(1)</sup>                    | 9,863         |
| City of Annapolis                                     | 471           |
| State   | 2,790         |
| Federal   | 12,282        |
| <b><i>Easements</i> <sup>(2)</sup></b>                |               |
| Maryland Environmental Trust                          | 3,250         |
| Maryland Historical Trust <sup>(3)</sup>              | 893           |
| <b><i>Zoning</i></b>                                  |               |
| Bog Protection Areas <sup>(4)</sup>                   | 867           |
| Additional Land with Open Space Zoning <sup>(5)</sup> | 17,150        |
| <b>Total</b>  | <b>47,566</b> |

*Notes:*

<sup>(1)</sup> Includes 4,872 acres of private residential resource land, and 4,991 acres of park lands categorized as Resource Lands (see Appendix G for listing).

<sup>(2)</sup> To avoid double counting, Table V-2 does not include lands under easement by local land trusts and forest conservation easements. These lands have not all been mapped, although some of the acreage may already be included in the table under "Additional Land with Open Space Zoning".

<sup>(3)</sup> Source: Anne Arundel County GIS. Total discounted by 14 acres as part of Hancock's Resolution park and historic site, which MHT lists as including 893 acres under easement. These lands need to be mapped, to determine if they overlap with other protected lands.

<sup>(4)</sup> Includes 100-foot bog protection buffer.

<sup>(5)</sup> Excludes park land, land in agricultural easements, and other protected natural resource land. May include residential resource land.

Sources: Appendix A, Land Trusts; MHT; Anne Arundel County Department of Recreation and Parks

#### *a. Patuxent River Valley*

Protected land along the Patuxent River includes the Patuxent Research Refuge (8,846 acres in Anne Arundel County), Jug Bay Wetlands Sanctuary (1,547 acres), the US Air Force Globecom Wildlife Sanctuary (836 acres), and a number of parcels that have been acquired by Anne Arundel County as part of the Patuxent River Greenway.

The Patuxent Research Refuge's mission is wildlife research, but it does offer public recreation on its north tract (hunting, fishing, wildlife observation, trails, and many interpretive programs). The refuge's other two tracts are closed to the public except for the National Wildlife Visitor Center and associated trails in the south tract.

The National Park Service owns and manages the 6.25 mile Baltimore-Washington Parkway and its associated forested buffer between the County line and MD 175.

In addition to being an important environmental preservation area, the Jug Bay Wetlands Sanctuary is the County's premiere environmental education site. This extensive tidal wetland ecosystem is home to a diverse population of unique flora and fauna. Knowledgeable staff at The Jug Bay Visitor's Center provide guided tours of the Sanctuary by land and water, particularly to school groups. This facility exemplifies the State and County's partnership to implement the State's Children In Nature program.

#### *b. Patapsco Valley State Park*

Public access to the Anne Arundel County portion of the park (992 acres) is less developed than the Baltimore or Howard County areas.

#### *c. Lake Shore*

Protected lands in the Lake Shore area include the Magothy Greenway Natural Area, portions of Beachwood Park, Harry & Jeanette Weinberg Park, Downs Park, Fort Smallwood Park, Grays Creek Bog Natural Area, as well as several areas that are protected through the County's bog protection program.

#### *d. Severn Run*

The State of Maryland owns a number of parcels that together form the Severn Run Natural Environment Area (approximately 1,760 acres total). The Scenic Rivers Land Trust also holds a number of conservation easements in this area (see below in Section 4.c).

#### *e. Crownsville*

The South River Watershed is the most ecologically challenged watershed in the County. To protect the headwaters of the South River, the county acquired approximately 974 acres of forestland, including 546 acres that were formerly part of the Crownsville State Hospital site. The City of Annapolis owns approximately 500 acres along Broad Creek north of Defense Highway. Waterworks Park comprises approximately 45 acres of this property.

f. *South County*

In addition to the protected lands along the Patuxent River Valley, large protected natural resource areas in South County include the Smithsonian Environmental Research Center (2,600 acres on the Rhode River), and DNR's Franklin Point preserve (476 acres).

