



Maryland Land Preservation and Recreation Plan 2014-2018





Dear Citizens:

Our land is the foundation of our economic and social prosperity, rich in productive forests and farms, vital wildlife habitat, opportunities for recreation and tourism, culture and history. As our State grows and changes, it is important to continually evaluate our mission and investments for the benefit of Maryland and its citizens.

As champion of public land conservation and outdoor recreation, DNR is pleased to present the *Land Preservation and Recreation Plan for 2014-2018* — a comprehensive, statewide plan that will guide our efforts to conserve open space and enhance outdoor resources on State lands for the next five years.

Outlining clear goals and measurable action items, the Plan will enhance coordination among local, County and State planners; promote the benefits of outdoor recreation and natural resources; improve access to land and water-based recreation for every Marylander; and connect public trails and lands to the places where people work, live and play.

This Plan was developed in cooperation with State, County and local officials, stakeholders and citizens in accordance with the U.S. Department of Interior, Land and Water Conservation Fund guidelines. By helping direct preservation to priority lands and fostering a greater connection to the outdoors, it supports the benefits of health and recreation, economic vitality and environmental sustainability for all citizens.

Sincerely,

Martin O'Malley
Governor

Joseph P. Gill
Secretary



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Maryland Land Preservation and Recreation Plan 2014-2018

“Connecting People & Places”



Honorable Martin J. O’Malley, Governor
State of Maryland

Joseph P. Gill, Secretary
Maryland Department of Natural Resources

John F. Wilson, Associate Director for Stewardship
Land Acquisition and Planning

Prepared By:
Maryland Department of Natural Resources
580 Taylor Avenue - Annapolis, MD 21401



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Technical Advisory Committee

Kevin Baynes, Maryland Housing and Community Development
Gary Burnett, Maryland Park Service
Jackie Carrera, Parks & People Foundation
Paul Dial, Maryland Association of Counties, Frederick County Recreation and Parks Department
Jonathan Doherty, National Park Service
Tom Donlin, Maryland Recreation and Parks Association
Maureen Dougherty, Frostburg State University
Pat Goucher, Maryland Department of Planning
Charlie Gougeon, Maryland Fisheries Service
Elizabeth Hughes, Maryland Historical Trust
Matt Jagunic, National Park Service
Joe McNeal, Maryland Municipal League, City of Greenbelt
Stephanie Oberle, Brookside Gardens, Maryland National Capital Park and Planning Commission
John Papagni, Maryland Housing and Community Development
Jared Parks, Eastern Shore Land Conservancy
Jack Perdue, Maryland Forest Service
Jim Rapp, Delmarva Low Impact Tourism Experience
Dan Rosen, Maryland Department of Planning
Marc Ross, Maryland Office of Tourism Development
Nita Settina, Maryland Park Service
Susan Simmons, Maryland Association of Counties, Caroline County Recreation and Parks Department
Erica Smith, Maryland Department of Health & Hygiene
Karina Stonesifer, Maryland Wildlife and Heritage Service
Kate Sylvester, Maryland Department of Transportation

Trails Committee

Laura Collard, Maryland Association for Environmental and Outdoor Education (MAEOE)
Dave Ferraro, Mid-Atlantic Off Road Enthusiasts (MORE)
Ronnie Gathers, Maryland Recreation & Parks Association (MRPA)
Steve Green, High Mountain Sports and Garrett Trails
Dan Hudson, International Mountain Bike Association (IMBA)
Richard Hughes, Maryland Heritage Area Authority
Ken Kyler, Mid-Atlantic Four Wheel Drive Association
Ellen Moyer, Former Mayor of Annapolis
Ronald MacNabb, Trail Riders of Today (TROT)
Rico Newman, Maryland Indian Tourism Association
Mike O'Connor, Mountain Club of Maryland
Carol Sildorf, Bike Maryland
John Wetmore, Perils for Pedestrians
Elizabeth Wyble, Friends of Anne Arundel Trails

Department of Natural Resources Staff and Contributing Authors

John F. Wilson, Associate Director of Stewardship, Land Acquisition and Planning
Sandra Trent, Administrator, Stewardship, Land Acquisition and Planning
Steve Carr, Trails Planner, Land Acquisition and Planning
Adam Bossi, Natural Resources Planner, Land Acquisition and Planning
Christine Conn, Director, Integrated Policy & Review
Lisa Gutierrez, Public Access, Water Trails and Recreation Planning Program
Virginia R. Busby, PhD, Maryland Commission on Indian Affairs

Project Consultant Team

Anne Miller, AICP, Project Manager, GreenPlay, LLC
Cindy Heath, CPRP, Project Manager, GreenPlay, LLC
Kristin Caborn, CPRE, Project Consultant, GreenPlay, LLC
Teresa Penbrooke, MAOM, CPRE, Principal-in-Charge, GreenPlay, LLC
Carter Marshall, Landscape Designer, Design Concepts
David Peterson, Landscape Architect, Design Concepts
Mike Simone, Senior Associate, RRC Associates



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EXECUTIVE SUMMARY

A. INTRODUCTION

Maryland’s natural and cultural landscape provides an ideal setting for residents and visitors to participate in a stunning array of world class, four-season outdoor recreation opportunities. These opportunities come as a result of Maryland’s long history of natural resource preservation and conservation efforts, which continue today in an effort to balance the impacts of development and population growth.

The ***Maryland Land Preservation and Recreation Plan*** is a framework for state, county, and local outdoor recreation planning initiatives. This plan has a strong focus on planning and design for access by people of all abilities, and on encouraging enjoyment and stewardship of Maryland’s natural resources, parks, trails, and cultural places. This document presents a clear, concise vision for the next five years. Preserving and enhancing Maryland’s outdoor resources corresponds with broader state and national efforts to balance outdoor recreation land use with natural and cultural resource protection.



Maryland’s new “[Smart, Green, and Growing](#)” initiative, a coordinated statewide effort to conserve the state’s vitally important natural resources and to implement comprehensive sustainability practices, is supported by the efforts of the Maryland Department of Natural Resources (DNR). Investments are needed in long range planning for land acquisition and preservation, including agricultural lands, progressive conservation practices, and balanced development for recreation activities. On the national level, the [America’s Great Outdoors](#) (AGO) initiative promotes connecting people to the outdoors, conserving natural and cultural resources, and developing partnerships.

“When children get outside, they build a healthy lifestyle at a young age and create connections with nature that last a lifetime. We have a responsibility to connect kids to nature so that they grow up to be our next generation of business leaders, scientists, and conservationists.”

Sally Jewell, Secretary of the Interior

An intended outcome of the ***Maryland Land Preservation and Recreation Plan*** is to justify state and federal expenditures for outdoor recreation and land preservation using the following planning criteria:

- Identify major issues and challenges facing the state’s outdoor recreation areas and natural resources
- Assess the existing supply of and demand for outdoor recreation opportunities
- Conduct an inventory of DNR land, trails, and water based resources
- Quantify the relationship between natural resource protection; land conservation; outdoor recreation; and public health and livability, economic vitality, and environmental sustainability
- Establish priorities for land conservation, outdoor recreation, and natural resource protection for the next five years based on outreach efforts, data research, previous plans such as PlanMaryland and related climate action plans



B. PLANNING CONTEXT

The Planning Context outlines the purpose of the plan, the DNR vision, mission, and goals that guided the plan's development, and the planning process and timeline.

Purpose

In December 2012, the Maryland Department of Natural Resources began the process of updating its 2009 *Land Preservation, Parks and Recreation Plans Volumes I and II* to create a coordinated document, the *Maryland Land Preservation and Recreation Plan*.

The purpose of this plan is to establish priorities and actions for the next five years that support a healthy citizenry through equitable and connected access to the outdoors, wise stewardship of Maryland's natural and cultural resources, and recognition of DNR's contributions to Maryland's economic vitality.

In addition, the *Maryland Land Preservation and Recreation Plan* will be submitted to the National Park Service in fulfillment of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) requirement. This enables Maryland to participate in the Land and Water Conservation Fund (LWCF) program, guiding the use of LWCF funding.



Maryland Department of Natural Resources Vision, Mission, and Goals

The following vision, mission, and goals for the *Maryland Land Preservation and Recreation Plan* have guided the development of this plan.

DNR Vision

"In a sustainable Maryland, we recognize that the health of our society and our economy are dependent on the health of our environment. Therefore, we choose to act both collectively and individually to preserve, protect, restore, and enhance our environment for this and future generations."

DNR Mission

"The Department of Natural Resources leads Maryland in securing a sustainable future for our environment, society, and economy by preserving, protecting, restoring, and enhancing the State's natural resources."

DNR 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 a more desirable place to live, work, and visit.
3. Use state investment in parks, recreation, and open space to complement and mutually support the broader goals and objectives of smart growth within Maryland.
4. To the greatest degree feasible, ensure that recreation 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 of lands at a rate that equals or exceeds the rate that land is developed at a statewide level.



C. PLANNING PROCESS & TIMELINE

The development of the *Maryland Land Preservation and Recreation Plan* has been guided by a Technical Advisory Committee (TAC), key state agency staff, county parks and recreation leaders and stakeholders, and an extensive statewide public input process. The TAC and DNR staff met with consultants from the GreenPlay team and provided input throughout the planning process. The planning process and timeline follows:

PHASE I: Information Gathering

January – June 2013

Start-Up

- Refined project goals and work plan

Regional Public Meetings & Stakeholder Input Process

- Conducted two TAC meetings to establish direction
- Facilitated four regional public meetings with 104 attendees
- Held staff interviews and received guidance from staff project team
- Facilitated MD Association of Counties and MD Recreation & Park Association Focus Groups

Inventory and Assessment of Existing Facilities

- Assembled inventory of state and federal public lands with the MD Department of Planning

Statistically Valid & Online Surveys

- Random phone survey conducted with 2,800 households
- 2,475 respondents to open link web-based survey

Demographic and Trends Analysis

- Reviewed statewide demographics and population projections
- Identified outdoor recreation and natural resource-related trends

PHASE II: Findings and Visioning

June – August 2013

Findings and Visioning

- Presented and validated key findings to TAC and DNR staff
- Facilitated visioning session
- Identified plan goals and priorities

PHASE III: Plan Development

September – November 2013

Analyze and Coalesce Data

- Presented draft plan to TAC
- Collected and evaluated TAC and staff feedback

Coordination and Final Draft Preparation

- Coordinated document development
- Finalized GIS mapping outputs

D. KEY FINDINGS

Through statistically-valid telephone and open online surveying, DNR staff interviews, and stakeholder meetings, the ***Maryland Land Preservation and Recreation Plan*** assessed trends in outdoor recreation, participation levels, barriers to participation, perceptions of user fees, benefits of land conservation and outdoor recreation, and user satisfaction and areas for improvement. The following high level key findings were identified:

- Outdoor recreation has a high participation rate across the state (> 80%).
- There is a need to expand trails for all types of users.
- Enhanced connectivity of trails among local, county, and state systems is important.
- Walking is the number one outdoor recreation activity; visiting cultural/historical sites is number two.
- Outdoor recreation is important, but it must be balanced with natural resource preservation.
- Physical limitations (mobility) and time are barriers to participation.
- Conflicts in trail use between different user groups need to be resolved.
- Fees are adequate, and residents are amenable to paying more for expanded opportunities.
- Expanded water access is a priority at the federal, state, county, and local levels.
- Land acquisition and park development efforts should continue to be a priority.
- State, county, and local coordination for planning and development of trails, water recreation, picnicking, and natural areas is a common goal.
- School transportation policies are a limiting factor in youth access to the outdoors.
- DNR staff is perceived to be responsive and customer service oriented by residents.
- There is inconsistent coordination of local, county, and state planning efforts.
- DNR outreach and education efforts are visible, but they need to evolve to have a health, livability, economic impact, and diversity focus.
- Both the ecological and social benefits of land conservation and protection are now acknowledged, ensuring equitable access to public lands by all Maryland residents.
- Heritage Tourism has become an important component of Maryland's economic vitality, demonstrating the nexus of trail use, land and property acquisition, and celebration of cultural and historic landscapes.

E. KEY STRATEGIES

The ***Maryland Land Preservation and Recreation Plan*** utilized broad public engagement methods, quantitative data review, and an analysis of state and national trends to assess current conditions statewide for outdoor recreation and land preservation. This process resulted in four key strategies to focus on during the next five years, illustrated in ***Figure 1*** and explained in further detail below. Detailed recommendations are discussed in ***Chapter 6: Strategies and Actions***.

Figure 1: Key Strategies – 2014-2018 Maryland Land Preservation and Recreation Plan



1. Coordinate Planning Efforts

The *Maryland Land Preservation and Recreation Plan* provides a Geographic Information System (GIS) based assessment of gaps in resident proximity to recreation areas, land and water based natural resources, and trails to sustainably address the growing demand for outdoor recreation. Sharing this information with county and local parks and recreation agencies and planners will help to coordinate long range planning efforts across Maryland and contribute to the mutually shared goals of stewardship of natural resources and provision of adequate outdoor recreation.

The previous LPRP stated an important recommendation which is still relevant and bears repeating. *“Where conservation investment is not supported by local land use management, the State should invest relatively little or no money. Small amounts should be invested to preserve individual properties or small aggregates of properties if that will accomplish specific conservation objectives, even if the properties are ultimately likely to be surrounded by development. Investment of small sums should also be used to encourage local adoption of more supportive land use policies and procedures, in areas where State goals might still be achieved if more effective zoning and related land use tools were established.”*

Actions Summary – Coordinate Planning Efforts

- Work with Counties to collect GIS data on outdoor recreation facilities and amenities, including trail heads, to provide a better understanding of the level of service provided.
- Coordinate with the Maryland Association for Environmental and Outdoor Education (MAEOE), county school districts and parks and recreation agencies to encourage the use of DNR lands as outdoor classrooms, with a focus on collaboratively resolving transportation issues.
- In collaboration with the staff of the Maryland Historical Trust, develop a GIS layer that identifies significant historic and cultural resources found on lands owned and managed by the Department.

“We (county and municipal parks and recreation agencies) need a uniform set of survey questions to use for public input on levels of service for outdoor recreation.”

Participant in Maryland Recreation & Parks Association and Maryland Association of County Officials Stakeholder Meeting

2. Promote Economic, Health, and Environmental Benefits of Outdoor Recreation and Natural Resource Protection

Economic Benefits

In Maryland, the outdoor economy generates \$9.5 billion in consumer spending, 85,000 jobs, and \$686 million in state and local tax revenue, according to the Outdoor Industry Association.

A recent report on the economic impact of Maryland State Parks tells a similar story. With nearly 10 million day users and one million overnight visitors to the state’s 66 parks, the total economic impact is more than \$650 million annually, according to a 2010 report, “Maryland State Parks Economic Impact & Visitor Study.”

Maintaining the delicate balance between meeting public demand for outdoor recreation opportunities, environmental sustainability practices, and economic growth goals is particularly important. According to *PlanMaryland*, the state’s Development Plan, population is expected to grow by one million additional residents by the year 2035. At this growth rate, *PlanMaryland* forecasts a loss of 226,000 acres of farmland and 176,000 acres of forested land, calculated at a value of more than \$312 million. The loss of this valuable resource economy based on agricultural and forest lands needs to be addressed.



Health Benefits

Overweight and obesity rates among children and adults continue to receive attention nationally and in Maryland, notably for the increased risk of developing chronic diseases, such as heart disease, diabetes, stroke, high blood pressure, and cancer. There is extensive research on the benefits of outdoor recreation participation and natural resource protection on individual as well as environmental health and livability. Spending time outdoors contributes to enhanced physical, social, and mental well-being.



Environmental Benefits

DNR participates in the review of Sustainable Community applications in conjunction with the Maryland Department of Transportation (MDOT), the Maryland Department of Planning (MDP), the Maryland Department of Economic Development, and the Maryland Department of the Environment. The planning process creates opportunities to consider plans for development, as well as connections to and preservation of nearby open space/agricultural land. The interagency planning process defines geographic areas eligible for state revitalization resources. Designated Sustainable Communities are urban, suburban, or rural communities that in many cases are adjacent to, or are in close proximity to, state parks and other public lands.

Actions Summary – Promote Economic, Health, and Environmental Benefits of Outdoor Recreation and Natural Resource Protection

- Utilize the Maryland Partnership for Children in Nature as a catalyst for conversations with local school districts and parks and recreation agencies to address barriers to schools using parks as informal environmental education sites, including transportation and fees.
- Conduct an economic impact study of trails and greenways.
- Add Quick Response Codes (QR Codes) and trail maps at trailheads and visitor centers to educate visitors about poison ivy, deer ticks, boating safety, related outdoor skills, and trail information.

visitors about poison ivy, deer ticks, boating safety, related outdoor skills, and trail information.

- Assist friends groups in developing partnerships with businesses to identify trails as an important economic generator (Trail Passport contest), and promoting active lifestyles, healthy eating, and community vitality.
- Showcase Maryland’s Native American cultural heritage using trails and interpretive signage to tell Native American stories, develop Indian Heritage Tourism, and highlight significant Native American sites.

3. Access to Water and Land Based Recreation for All Populations

The *2013 Chesapeake Bay Watershed Access Plan*, prepared by the National Park Service, highlights the indispensable value of access to water for boating, swimming, fishing, and wildlife viewing. It also highlights the environmental value of water based recreation in multiple plans at the state, county, and local levels. The high public demand for access to water based recreation, and Maryland’s growing urban population have the potential to threaten the available water resources for future generations.



Maryland has over 500 public water access sites, more than any other jurisdiction in the Chesapeake Bay Watershed. The *Access Plan* promotes the creation of new access throughout the Bay watershed with the goal of establishing 300 new sites by 2025. Using GIS mapping, the ***Maryland Land Preservation and Recreation Plan*** shows proximity to water access throughout the state, and prioritizes recommendations for expansion.

In addition, equitable access to land-based recreation for youth, diverse cultural populations, and individuals with physical and mental disabilities has been identified as a priority.

The DNR actively promotes recreational opportunities for wounded warriors, veterans, and their families through its [Wounded Warrior and Veteran Outreach Program](#).

Actions Summary – Access to Water and Land Based Recreation for All Populations

- Examine Wildlife Management Areas for opportunities to provide wildlife-dependent recreational development such as low-amenity camping, fishing/canoeing access, birding, walking, biking and equestrian trails, which are compatible with primary wildlife management purposes.
- Consider opportunities for water recreation access at Patuxent River State Park, Franklin Point State Park, Severn Run Natural Environmental Area, Patapsco Valley State Park, and Frederick and Carroll counties with Chesapeake Bay Watershed Public Access Report priorities.

4. Connect DNR Trails and Public Lands to the Places People Live, Work, and Play

The State of Maryland has a strong commitment to the health and well-being of its citizens and visitors. Partnerships and collaborations among state and local non-profit organizations, businesses, academic institutions, planning community, and public health practitioners have the greatest opportunity for providing a high quality outdoor recreation and natural resource protection to residents and visitors.

A new collaboration between the Maryland Department of Natural Resources and the Maryland Department of Transportation is evolving to assess gaps in trail connectivity between where people live, work, and go to school, and where they want to play. The value of trails, greenways, and multi-use pathways in promoting health, livability, and environmental sustainability cannot be overstated.



Through the public outreach process, a connected trail network as well as a desire for more trails was identified as a high priority by Marylanders. Using U.S. Census and survey data, the **Maryland Land Preservation and Recreation Plan** examined the proximity to trails and DNR lands within a five-mile catchment area. Using this information and advancing collaboration with county parks and recreation agencies for data sharing and coordinated planning will serve to create a connected trail system and greater access to water recreation and natural areas.

In a study of three urban communities, perceived miles between home and trail access, neighborhood connectivity, and trail safety were indicators of increased trail use¹.

Public education and connecting with users to promote outdoor recreation and natural resources are also important. Increasingly, public lands are in close proximity to existing communities – in some cases dense, urban communities. The value of these lands to the public and the importance of creating safe, accessible opportunities for participation cannot be overstated.

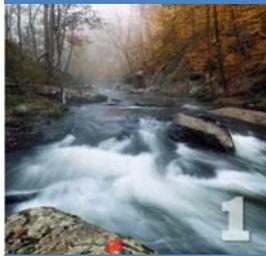
Actions Summary – Connect People and Places

- Create connections between trails within Maryland state parks and forests as well as between state, city, county and federal trail systems.
- With few exceptions, trails should be designed for multi-use and managed for cooperation among user groups to reduce conflicts.
- In cooperation with the ongoing program development of the Maryland Conservation Corps, Civic Justice Corps, and Maryland Department of Education, develop working relationships with school systems to engage high schools in trail construction and maintenance projects on DNR lands as a means for students to fulfill community service requirements.

¹ Wolch, J.R., Tatalovich, Z., Spruijt-Metz, D., Byrne, J., Jerrett, M., Chou, C.-P., et al. (2010). Proximity and Perceived Safety as Determinants of Urban Trail use: Findings from a Three-City Study. *Environment & Planning A*, 42(1), 57-79.

F. LAND PRESERVATION AND RECREATION PLAN CHAPTER SUMMARY

The *Maryland Land Preservation and Recreation Plan* has six chapters, summarized as follows:



1: Introduction

Provides an overview of the vision for land preservation and recreation in Maryland and the relevance of natural resources and outdoor recreation to health, the economy, and environmental sustainability. Planning methodology, public engagement process, and a summary of the plan references and accomplishments are reviewed.



2: Maryland's Outdoor Recreation Demand

Presents the planning methodology, online, phone survey, and stakeholder meeting results demonstrating the demand for outdoor recreation activities, participation preferences by activity and location, and barriers to participation. A demographics snapshot of Maryland's migration, population, and diversity patterns and a look at state and national trends pertaining to outdoor recreation, health, and multi-cultural issues are discussed.



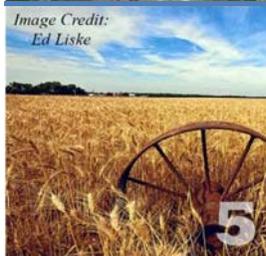
3: Maryland's Outdoor Recreation Supply

Analyzes the current inventory of DNR public lands and level of service for selected outdoor recreation activities and public access to water recreation. Provides an overview of DNR's major outdoor recreation initiatives. High level GIS maps of Maryland's regions and proximity maps for water access, picnicking, trails, hunting, and fishing show gaps in levels of service.



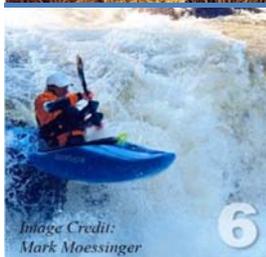
4: Connecting People and Places – A Vision for a Connected Trail System

Evaluates opportunities to expand connections between Maryland's parks, forests, and wildlife management area. Focuses on connecting people to the places they live, work, and play with a network of paved and natural surface trails. Examines best practices for different types of trails.