### 3. Land Trusts and Easements

a. *Land Trusts*

Land trusts in Anne Arundel County promote natural resource protection through conservation easements and occasional fee simple acquisition, and foster an increased understanding and appreciation of natural resources.

The Maryland Environmental Trust (MET) holds approximately 30 easements on 3,250 acres throughout Anne Arundel County<sup>3</sup>. Of these, approximately 2,250 acres are co-held with local land trusts, mostly with the Scenic Rivers Land Trust, and are included in the acreages in Table V-3.

Six local land trusts are active in the County. They meet as a group as the Coalition of Anne Arundel County Land Trusts. Combined they have protected approximately 3,555 acres in the County (Table V-3).

**Table V-3 Land Protected by Local Land Trusts**

| Land Trust                        | Acres        |
|-----------------------------------|--------------|
| Scenic Rivers Land Trust          | 2,494        |
| Magothy River Land trust          | 435          |
| Patuxent Tidewater Land Trust     | 250          |
| North County Land Trust           | 224          |
| Annapolis Conservancy Board       | 112          |
| The Crownsville Conservancy, Inc. | 40           |
| <b>Total</b>                      | <b>3,555</b> |

*Note: Some of these lands are co-held with MET or under other additional protection.*

- The Annapolis Conservancy Board (ACB) is a municipally-run land trust that conserves environmentally sensitive lands within Annapolis city limits for recreational, cultural, and ecological benefit. Created by the City in 1988, the ACB holds 112 acres in 21 easements. (<https://www.annapolis.gov/536/About-the-Conservancy-Board>)

- The Scenic Rivers Land Trust (SRLT), formerly the Severn River Land Trust, was established in 1988, and is focused on the Severn, South, Patuxent, Rhode, and West River watersheds. As of 2016 it holds 2,494 acres in 58 easements, of which 1,408 acres in 16 easements are co-held with MET. ([www.srlt.org](http://www.srlt.org))
- The North County Land Trust was established in 2000, and focuses on land preservation and environmental stewardship in northern Anne Arundel County. As of 2016 the Trust held approximately 224 acres in five conservation easements, of which two are co-held with MET, covering 214 acres. ([www.ncltrust.org](http://www.ncltrust.org))
- The Magothy River Land Trust (MRLT)'s mission is to preserve the environment and protect land within the Magothy River watershed, and has focused much of its efforts on promoting protection of the Magothy Bog complex. As of 2016 the MRLT protects approximately 435 acres through 16 easements. Two of the easements covering 372 acres are co-held with MET. ([www.magothyriver.org](http://www.magothyriver.org))
- The Crownsville Conservancy, Inc. was founded in 2005, and focuses on preserving green space and wildlife habitat to create natural buffers to development to preserve the integrity of Herald Harbor, Arden, Valentine Creek, and the greater Chesapeake Bay region. As of 2016 it has over 300 small lots in the Crownsville area under protection through conservation easements and fee simple ownership. ([www.crownsvilleconservancy.org](http://www.crownsvilleconservancy.org))
- The Patuxent Tidewater Land Trust was formed in 1996, and is dedicated to the preservation of agricultural, forested and open space land in southern Maryland. As of 2016, the trust co-holds one, 250 acre easement with MET and SRLT. ([www.patuxent-tidewater.org](http://www.patuxent-tidewater.org))

In addition to the local organizations, a 279 acre property in the County is protected by the Conservation Fund, a national land conservation and environmental advocacy organization.

<sup>3</sup> Data from MET as of 12-31-16.

*b. Conservation Trust Fund*

Anne Arundel County has a Conservation Trust Fund within the capital budget (C383200) that provides easement acquisition assistance to local land trusts. In the mid-2000s, it was funded at \$50,000 per year, but is not currently funded.

*c. Tax Credit Program*

Similar to the real property tax credit available to landowners who participate in the County or MALPF district or easement programs (see Chapter IV), the County offers a tax credit from County real property taxes that are:

*levied on conservation land that is used to assist in the preservation of a natural area, for the environmental education of the public, generally to promote conservation, or for the maintenance of a natural area for public use or a sanctuary for wildlife.*

The credit is granted annually as long as the property meets the definition of “conservation land” (Code 4.2.307).