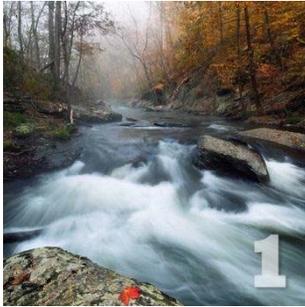
5: Land Protection and Conservation – Sustaining Maryland's Legacy

Documents Maryland's rich history in land protection and conservation and discusses how the State's four key land conservation programs work to protect "GreenPrint" and other priority lands. Land protection and conservation efforts in Maryland are closely aligned with the state's effort to maintain ecological balance in relation to development pressures, formally known as "GreenPrint."



6: A Future Direction for Land Conservation & Outdoor Recreation in Maryland

Summarizes the input of the Technical Advisory Committee and DNR staff, public engagement, and data analysis process. Describes four major strategies and related recommendations intended to foster greater connection to the outdoors by Marylanders to achieve the benefits of health and livability, economic vitality, and environmental sustainability.



CHAPTER 1: INTRODUCTION

A. Vision for Land Preservation and Outdoor Recreation in Maryland

Since its creation in 1969, the Maryland DNR has celebrated a nationally recognized legacy of comprehensive land acquisition and preservation and a diverse offering of recreational opportunities. With a vast array of some of the nation’s most important cultural and historic resources, 4,000 miles of scenic coastal resources including America’s largest estuary, and more than 475,839² acres of designated wildlands and wildlife management areas, forests, parks, and protected lands and open space, Maryland residents and visitors have many choices for outdoor recreation experiences. From nature study, wildlife observation, hiking, swimming, and camping, to boating, hunting, fishing, off-highway vehicle recreation, interpretive history, and mountain bicycling, the opportunities for outdoor recreation in Maryland are many and varied.

With the development of the ***Maryland Land Preservation and Recreation Plan***, the DNR continues its commitment to the stewardship of Maryland’s forests, wildlife preserves, historic and cultural assets, state parks, and trail systems for the recreational use and enjoyment of Maryland’s residents and visitors. A unique opportunity exists for national, state, and local alignment of outdoor recreation and both natural and cultural resource conservation goals. Through a broad public participation process and utilizing progressive planning methodologies, the needs and interests of a diverse group of citizens and professionals have been considered in creating an implementable vision for the future of Maryland’s natural and cultural resources.

B. Alignment with National Outdoor Recreation Priorities

A unique opportunity exists for alignment among national, state, and local outdoor, recreation, conservation, and natural resource goals. From a national perspective, President Obama’s 2010 America’s Great Outdoors Initiative has identified the following relevant recommendations:

1. Connecting Americans to the Great Outdoors

- Provide quality jobs, career pathways, and service opportunities*
- Enhance recreational access and opportunities*
- Raise awareness of the value and benefits of America’s Great Outdoors*
- Engage young people in conservation and the great outdoors*

“Our natural areas and waterways, whether publicly or privately owned, are reconnected, healthy, and resilient and support both human needs and the wildlife that depend on them.”

*America’s Great Outdoors
Vision Statement*

² DNR Owned Lands Acreage Report, October 2013.

2. Conserving and Restoring America's Great Outdoors

- Strengthen the Land and Water Conservation Fund
- Establish great urban parks and community green spaces*
- Conserve rural working farms, ranches, and forests through partnerships and incentives*
- Conserve our national parks, wildlife refuges, forests, and other federal lands and waters
- Protect and renew rivers and other waters*

3. Working Together for America's Great Outdoors

- Make the Federal Government a More Effective Conservation Partner*

*Supporting goals included in Maryland Land Preservation and Recreation Plan

C. Collaborative Outdoor Recreation and Cultural History Projects

The proposed [Harriet Tubman Underground Railroad National Historic Park](#) is an example of a collaborative partnership project under the America's Great Outdoors Initiative³. Additional Federal and State partnerships projects are identified in **Chapter 5: Land Protection and Conservation**.

The America's Great Outdoors Initiative notes *"The proposed Harriet Tubman Underground Railroad National Historical Park will trace Tubman's early life on the Eastern Shore of Maryland, where she was born, escaped from slavery, and then returned as one of the leaders of the Underground Railroad to lead others to freedom. The Maryland Department of Natural Resources seeks to acquire four top-priority historical properties totaling 1,245 acres for the National Historical Park in Dorchester County. The state has gathered all funding needed to construct the Harriet Tubman Underground Railroad Visitor Center, which will be jointly managed by the National Park Service and the Maryland Park Service, should the park be designated by Congress."*



Image Credit: Library of Congress



Native people have called Maryland home for millennia, dwelling within the different regions through a changing climate. The [Maryland Commission on Indian Affairs](#)⁴ has initiated a campaign to identify and preserve endangered landscapes across the state. Broad-based partnering with preservation and conservation organizations and with non-traditional supporters of environmental stewardship are part of the campaign. The National Park Service is sponsoring research and a pilot mapping project to identify these culturally important landscape areas.

³ America's Great Outdoors, 2011 Progress Report. October 2011.

⁴ <http://www.americanindian.maryland.gov/index.html>



D. Purpose of the Land Preservation and Recreation Plan

The ***Maryland Land Preservation and Recreation Plan*** is intended to complement the DNR's existing process for individual land unit planning by providing a system-wide framework for land preservation and complimentary recreational use and development of DNR owned parks, forests, wildlife management areas, cultural resources, and trails. This plan identifies priorities and actions for the next five years that encourages a healthy citizenry through equitable and connected access to the outdoors, instills stewardship of natural and cultural resources, and contributes to Maryland's economic vitality.

When planning for expenditures of Maryland's Program Open Space and Federal Land and Water Conservation Funds, it is important to note that the State's focus is on land acquisition, open space protection, land preservation, and natural resource protection, while local plans address active and passive recreation development needs when acquiring land.

This document incorporates contemporary planning resources to secure a future in which Maryland residents and visitors can live healthier lifestyles; wildlife, water, and natural resources are conserved; and the economic vitality of communities is sustained. A key strategy to achieving this vision moving forward is coordinated planning with local parks and recreation agencies in obtaining a true understanding of level of service deficiencies in four realms: natural areas, picnic areas, trails, and water access.

Under the terms of the Land and Water Conservation Fund Act (LWCF) of 1965, which established the LWCF State Assistance Program, each state is required to develop a Statewide Comprehensive Outdoor Recreation Plan (SCORP) at least every five years. The SCORP is filed with the National Park Service (NPS), and enables Maryland to participate in the LWCF program, guiding the use of LWCF funding. The ***Maryland Land Preservation and Recreation Plan*** will be submitted to the National Park Service in fulfillment of the SCORP requirement.

This plan also serves to justify state and federal expenditures for outdoor recreation using the following planning criteria:

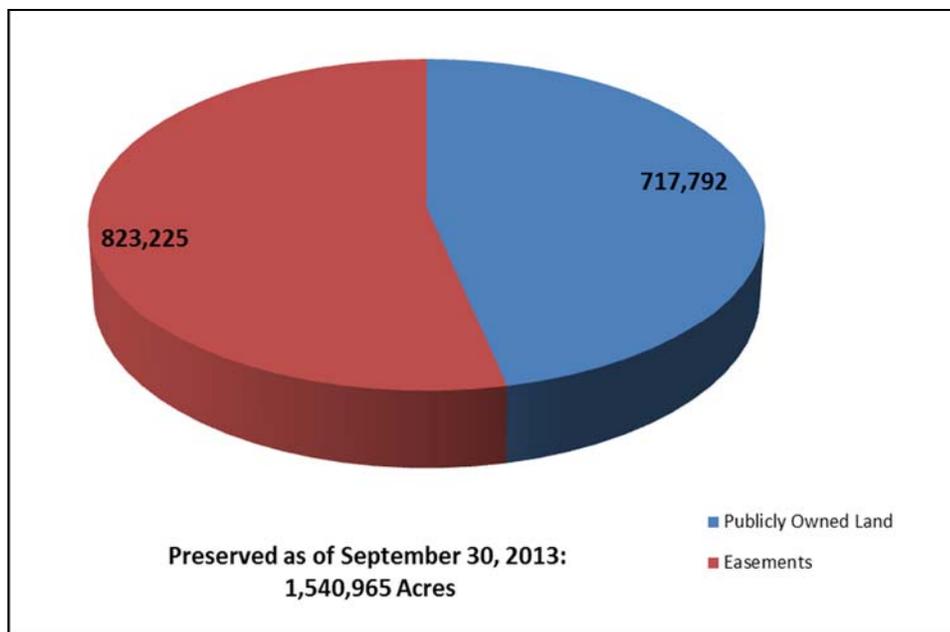
- Identify major issues and challenges facing the state's outdoor recreation and land protection through public input, DNR staff perspectives, and GIS data analysis
- Promote the relationship between outdoor recreation participation and natural and cultural resource protection

- Maintaining the delicate balance between providing for the demand for outdoor recreation, environmental, and cultural conservation, and stimulating economic growth
- Update the inventory of DNR land and water based properties and assess the existing supply and demand for outdoor recreation opportunities
- Evaluate outdoor recreation trends, deficiencies, under-served areas, and desired improvements
- Establish priorities based on outreach efforts, data research, and previous plans
- Measuring success using publicly issued annual benchmark reports

E. Value of Outdoor Recreation and Natural Resource Protection

Maryland DNR has the distinction of serving as steward of the largest land holdings in Maryland. According to the *2013 DNR Owned Lands Acreage Report*, the DNR manages more than 475,839 acres. Considering all land under easement and public ownership, the total amount of preserved land in Maryland is over 1.5 million acres. The distribution of these DNR lands includes 25 percent that is designated as state parks, 50 percent dedicated to forests, and 25 percent comprising wildlife management areas. **Figure 2** illustrates the total amount of land protected in the State of Maryland.

Figure 2: Total Land Protected Acreage by Easement and Public Ownership



Source: Maryland Department of Planning

Outdoor recreation in Maryland is a vital contributor to local, regional, and state economies, as well as natural and cultural resource conservation efforts. Access to the outdoors contributes to individual, physical, and mental well-being and creates future land stewards. The DNR has been a national leader in land conservation for more than 40 years. This legacy, along with effective partnerships with friends and user groups, advocacy organizations, intergovernmental agencies, and other stakeholders, ensures the continued success of its land preservation and recreation initiatives.

Measuring the Economic Value of a Park System

Measuring the benefits of outdoor recreation using survey tools, metrics, and data collection is an important component of understanding the impacts on employment opportunities, land values, revenue generation, mental and physical health, environmental stewardship, and community sustainability.

“It is very calming for people to go to a...park to see the deer, sit on the beach, go on nature hikes, and use their facilities. And the rangers are very nice too.”

2013 LPRP Random Phone Survey Respondent

According to a study published in 2009 by Trust for Public Land and Center for City Park Excellence, seven attributes of park systems that provide economic value (property value, tourism, direct use, health, community cohesion, clean water, and clean air) can be quantified and measured by calculating:

- **Direct revenues** to local and state government realized from property taxes related to property value increases because of proximity to parks, and increased spending by tourists
- **Direct savings** in medical costs resulting from exercising in parks, community members coming together to improve neighborhood parks, the public safety, and social benefits of a park system

DNR Activities – Revenue Highlights

In a 2010 report entitled, “Maryland State Parks Economic Impact & Visitor Study,” the significant contribution of the state park system to Maryland’s economy was quantified. Visitors directly spend more than \$567 million, generating a total economic impact of more than \$650 million annually. State park visitor spending supported 10,000 full-time jobs and generated over \$39 million in state and local retail, gasoline, hotel, and income taxes. **Table 1** quantifies the revenue history from 2009–2013, and demonstrates the value of recreation activities to the state. Fluctuation in ORV permits is due to a DNR decision to restrict access of motorized vehicles on environmentally sensitive lands. Collaboration with ORV user groups is ongoing to explore the development of a more sustainable ORV trail system.