*d. Other Easements*

The Maryland Historical Trust (MHT) helps preserve significant historical or architectural structures throughout Maryland. As of 2017, MHT held 58 easements, comprising approximately 900 acres in Anne Arundel County, and 23 easements, comprising 17 acres, within the City of Annapolis (including five acres at the Thomas Point Shoal Lighthouse).

The County holds many forest conservation easements that were created through forest conservation regulations. Mapping of forest conservation easements required as part of the subdivision process is partially complete. Beginning in 2010, the County began requiring digital submittals of all record plats including forest conservation easements. Surveyed descriptions of forest conservation easements on plats back to 2005 are available but are not all digitized in GIS.

A number of properties in the County participate in the state-federal Conservation Reserve Enhancement Program (CREP). This program includes a 10 to 15 year commitment to abstain from development; however, none of the participating properties have sold permanent easements.

## **4. Watershed Management**

The Watershed Protection and Restoration Program within the Department of Public Works consists of three divisions, as described below.

*a. Ecological Assessment and Evaluation Program*

The Ecological Assessment and Evaluation Program administers the County’s National Pollutant Discharge Elimination System (NPDES)—Municipal Separate Storm Sewer System (MS4) permit, the Town Center Surface Water Monitoring Program, and the County’s Biological Monitoring Program. Staff provide interpretation and implementation of these programs as they relate to State and County law.

*b. Restoration Program*

The Restoration Program uses a watershed-based approach to restoring degraded stream systems, to improve stream and wetland function, water quality, aquatic and riparian habitat. This group is at the core of Anne Arundel County’s program to meet Federal and State mandated pollutant load reductions required to achieve the Chesapeake Bay Total Maximum Daily Load (TMDL)—See Section B.7.a—including those local TMDLs established for Anne Arundel County’s waterways, and impervious surface management requirements under Anne Arundel County’s NPDES MS4 Permit. The Program focuses on three key areas to meet these requirements: Stormwater Management Facility Retrofits; Storm Drain Outfall Repairs; and Stream and Wetland Restoration.

*c. Watershed Assessment and Planning Program*

The Watershed Assessment and Planning Program supplements water quality monitoring performed by the Ecological Assessment and Evaluation Program with additional stream and watershed baseline assessment measurements, such as high resolution impervious and land cover datasets, urban stormwater information pertaining to treatment areas and performance measures, septic and stormwater infrastructure information, stream problem area inventory, and other assessment data.

Information is compiled and housed in the GIS interfaced Watershed Management Tool (WMT). The WMT consists of several components:

- A data repository;
- Engineering models used to evaluate existing and future conditions of hydrology, hydraulics, and water quality;
- A statistical model for performing analysis to identify watershed stressors and their relationship to select watershed health indicators; and
- A rating analysis for streams and subwatersheds aimed at prioritizing restoration and preservation actions.

## 5. Land Use Management Authority

The County's land use management, zoning and subdivision authority is a major component of its implementation program to achieve natural resource goals. As development occurs, these regulations help protect sensitive resource lands.

As discussed in Chapter IV, in 2005 the County adopted comprehensive changes to its zoning and subdivision codes. These included protective zoning in the RA zoning district that now permits residential subdivisions at density of no more than one dwelling unit per 20 acres.

Sensitive resources are further protected through a broad range of regulations and programs, including (citations are from the County Code):