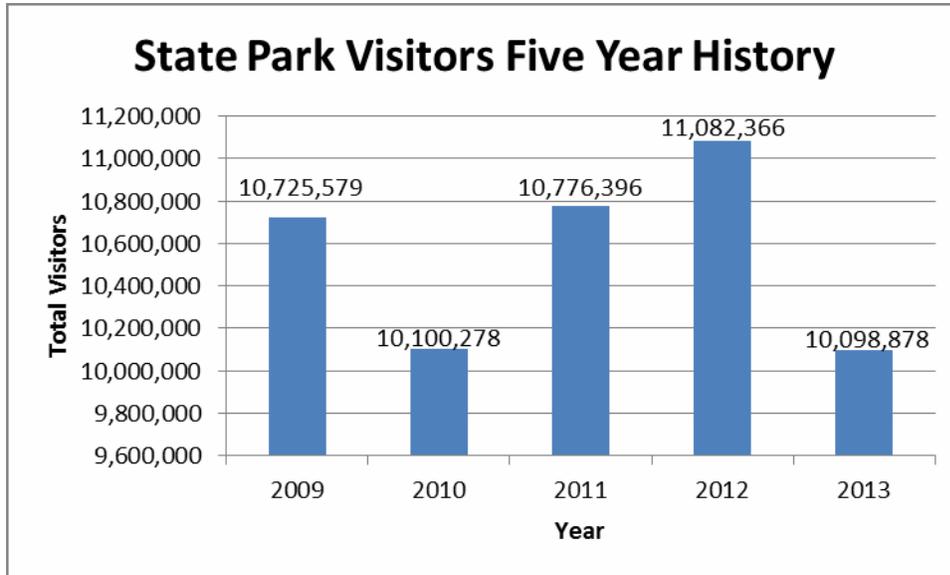
Table 1: DNR Revenue History

	2009	2010	2011	2012	2013
State Parks Special Funds	\$13,271,976	\$13,627,597	\$13,423,562	\$14,391,392	\$14,848,000 (projected)
Vessel Excise Tax (Boats)	\$16,751,911	\$14,985,064	\$14,929,393	\$13,496,397	\$15,247,099
Sport Fishing Licenses	\$8,059,707	\$7,758,973	\$8,126,260	\$9,221,491	\$8,429,254*
ORV Permits	\$76,413	\$63,405	\$39,295	\$7,740	\$7,100
Hunting Licenses	\$6,638,333	\$6,657,499	\$6,767,904	\$6,679,707	Data not available

Source: Maryland Department of Natural Resources. *Fishing revenues for 2013 as of October 8, 2013.

According to the 2013 *Maryland State Parks Strategic Plan*, state parks visitor history shows a consistent total visitation of over 10,000,000 annually, with day use visitors making up the largest visitor segment. Between 2006 and 2012, there was a 72 percent increase in visitation at State parks with natural water bodies for swimming, fishing and wading, which aligns with the need for increase access to water identified in this plan’s public surveys, stakeholder and public group discussions, and previous state and federal planning documents. **Figure 3** illustrates state park visitor history, which indicates a steady trend toward increases in visitation (2013 figures incomplete).

Figure 3: State Park Visitors Five Year History



Source: *Maryland State Parks 2013 Strategic Plan*. Note: 2013 figures represent a partial year.

Resource Allocation for Recreation and Parks

Future costs for land acquisition, facility development, and facility rehabilitation included for reference in **Table 2** were reported by county governments in their 2012-2017 local Land Preservation, Parks and Recreation Plans.

Table 2: Needs- Based Priorities for Recreation and Parks by Jurisdiction

Local Jurisdiction	Estimated Total Cost (1,000's)	Acres to be Acquired	Estimated Short-Range (2012-16) Cost			Estimated Mid-Range (2017-21) Cost			Estimated Long-Range (2022+) Cost		
			Acquisition (1,000's)	Capital Development (1,000's)	Rehabilitation (1,000's)	Acquisition (1,000's)	Capital Development (1,000's)	Rehabilitation (1,000's)	Acquisition (1,000's)	Capital Development (1,000's)	Rehabilitation (1,000's)
Allegany	\$1,181	3	\$231	\$950	-	-	-	-	-	-	-
Anne Arundel	\$195,460	1,130.0	\$19,604	\$33,791	\$14,800	\$7,500	\$41,450	\$13,500	\$7,500	\$43,815	\$13,500
Baltimore City	\$243,150	15.0	\$500	\$36,500	\$53,350	\$500	\$27,500	\$53,150	\$500	\$18,000	\$53,150
Baltimore County	\$250,995	2,375.0	\$17,190	\$15,930	\$12,850	\$19,565	\$43,580	\$30,850	\$49,680	\$32,450	\$28,900
Calvert	\$40,956	748.7		\$2,080	\$189	\$312	\$2,740		\$13,735	\$21,900	
Caroline	\$14,332	144.0	\$689	\$705	\$350	\$370	\$2,285	\$630	\$250	\$8,023	\$1,030
Carroll	\$12,271	59.5		\$4,362	\$1,009	\$1,124	\$1,386		\$2,110	\$2,190	\$90
Cecil	\$23,503	1,500.0	\$950	\$7,220	\$170	\$6,563	\$7,000		\$600	\$1,000	
Charles	\$58,470	453.0	\$4,330	\$5,960	\$1,500	\$3,330	\$19,920	\$3,000	\$1,080	\$14,950	\$4,400
Dorchester	\$4,888	75.5		\$475	\$152		\$1,413	\$1,357		\$1,032	\$460
Frederick ¹	\$28,924		\$1,678	\$24,093	\$3,154						
Garrett	\$2,413	175.0	\$100	\$1,068	\$85	\$141	\$460	\$15	\$50	\$495	\$0
Harford	\$250,864	1,129.0	\$10,175	\$67,335	\$11,011	\$5,985	\$103,200	\$10,475	\$11,635	\$18,285	\$12,763
Howard	\$229,519	955.0	\$4,000	\$107,853		\$12,600	\$54,733		\$5,000	\$45,333	
Kent	\$1,250			\$270	\$125		\$675	\$100			\$80
Montgomery	\$153,500	6,346.0	\$21,800			\$47,000			\$84,700		
Prince George's	\$272,834				\$72,836			\$66,664			\$133,334
Queen Anne's	\$28,408	20.0		\$3,455	\$825		\$4,480	\$1,225	\$750	\$15,471	\$200
St. Mary's	\$34,102	308.0	\$500	\$4,500	\$1,655	\$5,000	\$7,097	\$1,100	\$1,500	\$11,500	\$1,250
Somerset	\$10,491	7.5	\$150	\$6,536	\$1,025	\$100	\$680		\$1,000	\$1,000	
Talbot ²	\$200			\$75			\$125				
Washington ³	\$0										
Wicomico	\$140	3.0	\$25	\$40			\$35	\$40			
Worcester	\$11,459	-	\$1,500	\$650		\$4,500	\$3,859	\$650			\$300
	\$1,867,307	15,446.8	\$83,422	\$323,847	\$175,085	\$114,590	\$322,617	\$182,756	\$180,090	\$235,444	\$249,456

Total Funds Estimated for Recreation and Open Space by Local Jurisdictions (1000's)	
Acquisition	\$378,102
Capital Development	\$881,908
Rehabilitation	\$607,297

¹ Total Costs for Frederick were listed in table of short-range costs.

² Talbot did not provide a table but listed just two park development projects in the plan's text.

³ Washington County data has not been received.

The Outdoor Recreation Economy

The Outdoor Industry Association's 2012 Report, "The Outdoor Recreation Economy," has calculated the economic impact of outdoor recreation⁵, studying the purchase of gear and vehicles and dollars spent on trips and travel. Gear purchases include anything for outdoor recreation, such as outdoor apparel and footwear, bicycles, skis, fishing waders, tents, rifles, or backpacks. Vehicle purchases include vehicles and accessories used only for outdoor recreation, such as boats, motorcycles, RVs, snowmobiles, and all-terrain vehicles. The Outdoor Industry Association reports that in Maryland, the outdoor recreation economy generates:

- \$9.5 billion in consumer spending
- \$686 million in local tax revenue
- 85,000 jobs
- \$2.8 billion in wages and salaries

The value of resource-based businesses that depend on the land base is important to include in valuing the outdoor recreation economy. For example, the 2007 Census of Agriculture reports that the value of farm products sold in Maryland is over \$1.8 billion.

According to the U.S. Fish & Wildlife Service's 2011 *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*⁶, significant expenditures are made by Maryland residents and non-residents who hunt, fish, and participate in wildlife viewing as shown in **Table 3** below.

Table 3: Fishing, Hunting, and Wildlife Viewing Expenditures in Maryland

	Fishing	Hunting	Wildlife Viewing
Total Annual Expenditures	\$535,232,000	\$264,119,000	\$483,421,000
Average Expenditure Per User	\$1,212	\$2,815	\$265

Source: U.S. Fish & Wildlife Service 2011 Survey of Fishing, Hunting, and Wildlife Associated Recreation

DNR's Commitment to Innovative Funding Mechanisms

The DNR programs listed below as well as other long established land preservation efforts, explained further in **Chapter 5: Land Protection and Conservation**, have all brought national recognition to Maryland and are used by other states as a model for land conservation. The State of Maryland continues to demonstrate its commitment to land and energy conservation with its statewide "Smart, Green, and Growing" campaign. The program outcomes include energy cost savings, green building practices, acquisition of new wetlands and forest habitats, sustainable landscape practices, and the planting of more than 100,000 trees across the state.

- **Program Open Space (POS)** acquires recreation and open space areas for public use. The Program administers funds for open space and recreation through the State real estate transfer tax and from federal programs, such as the Land and Water Conservation Fund of the National Park Service, U.S. Department of the Interior. POS funds are split between state and local government.

⁵ "The Outdoor Recreation Economy", Outdoor Industry Association, 2012.

⁶ U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

- **Stateside POS Funds** are allocated to purchase land for state parks, forests, wildlife habitats, natural, scenic, and cultural resources for public use. A portion of stateside funds are also dedicated to capital improvements, critical maintenance, and operations in state parks. Stateside POS projects are now being driven by a new Targeting System, which uses the best scientific information available to target spending of the program’s limited funds.
- **Localside POS Funds** are available to local government for land acquisition and park facilities that meet specific goals of land conservation and recreation. To date, over 5,000 local grant projects have either acquired land or built facilities for Maryland’s conservation and recreation needs.
- **Maryland's Rural Legacy Program (RLP)** was created within the DNR to preserve large blocks of working rural lands for future generations. The program protects natural, cultural, agricultural, forest, and environmental resources from urban sprawl development and promotes land conservation by granting funds to local governments and land trusts to conserve land through easement and fee purchases within designated rural legacy areas.
- **Maryland Environmental Trust (MET)** was formed in 1967 to conserve, improve, stimulate, and perpetuate the aesthetic, natural, scenic, and cultural aspects of the Maryland environment. The Trust also promotes conservation of open space, and appreciation of the environment and its care. Four main programs come under the Trust: Conservation Easements, Keep Maryland Beautiful, Local Land Trust Assistance, and Rural Historic Village Protection.

“Rural lands—our working farms, ranches, and forests— are conserved and restored through incentives and local partnerships.”
*America’s Great Outdoors
 Vision Statement*

In a 2013 random telephone survey of Maryland residents, the vast majority of respondents (over 90 percent) rate the following benefits of land conservation and outdoor recreation as having the most importance: “promoting healthy, active lifestyles,” “protecting the environment,” and “improving quality of life.”

The attribute of “providing an economic benefit to the State” is viewed as being the least important of the benefits; however, it was still rated as important by 71 percent of the respondents.

F. Outdoor Recreation Impacts on Health and Livability

There are continuous reminders of the high costs associated with obesity and related lifestyle diseases including hypertension, kidney disease, heart disease, and liver disease – all on the rise for children, some as young as age 12. The Centers for Disease Control (CDC) reports that the percentage of obese youth has tripled from 1980 to 2011.

“All children, regardless of where they live, have access to clean, safe outdoor places within a short walk of their homes or schools, where they can play, dream, discover, and recreate.”

America’s Great Outdoors

Nationwide, local, county, state, and federal governments are working to reduce childhood obesity and encourage children and families to be more physically active through initiatives like [Safe Routes to School](#), [Safe Routes to Play](#), [Complete Streets](#), [Green Streets](#), and other active transportation and recreation planning and infrastructure programs. Maryland State Highway Administration finalized the state’s [Complete Streets Policy](#) in 2011.

DNR collaborations with the Maryland’s Partnership for [Children in Nature](#) and the [Maryland Association of Environmental and Outdoor Educators](#) are helping to reverse this trend by encouraging children to become responsible land stewards. Further explanation of environmental literacy and youth environmental education initiatives are included in **Chapter 5: Land Protection and Conservation**.

Continued land acquisition and preservation are vitally important. If children and families are going to be encouraged to adjust their lifestyles, they need accessible, clean, and safe places to connect with the outdoors. **Chapter 5: Land Protection and Conservation**, explores this concept further.

G. Existing Plan Review

The vision, mission, goals, and objectives for the DNR directly support Maryland’s “*Smart, Green and Growing*” initiative, which exists to “...provide a place for citizens, businesses, organizations, and governments to come together to strengthen our economy, protect our environment, and improve our quality of life – all components of a more sustainable future.”

DNR-Wide Objectives

The following objectives are promoted on the Department’s website along with the vision and mission, and support the complementary conservation policies and programs of other state agencies:

- Healthy Terrestrial and Aquatic Ecosystems
- Efficient use of Energy and Resources
- Citizen Stewardship, Outdoor Recreation, and Opportunities to Take Action
- Vibrant Communities and Neighborhoods
- Long-Term Economic Prosperity
- Professional Commitment

Some Relevant Plans Supporting the DNR Vision, Mission, and Objectives

The DNR objectives for stewardship, preservation, and sustainability of public lands are appropriately echoed in numerous other state plans and vice versa:

- Chesapeake Bay Watershed Public Access Plan, 2013
- Maryland Department of Natural Resources Park Equity Analysis Tool, 2013
- Maryland Park Service Five Year Strategic Plan, 2013
- Maryland DOT Bicycle & Pedestrian Plan Update Survey and Poll, 2013
- America's Great Outdoors Progress Report, 2012
- DNR Owned Lands Acreage Report, 2012
- Trail Town User Survey and Business Survey Reports, 2012
- PlanMaryland, 2011
- Maryland Trails Summit Regional Reports, 2010
- Maryland State Parks Economic Impact & Visitor Study, 2010
- Maryland Trails: A Greener Way to Go, 2010
- Maryland Heritage Areas Authority Strategic Plan, 2010-2020
- Maryland Department of Transportation Trails Strategic Implementation Plan, 2009
- Maryland Partnership for Children in Nature, 2009
- Maryland Land Preservation, Parks & Recreation Plan, Volumes I & II, 2009
- Maryland's Wildlife Diversity Conservation Plan, 2006
- Maryland DOT Twenty Year Bicycle & Pedestrian Access Master Plan, 2002

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CHAPTER 2: MARYLAND'S OUTDOOR RECREATION DEMAND

A. Planning Methodology

A project team comprised of staff from the Land Acquisition and Planning Division of the DNR, a multi-agency Technical Advisory Committee, and a statewide Trails Committee guided the development of the Maryland **Land Preservation and Recreation Plan**. This collaborative effort has created a five year plan with goals and recommendations that incorporates local knowledge and institutional history. The following methodologies were used.

Public Engagement and Needs Assessment

Citizen stakeholder meetings were held in each of the four DNR regions – Eastern (16 participants), Central (34 participants), Southern (20 participants), and Western (54 participants). Four meetings with the Technical Advisory Committee were held over the course of the planning process, as well as two focus group meetings with members of the Maryland Association of Counties and Maryland Recreation and Park Association. DNR staff project meetings and key staff interviews were held as needed.



A statistically-valid phone survey was conducted with 2,800 households, as well as an online open link survey for members of the public who did not receive a randomly selected telephone survey, which had 2,475 respondents. Written and online comments were accepted from individuals who could not attend the stakeholder meetings.

Demographics/Trends/Previous Planning Efforts

A demographic summary was prepared using data from the Maryland Department of Planning. A trends analysis explored state and national trends in outdoor recreation participation, multi-cultural recreation, and healthy lifestyles. Existing state plans were reviewed to determine commonalities and provide guidance.

DNR Land and Water Based Inventory and Level of Service Analysis

An inventory update of Maryland's outdoor recreation assets was conducted using GIS data from the Maryland Department of Planning. All publicly accessible DNR lands and waters were included, as well as all National Park Service (NPS) lands in the state. Other providers such as counties, municipalities, and alternative providers were not included for the purposes of this plan, because the data was not available for every County.

Only resource-based recreation sites were included in the inventory. User-based recreation facilities that focus less on natural settings, such as sports complexes or swimming pools, were excluded, as such amenities are not within the purview of the DNR. Along with locating each site within the state, data was gathered on all recreation amenities at each location such as facilities (shelter, boat ramp, etc.), permitted activities (hunting, swimming, etc.), and resources (natural area, beach, etc.).

In addition to several resource maps, a total of seven levels of service analysis maps were produced. Analyses focused on proximity to all DNR assets across the state of Maryland, and considered population density. Specially developed GIS tools were utilized as part of a Geo-Referenced Amenities Standards Process (GRASP®) methodology.

Findings and Visioning Workshops

Findings were presented to DNR staff, the Technical Advisory Committee, and members of the Maryland Association of Counties and Maryland Recreation and Park Association summarizing all information gathered, followed by visioning workshops to obtain feedback on the key issues and analysis components of the plan.

Recommendations and Action Steps

Based on the findings and analysis, key issues, strategies, and recommendations were identified and developed with DNR staff, the Technical Advisory Committee, and members of the Maryland Association of Counties and Maryland Recreation and Parks Association.

B. Public Engagement Summary

The information gathering phase of the ***Maryland Land Preservation and Recreation Plan*** included a comprehensive process to obtain citizen, user group, staff, and stakeholder input through multiple outreach and engagement tools. The goals of the public participation process for this project were to:

- Gather relevant and meaningful information to inform decisions and recommendations.
- Provide Maryland residents and stakeholders the opportunity to be involved in creating the plan's strategies and recommendations.

Complete results of the random survey are included in ***Appendix H: Survey Report***. Highlights of the public participation process for the ***Maryland Land Preservation and Recreation Plan*** follows.

1. Statistically Valid Survey

In a random telephone survey of Maryland residents, a high percentage of respondents indicated that a member of their household participates in outdoor recreation activities (82%). The most popular outdoor recreation activities are:

- Walking (75%)
- Visiting historical sites (75%)
- Picnicking (65%)
- Visiting natural areas (59%)
- Participation in outdoor special events (57%)
- Visiting playgrounds (56%)
- Swimming outdoors (55%)



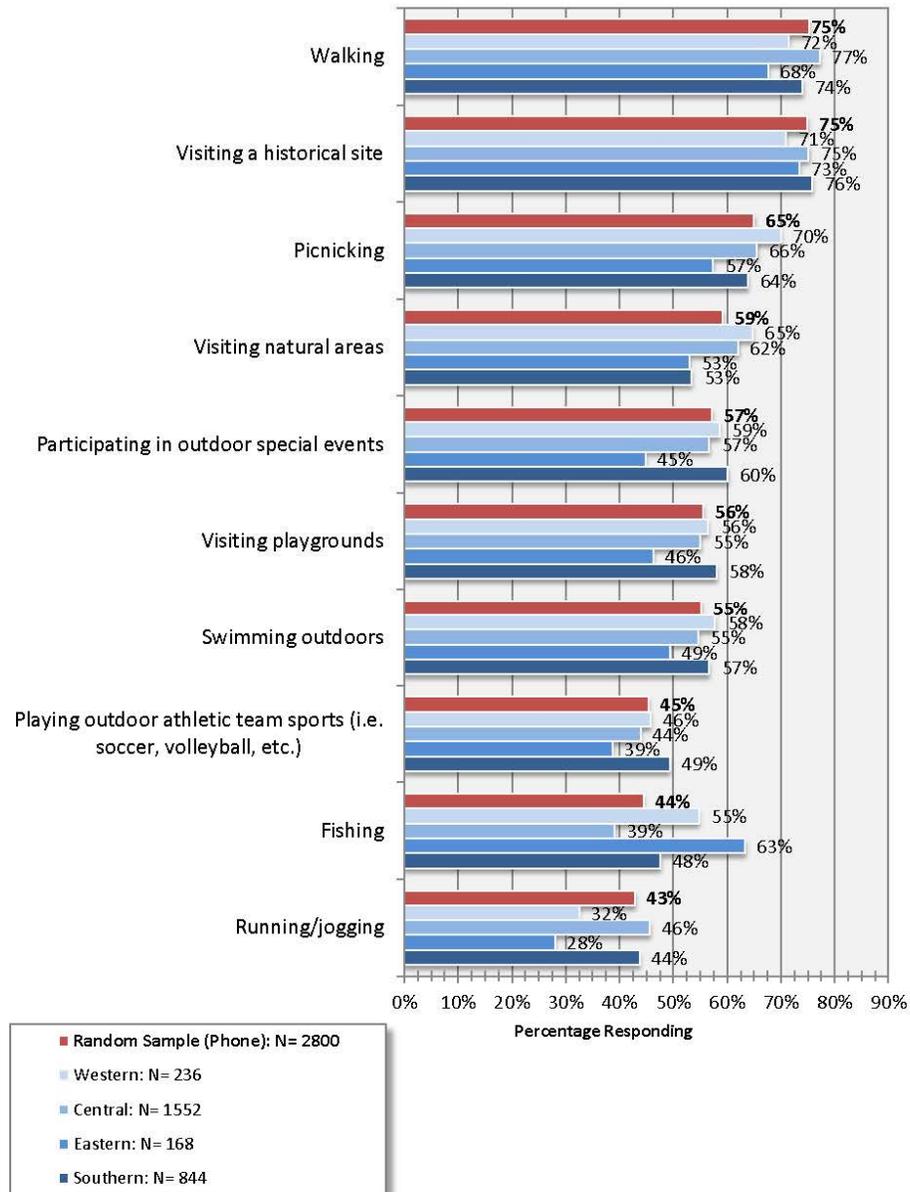
Not surprisingly, the activities that were most popular in each of the regions reflected their unique characteristics. For example, water sports are more popular in the Eastern Region than in the state overall. Respondents from the Eastern Region were more likely to participate in fishing (63%), paddle sports (37%), motor boating (38%), and sailing (15%) than respondents in the other three regions.

Conversely, respondents in the Western Region are more likely to participate in hiking/backpacking (51%), fishing (55%), hunting (36%), tent camping (47%), or sledding/snow play (44%) than the average Marylander.