- Floodplain management (Article 16, Title 2): Much of the Open Space-zoned land in the County is 100-year floodplain (see Maps II-3 and V-3). Under the subdivision regulations (Article 17), if a subdivision contains 100-year floodplain that is not included in the subdivision open space, the developer must provide an easement to the County for access to and maintenance of the floodplain. For residential development, except in the RA district, the floodplain is given to the County in fee simple. Easements are provided in the RA, non-residential and mixed use districts.
- Erosion and sediment control (Article 16, Title 3).
- Stormwater management (Article 16, Title 4).
- Zoning regulations (Article 18): Approximately 37,000 acres are zoned open space, with a very limited set of land uses permitted.
- Subdivision and development regulations (Article 17):
  - Chesapeake Bay Critical Area overlay (Article 17, Title 8).
  - Bog Protection Area Overlay (Article 17, Title 9): This set of regulations is somewhat unique to Anne Arundel County, and controls discharges and disturbance in bogs, contributing streams, and contributing drainage areas.
  - Forest conservation (Article 17, Title 6, Subtitle 3).
  - Non-tidal wetlands (Article 17, Title 6, Subtitle 4).
  - Streams and stream buffers (Article 17, Title 6, Subtitle 4: Under the Stormwater Management Practices and Procedures Manual (updated February 2012) required buffers are based on stream order, with greater buffers required if floodplains, wetlands, or steep slopes extend beyond the buffer line. The minimum buffer width is 100-feet.
  - Steep slopes (Article 17, Title 6, Subtitle 4).
- Habitats of Threatened and Endangered Species: As development occurs within the Chesapeake Bay Critical Area, rare and endangered species habitat is evaluated on a case-by-case basis. The County defers to the requirements of State and Federal agencies.

## 6. Capital Budget and Program Funding

The County's Capital Budget and Program contains a number of natural resource land-related projects and programs:

- Greenways, Park Land & Open Space (P400200): a \$2.1 million appropriation in FY 2017 and approximately \$1.3 million per

year for FY 2018 to FY 2022. The County uses this fund to acquire land for greenways, protecting sensitive natural resources, providing additions to existing parks or trails and/or preservation needs.

- Patuxent River Greenway (P482500): This was funded at approximately \$250,000 per year in the mid-2000s, but was merged with the Greenways, Parkland and Open Space Acquisition capital project in 2012. It continues to be a major focus.
- Shoreline erosion control for waterfront parks (P468700): approximately \$830,000 for Fiscal Year 2017 and an average of \$660,000 per year from Fiscal Years 2018-2022.

Funding for natural resources land conservation comes from a variety of sources, including County bonds, general funds, Program Open Space, state and federal grants, and developer contributions.

Table III-3 summarizes POS apportionments in the County over the past 10 years since 2008. Anne Arundel County has balanced spending on non-resource-based recreation, as described in Chapter III, with acquisition of natural resource-based lands. These projects also contribute to the County's ecotourism development efforts (see Section B.6).

Agricultural land preservation funds also serve to protect natural resource lands from development. As noted in Table IV-1, approximately 25 percent of land in farms is woodland. As discussed in Chapter IV, since 1992, the County committed more than \$32 million for its Agricultural and Woodland Preservation Program, plus approximately \$1.7 million to the MALPF and Rural Legacy programs.

Some of the County's historic sites have strong natural resource land-related elements, and also contribute to the County's ecotourism development efforts. Notable capital investments include Hancock's Resolution in Lake Shore (\$1.2 million to date).

## **7. Other Regulatory or Management Programs**

### *a. Chesapeake Bay TMDL*

On December 31, 2010 EPA promulgated a Total Maximum Daily Load (TMDL) for the Chesapeake Bay and its tributaries. The TMDL is designed to ensure that all pollution control measures needed to fully restore the Bay watershed are in place by 2025. The TMDL is supported by rigorous accountability measures to ensure cleanup commitments are met, including short and long term benchmarks, a tracking and accountability system for jurisdiction activities, and federal contingency actions that can be employed if necessary to make progress. Watershed Implementation Plans (WIPs) detail how and when the Bay states and local governments will meet pollution allocations.

Maryland submitted its final Phase II WIP to USEPA in October 2012. It includes Anne Arundel County's final Phase II WIP (July 2012).

### *b. Patuxent River Policy Plan*

The County has been actively involved in watershed planning efforts for the Patuxent River. These efforts involve seven counties and many state and federal agencies, guided by the 1997 Patuxent River Policy Plan and overseen by the Patuxent River Commission. The goals of the Commission and Plan are to protect the river's resources through land management and pollution control strategies. The Commission continues to meet monthly.