Participation in Outdoor Recreation Activities

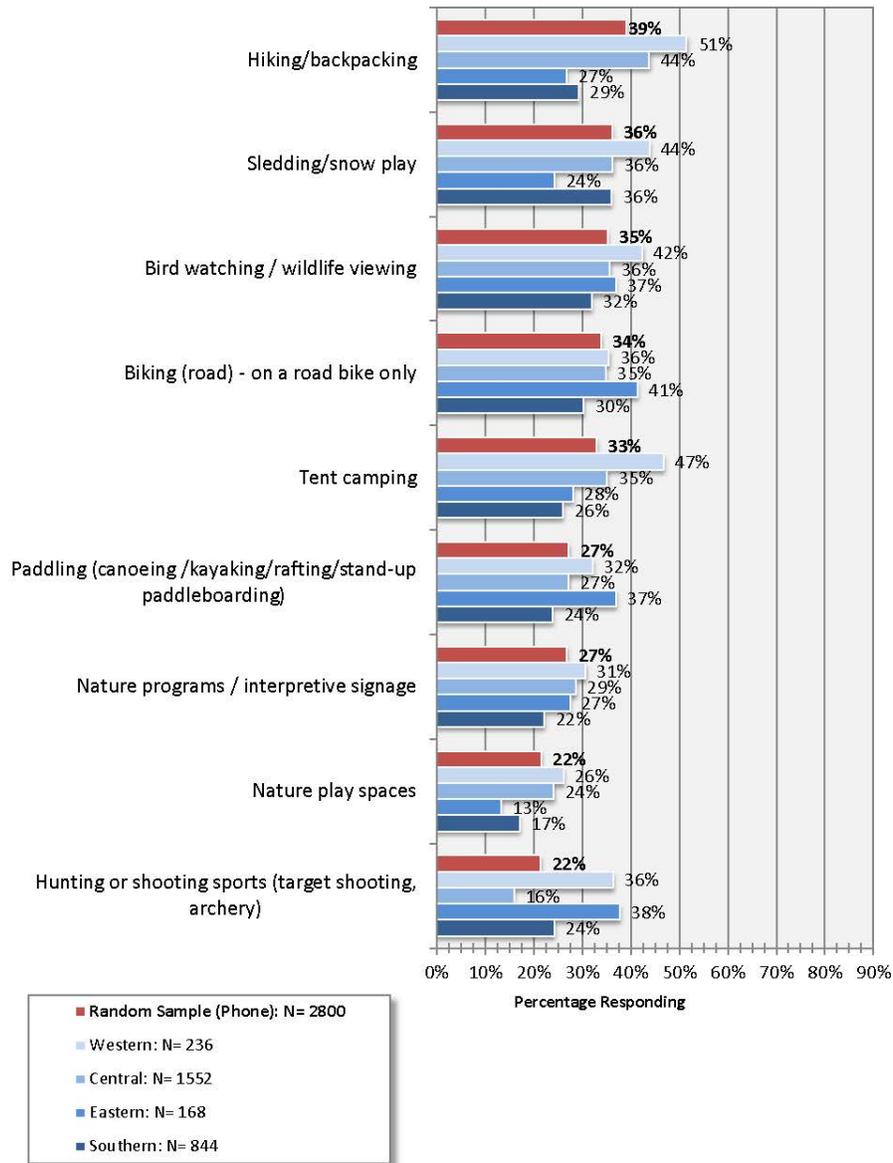
The top ten list of activities in **Figure 4** shows a balanced mix of generally low cost natural resource based recreation preferences and participation at developed recreation sites such as playgrounds, historic sites, and sports areas.

Figure 4: Participation in Outdoor Recreation Activities – Top Ten Activities Overall



Similar to the top ten activities, the middle ten activities in terms of participation showed a balance of natural resource based activities and developed area activities. **Figure 5** shows regional differences appearing as well, with hiking, sledding, wildlife viewing, and camping garnering more participants in the Western region than in other regions. Road bicycling, paddling, and hunting were the most popular in the Eastern Region. This finding aligns with respondents preferences for a balance of outdoor recreation development and natural resource protection.

Figure 5: Participation in Outdoor Recreation Activities – Middle Ten Activities Overall



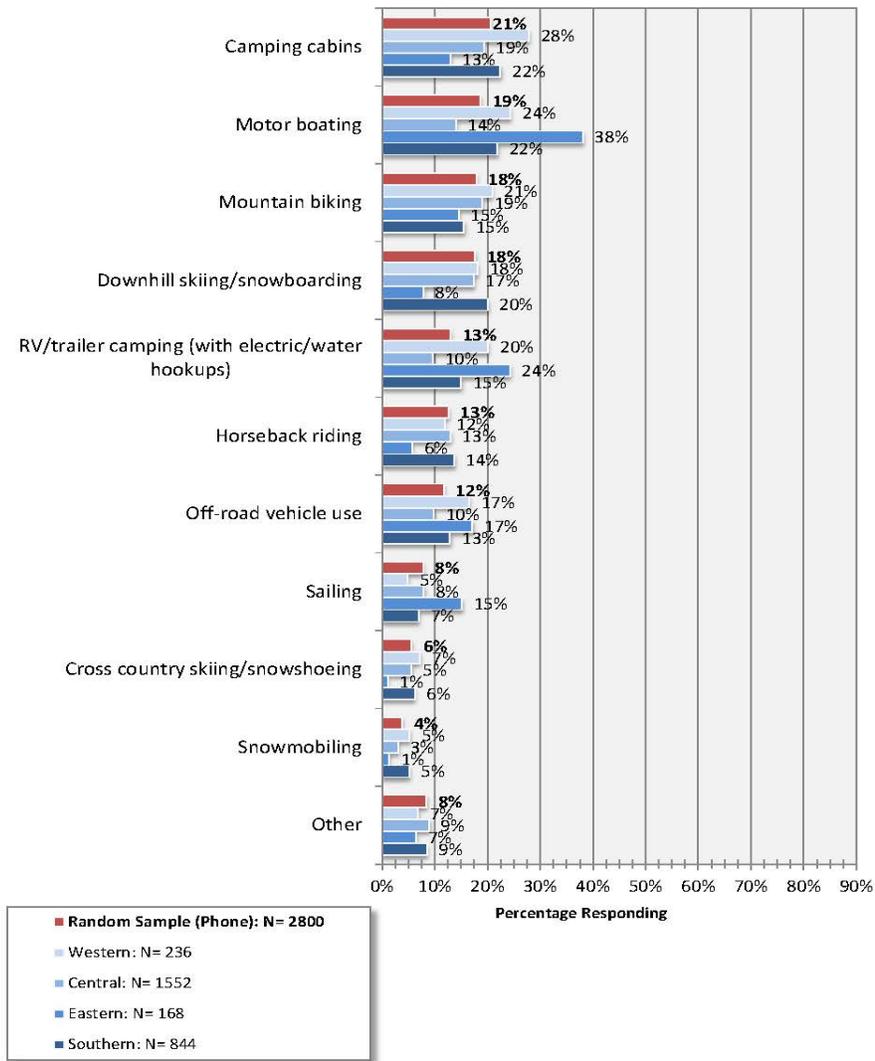
As noted in **Figure 6**, survey respondents ranked cabin camping in the bottom ten activities. A review of data relative to state park visitation shows that cabin visits are the lowest of the three visitor categories (cabins, overnight, and day visitors). This combination of data suggests an evaluation and possible shift of resource allocation from cabin maintenance and management and other bottom tier activities to supporting activities in the top ten in participation such as:

- Trail connectivity for expanded walking and jogging opportunities
- Promotion of historical and cultural sites to further celebrate Maryland’s rich heritage
- Increasing land acquisition for nature based recreation and land protection
- Expanding access to water based recreation to support swimming and fishing

A trend toward motorized activities and those activities with relatively high equipment costs showing up in the bottom ten participated in activities suggests that these users groups are smaller but have the financial means to engage in these activities.

Through Maryland’s Program Open Space process, these findings can provide guidance to county and municipal recreation and parks agencies on Marylanders’ preferences for developed recreation supporting field sports, playgrounds, and special events.

Figure 6: Participation in Outdoor Recreation Activities – Bottom 10 Overall



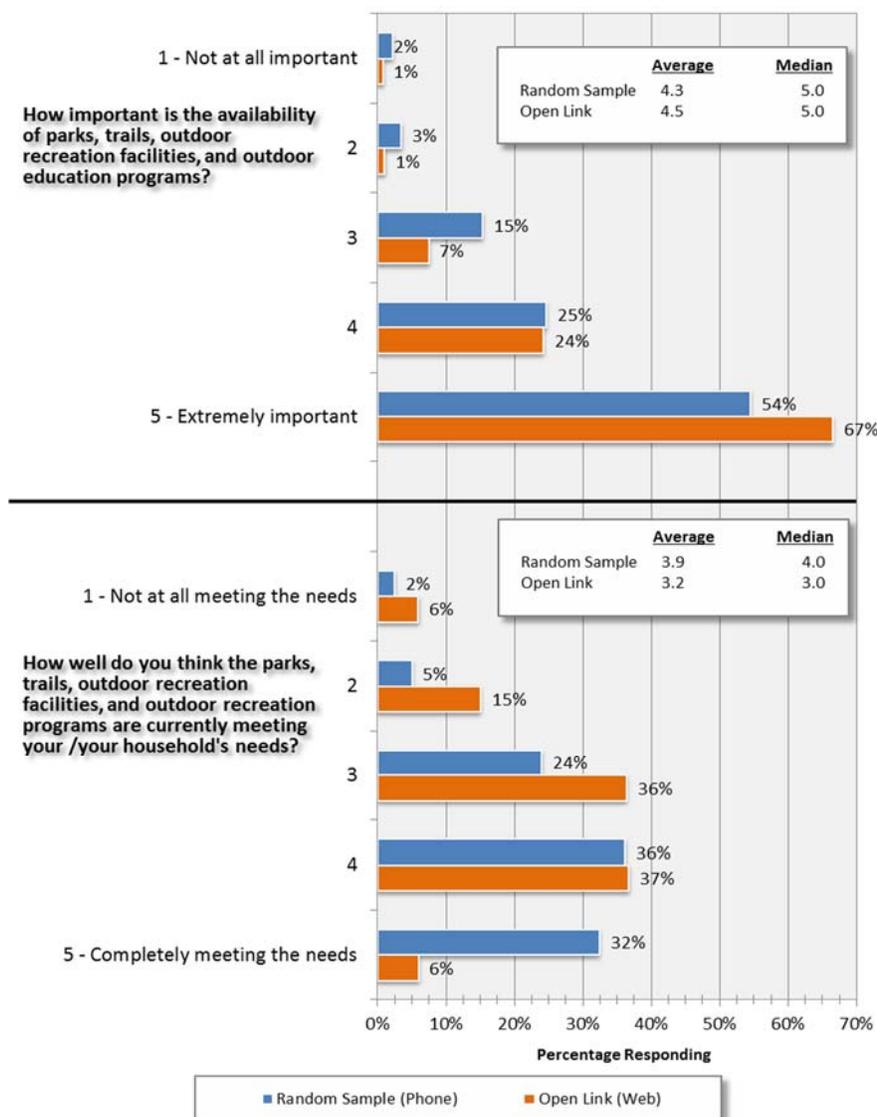
Importance of Outdoor Recreation to Marylanders

Results from the random telephone survey conducted for the *Maryland Land Preservation and Recreation Plan* revealed that over half of all respondents indicated that the availability of parks, trails, outdoor recreation facilities, and outdoor education programs is “extremely important” to their household. **Figure 7** shows that according to the top two ratings, 79 percent of phone survey respondents and 91 percent of online survey respondents, perceived outdoor recreation as important or extremely important. This data aligns with the high participation rate (82%) noted earlier.

Furthermore, a large percentage of respondents perceived that their need for parks, trails, and outdoor recreation facilities and education programs was being met. When the top responses from each methodology are compared, 68 percent of the phone survey participants felt that their needs were being met, while only 43 percent of the online survey respondents felt that their needs were being met.

The demand for outdoor recreation is echoed by a statewide coalition of over 165 groups (Partners for Open Space), which seeks to secure, save, and protect Maryland’s land conservation programs. The group produced “*The Case for Open Space*” in 2012, a resource highlighting County level success stories related to DNR’s Program Open Space (POS). The report identifies the negative consequences on heritage, agricultural, recreation, and other land and water based resources if POS funding is diverted.

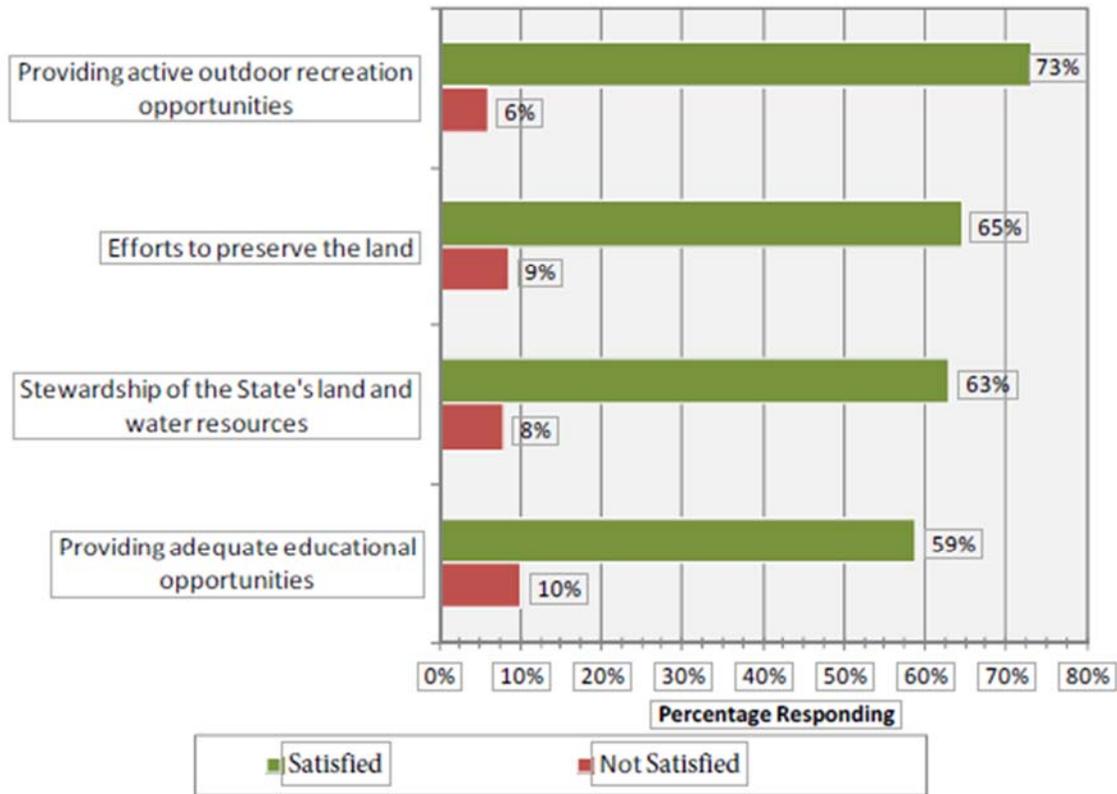
Figure 7: Importance and Level of Needs Being Met for Parks, Trails, Outdoor Recreation Facilities, and Education Programs



Level of Satisfaction with the Attributes of DNR

Ratings of satisfaction with the DNR are high overall. Respondents are most satisfied with the Department’s provision of active outdoor recreation opportunities. Respondents are satisfied with the Department’s ability to provide educational opportunities. When examined by region, respondents from the Western Region are most satisfied with all attributes than their counterparts in other regions. Respondents from the Eastern and Southern regions tend to have slightly lower ratings of the DNR for all attributes, as noted in **Figure 8** below.

Figure 8: Level of Satisfaction with Attributes of DNR



Perceptions of DNR Fees

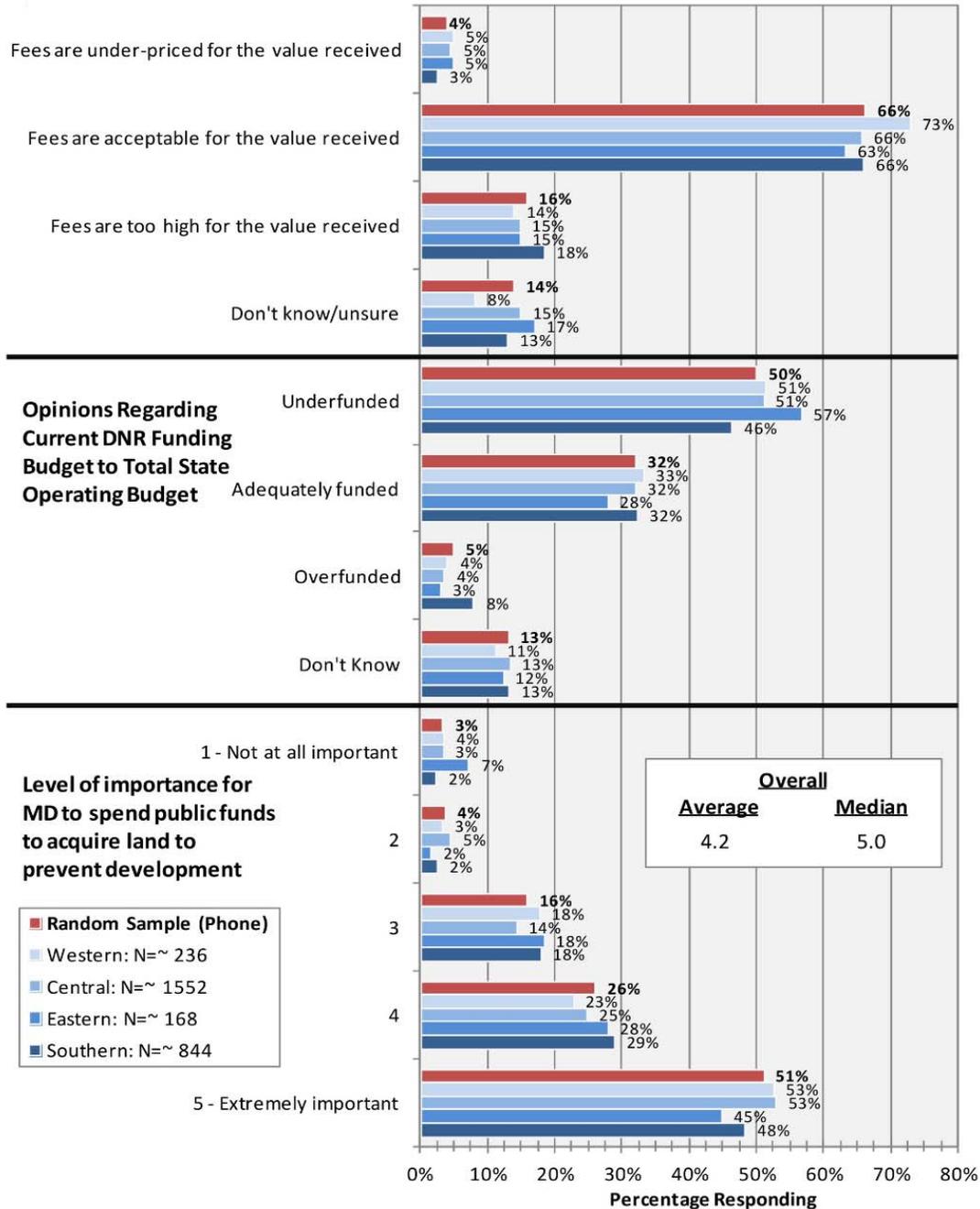
Respondents were asked how they felt about the fees charged directly to them by the DNR. As noted in **Figure 9**, the majority felt that the fees are acceptable for the value received (66%), while 16 percent felt that the fees are too high for the value received, and four percent felt that the fees are underpriced for the value received. Of the regions, respondents from the Western Region were most likely to feel that the fees are acceptable for the value received (73%), while responders from the Eastern Region were least likely (63%) to feel that the fees are acceptable for the value received.

Half of the respondents felt that the DNR is underfunded in the state operation budget (50%). Thirty-two percent (32%) of the responders felt that the department is adequately funded, while only five percent of responders felt that it is overfunded. This perception underscores the importance of tracking DNR revenue streams from hunting, fishing, state parks, vessel taxes, and ORV permits to begin to illustrate the vital role public outdoor recreation and natural resource conservation play in Maryland’s economy.

As illustrated in **Figure 9**, over half of all responders indicate that it is “extremely important” that the State of Maryland spend public funds to acquire land to prevent development. Only three percent feel that it is “not at all important.” This finding suggests that DNR established practices in land and water conservation and preservation efforts should continue and possibly expand.

Figure 9: DNR Funding and Fees by Region

How Respondents Feel About Fees Charged Directly to Them



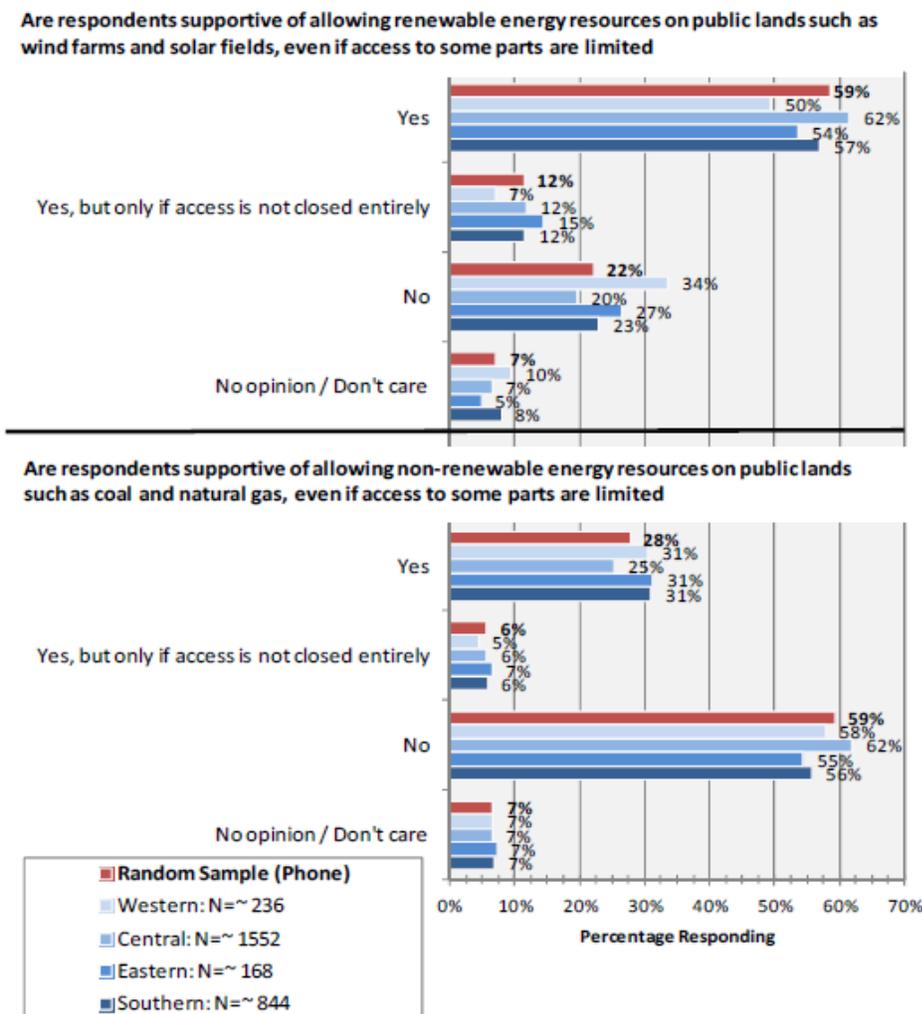
Renewable and Non-renewable Resources

Respondents were asked to consider allowing both renewable and non-renewable energy resources on public lands. Renewable energy resources were defined as sources such as wind farms and solar fields, while non-renewable resources were considered to be coal and natural gas.