### *c. Patuxent River Greenway*

The Patuxent River Greenway is partially complete, and will eventually connect land in portions of seven Maryland counties. The greenway will connect a variety of environmentally sensitive areas including: Patuxent River State park, Oxbow Natural Area, and Jug Bay Wetlands Sanctuary, which is part of the National Estuarine Research Reserve system. The Patuxent River Greenway also promotes passive recreational and educational opportunities.

One property has been added to the greenway since the 2013 LPPRP, a six-acre wetland site.

Several additional parcels of land are currently under review, totaling 100 plus acres.

*d. Severn River Commission*

The Severn River Commission is a quasi-governmental organization established in 1985 by Resolutions of the Anne Arundel County Council and the Annapolis City Council. The Commission, comprised of citizens appointed by the local governments, acts as an advisory body to state and local government on environmental matters within the Severn River Watershed. The Commission meets monthly addressing questions relevant to private or administrative considerations and strives to achieve balance between governmental necessities and civic concerns.

*e. Forestry Program*

Anne Arundel County's Forestry Program (housed within the Department of Inspections and Permits) administers the reforestation and afforestation requirements of the Critical Area Program, and the Maryland Forest Conservation Act. A component of this program is the coordination of voluntary reforestation projects with landowners and community associations. The County has a Forest Conservancy District Board that provides technical assistance to landowners who seek guidance in properly managing their woodland.

A timber harvest permit is required for any disturbance over 1,000 square feet inside the Critical Area, or 40,000 square feet outside the Critical Area<sup>4</sup>. Commercial timbering is a small industry in Anne Arundel County, accounting for an average of eight harvest permit applications per year, totaling an average of 20 acres.

Most timber harvesting occurs in the southern portions of the County. The primary harvest type is a "selective harvest" that generally sets a minimum diameter of trees that may be cut. Yellow poplar (*Liriodendron tulipifera*) is the dominant species harvested, along with red and

white oak families (*Quercus* sp.). The value of the harvest is not known.

The County has a program that allows landowners within greenways identified in the Greenways Master Plan to place protective easements on forest land (1 acre minimum), and then sell acreage credits for those easements to developers needing to meet their tree planting requirements under the subdivision and development forest conservation requirements (Article 17, Title 6, Subtitle 3).

*f. Emergent (Marsh) Grass Re-Vegetation Program*

Anne Arundel County provides wetland plants to communities and individuals for shoreline stabilization, beautification, habitat enhancement, and water quality improvement. The Department of Inspections and Permits assists landowners in evaluating the potential for emergent marsh grass establishment on their property. The Department of Recreation and Parks produces plants for distribution at its wetlands nursery located at South River Farm Park.

*g. Deer Management*

Anne Arundel County recognizes that a healthy, stable deer population is a valuable component of a balanced ecosystem. The County's management goals for its lands are to reduce deer-human conflicts, protect natural areas from negative impacts, and improve the overall health of the deer herd.

*h. Invasive Species Management*

Non-native invasive plants (NNI) are the second greatest threat to native species after direct habitat destruction. They degrade the County's unique and diverse biological resources.

The Division of Natural and Cultural Resources is the Departmental lead on invasive species management, in partnership with other County agencies. The division's current focus is on a multi-year effort to eradicate non-native phragmites, a perennial, aggressive wetland grass that outcompetes native plants and displaces native animals. Started 2 years ago, this program seeks to mitigate the damage caused by phragmites in all active County parkland. Currently, herbicidal eradication

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<sup>4</sup> The County considers timbering to be a regulated grading activity. Therefore, the logging permit is a form of a grading permit. The request is reviewed by relevant agencies including the Anne Arundel Soil Conservation District, Office of Planning and Zoning, and the Dept. of Inspections and Permits.

efforts are occurring on 173 acres in 28 park properties.

This LPPRP retains the 2012 plan's recommendation that Anne Arundel County develop a comprehensive management plan to address NNI. Strategies should be identified to prevent the introduction and spread of NNI; to incorporate appropriate mechanical, environmental, and chemical control of the species, and to establish projects to eradicate NNI from ecologically sensitive areas.

Public outreach and involvement are vital to reduce the introduction and spread of NNI from private lands to public lands. Efforts should be made to educate the public, governmental agencies and businesses about impacts of NNI, and solutions to problems caused by these species. The plan should also include appropriate native substitutes for common NNI used in landscaping and habitat restoration projects.

Various County agencies should be involved. The County's Forestry Program within the Code Compliance Division of the Inspections and Permits Department administers reforestation and afforestation requirements and voluntary reforestation projects, and determines which species must be restricted in these efforts. Others include Public Works (roadways and other infrastructure); Central Services (landscape maintenance around County facilities); Recreation and Parks (management of park land); and Board of Education (outreach and educational efforts).

#### *i. Citizen Watershed Organizations*

The Magothy, Severn and South Rivers have active citizen watershed organizations. These Associations actively promote responsible stewardship of their watershed and water resources. Other organizations include the South County Exchange and the Chesapeake Environmental Protection Association (CEPA).

The South, Patuxent, Severn, and Rhode/West Rivers have riverkeepers affiliated with the Waterkeeper Alliance, a national grassroots organization. ([www.waterkeeper.org](http://www.waterkeeper.org))

A bog committee coordinates with the State, County, and Federal programs as well as land trusts and other non-governmental organizations

to maximize efforts and enhance cooperation in protecting the bogs.

#### *j. Climate Resiliency*

DNR recommends addressing climate resiliency by identifying areas vulnerable to inland flooding, minimizing impervious surface areas, and protecting and expanding stream buffers in these vulnerable areas. Planning for the enhanced protection and or restoration of public lands can ensure waterways have capacity to respond to flood events, including infrastructure such as culverts and road crossings.

Anne Arundel County's 2011 *Sea Level Rise Strategic Plan* assesses the County's vulnerability to sea level rise (including coastal flooding and other related hazards), including the area of developed land and extent of public infrastructure that could be affected under various sea level rise scenarios. The plan recommended that the LPPRP include coastal sites identified as high priorities for protection or preservation, as well as the prioritization of acquisition of those sites using POS funds.

To date, no list of priority acquisition parcels has been identified. The LPPRP acquisition targets, described in Chapter III, Section C.1, include some shoreline properties (such as Stoney Creek Park). Existing regulations, such as the Critical Area RCA designations also reduce the amount of development possible in areas potentially subject to inundation.

## **8. Ecotourism and Resource-Based Recreation**

Anne Arundel County offers a number of opportunities for resource-based recreation.

Parks and recreation areas offering resource-based recreation and/or environmental education include Patuxent Research Refuge, Jug Bay Wetlands Sanctuary, Patuxent Wetlands Park, Back Creek Nature Park in Annapolis, as well as the County's staffed regional parks (Quiet Waters, Downs, and Fort Smallwood Park).

Since the 2013 LPPRP, Kinder Farm Park has developed an agricultural history program and working farm to show past and present agricultural practices of Anne Arundel County. Anne Arundel Public Schools runs Arlington Echo Outdoor School in Crownsville.

Anne Arundel County's growing trail system is another important form of resource-based recreation. Several long-distance trails, such as the B&A Trail and the BWI Trail, as well as shorter trails in County and State Parks, offer signage and visitors' centers to help interpret the local resources.

Developed or partially developed historic parks and sites include historic London Town House and Gardens, Hancock's Resolution, as well as many sites in and around the City of Annapolis and Highland Beach. Groundbreaking for the Hancock's Resolution Visitor Center occurred in November 2016. A modern visitor center and pavilion supports weddings, business meetings, family events, as well as school and group tours.

The Star-Spangled Banner National Historic Trail (SSBNHT) was designated by Congress in 2008. Managed by the National Park Service, the Trail commemorates the Chesapeake Campaign of the War of 1812, including the British invasion of Washington, DC and the Battle of Baltimore in summer 1814. The Trail has land and water components that knit together historic resources throughout the Chesapeake Bay region in Maryland, Virginia, and Washington, D.C. In Anne Arundel County, Annapolis and Bodkin Point (near Hancock's Resolution) are official trail sites.

Much of the County's resource based recreation is water-based. As noted in Chapter III, the County offers many opportunities for water-based recreation including boating, paddling, fishing, and water viewing. The Patuxent River Commission has worked with others to create a paddling trail along the Patuxent River (<http://www.patuxentwatertrail.org/>). The water portions of the SSBNHT in Maryland include a trail segment on the Severn River.

The Annapolis, London Town, and South County Heritage Area was certified by the State in 2001. The heritage area incorporated as a nonprofit organization in 2003, and is now referred to as the Four Rivers Heritage Area. (<http://www.fourriversheritage.org/>). Its management entity, the Coordinating Council, consists of 19 representatives of civic, non-profit, business and governmental partners, and actively promotes regional cooperation, heritage

tourism development, and resource preservation in accordance with the state, county and city approved Management Plan adopted in 2000. One of the plan's strategies for enhancing heritage resources is to "Enhance parks, recreational facilities, and other public lands to interpret natural and cultural heritage".

## **9. Use of resource data and inventories**

The County's Office of Information Technology, Geographic Information Services (OIT GIS) is responsible for the dissemination of geographic information. Interactive mapping and geographic information for Anne Arundel County is available from the County's website (<http://www.aacounty.org/county-maps/>). The site allows users to view or print topographic maps, satellite imagery, aerial photography, water and sewer lines, fire hydrants and manholes, as-built engineering record drawings for water, sewer, stormwater and roads, and survey monuments and reports.

CountyView and GeoCortex are the County's enterprise tools for viewing geographic information, commonly referred to as GIS data. CountyView is a multi-departmental mapping and database query desktop application. The primary goal of this application is to make it easy for users to access a variety of information, regardless of where it may reside. It enables County employees to retrieve mapping, image documents, and tabular database information from a single system using either database text queries or spatial queries by selecting features on a map.

GeoCortex is a similar application that provides web-based intranet access to GIS data for County employees with a connection to the County network. GeoCortex is only available through the County Intranet and is not accessible outside the County via the Internet.

The County's planning and development review process uses available State and County data inventories of land cover, natural resource lands, conservation areas, protected lands and other environmental features. The County has developed a comprehensive GIS-based data inventory including, as described in Chapter II, its own land cover database built on 2014 satellite imagery. As described above in this

Chapter, the County's WMT links watershed data, scientific engineering models, and predictive management scenarios in a consistent GIS format.

The County shares data, methods, analyses and results with a variety of agencies, including the Chesapeake Bay Program Office, state agencies (especially the Maryland Department of the Environment (MDE) as it relates to the County's MS-4 NPDES permit requirements and Total Maximum Daily Loads (TMDLs)), as well as other local jurisdictions, community associations, and scientists. Watershed data are also posted on the County's web site at <http://www.aacounty.org/dpw/wprp>.

## **10. City of Annapolis Initiatives**

Priorities for Annapolis include obtaining conservation easements to connect existing environmental areas, creating/maintaining wildlife corridors, and expanding the City's tree canopy. Specifically, the City has committed to the following goals, policies, and actions within its boundaries (see comments from the Mayor of Annapolis in Appendix B).

- The Annapolis Conservancy Board (see Section B.3 above) will pursue opportunities to connect its 21 existing conservation easement properties, including working with the Smithsonian Environmental Research Center (SERC), to protect and enlarge orchid habitat in conjunction with the existing North American Orchid Conservation Center, based at SERC.
- The City will continue to seek to increase its tree canopy from 41 percent (as measured by Maryland DNR in 2006) to the City's Comprehensive Plan goal of 50 percent coverage by 2036.
- The City will consider purchase of forested properties within the City along Forest Drive (specifically, near Bembe Beach Road and Edgewood Road) be considered for purchase to remain as natural habitat, in keeping with open space and tree canopy goals.
- The City will continue to support GreenScape, a city and community partnership facilitating investment in public spaces through including beautification, landscaping to filter groundwater, new canopy, pedestrian amenities, access to recreation areas, and reclamation of old stream beds.
- The City will updating and reinitiating the Floating Islands project (initially proposed in 2008/9) at the Ellen Moyer Nature Park on Back Creek.