Overall, respondents are more favorable towards allowing renewable energy resources on public lands even if access to some of the land is limited (71 percent favorable). Another twelve percent indicated that they are in favor of renewable energy resources as long as the access to the public lands was not closed entirely. Twenty-two percent (22%) of respondents are not in favor of allowing renewable resources on public lands. Respondents from the Western and Eastern Regions were not as likely to be in favor of allowing renewable resources on public lands as their counterparts in the Central and Southern Regions.

The majority of respondents are not in favor of allowing non-renewable resources on public lands (59 percent), although 34 percent are open to some level of activity. Respondents from the Central Region are more unfavorable (62%) than responders from the other regions.

Figure 10: Renewable and Non-renewable Resources by Region



Barriers to Participating in Outdoor Recreation

The most frequently given reason for not participating more in outdoor recreation was that respondents had “no time, other personal issues, or physical limitations” (46%). The next most common barriers were: “not aware of program/facilities offered” (9%), “price/user fees” (7%), “lack of facilities/programs” (6%), “transportation access issues” (6%), and to a lesser extent “safety and security,” “conditions or parks,” “hours of operation,” and “size of facilities/amount of space available.” Only 17 percent of responders indicated that they did not have any barriers to participation.

2. Technical Advisory Committee (TAC), Maryland Association of Counties, Maryland Recreation and Park Association

Four meetings were held with the project’s Technical Advisory Committee, resulting in identification of the following highlights:

- **Coordinate GIS data with Local Governments**
 - Long range goal for every county and municipality to provide the DNR with GIS mapping for trails, natural resources, public water access, and picnic amenities

- **Explore Collaborative Partnerships**
 - Appalachian Environmental Lab
 - GIS lab at Washington College
 - Salisbury University
 - Urban Resources Initiative
 - Outward Bound Baltimore
 - Appalachian Trail conference – Potomac Trail Club (across border)
 - Baltimore Ecosystem Study
 - Adventure Sports Institute in Garrett County – National Whitewater Hall of Fame
 - Maryland Recreation and Park Association
 - Maryland Association of Counties
 - Baltimore Metropolitan Planning Authority
 - Maryland Association for Outdoor and Environmental Education
 - 1000 Friends of Maryland

- **Expand Messaging and Branding**
 - Produce short “how to” videos (access information, educational, safety)
 - QR code readers on signage, brochures could link to DNR website
 - Consider mobile phone version of DNR website
 - Link local outdoor recreation, cultural, and natural resource sites to DNR website
 - Share DNR information with health community to support park prescriptions

- **Water Recreation Access**
 - Reassess the gaps after DNR and county data is combined, then collaboratively identify priorities
 - Need fishing access link on DNR website, coordinate with county access opportunities



- **Trail Connectivity, Connecting People to Nature Across the Age Span**
 - Reluctance to use trails because of safety issues (natural predator or crime)
 - ◆ Trail partners, walking partners
 - ◆ Power of storytelling, testimonials about experiences
 - ◆ Use emergency locator numbering, integrating technology for safety
 - ◆ Incorporate emergency personnel into planning
 - ◆ “Friends of” groups to help with vigilance
 - Better access from front door – plan connections early during local development, then look at state level planning for connections to points of interest, natural areas, picnicking, water, etc.



3. Open Link Online Survey

An open web-based survey was conducted with 2,475 respondents, identifying the following highlights:

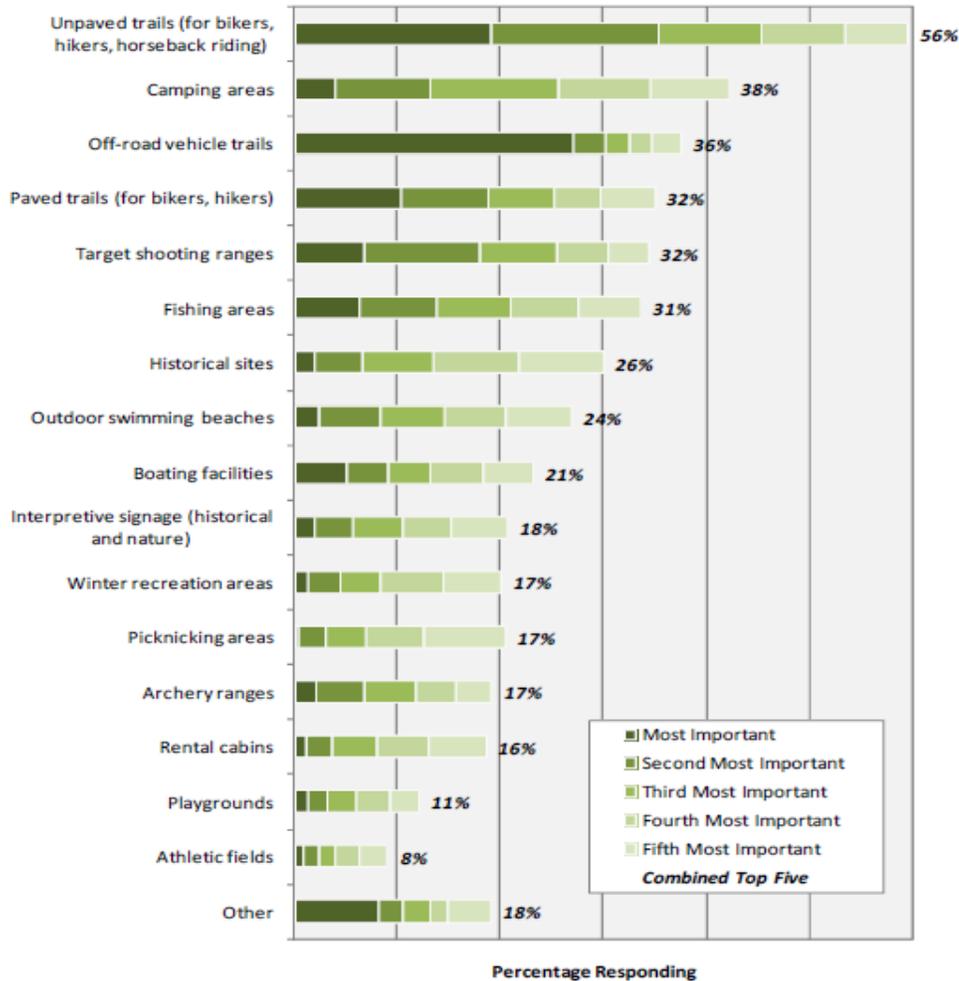
- Top three aspects of outdoor recreation most in need of improvement:
 - Number of trail available (46%)
 - Number of parks (41%)
 - Connectivity of trails (32%)

- Top six outdoor recreation facilities that need to be added, expanded, or improved:
 - Unpaved trails (for bicyclists, hikers, horseback riding) (56%)
 - Camping areas (38%)
 - Off-highway vehicle trails (37%)
 - Paved trails (for bicyclists, hikers) (32%)
 - Target shooting ranges (31%)
 - Fishing Areas (31%)



These results are similar to opinions expressed during citizen stakeholder meetings, staff interviews, and in written comments, and the full responses are illustrated in **Figure 11**.

Figure 11: Most Important Facilities to be Added, Expanded, or Improved



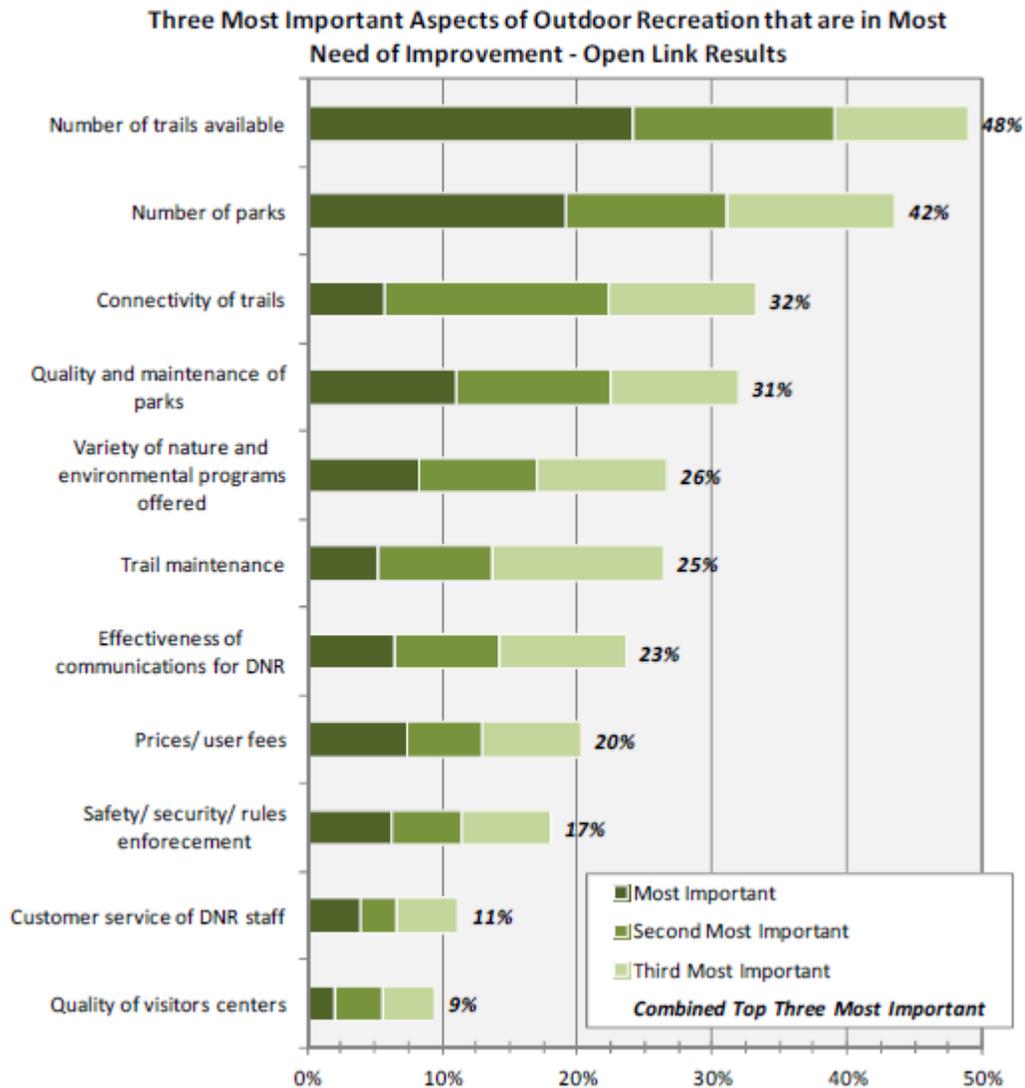
Aspects of Outdoor Recreation Most In Need of Improvement

The open link survey participants were asked to identify the three most important aspects of outdoor recreation most in need of improvement. As illustrated in **Figure 12**, the areas that emerged when the top three most important responses were combined are:

- Number of trails available (48%)
- Number of parks (42%)
- Connectivity of trails (32%)
- Quality and maintenance of parks (31%)

The random phone survey did not include this question, so comparative data is not available. However, these results are similar to opinions expressed during in citizen stakeholder meetings, staff interviews, and in written comments.

Figure 12: Three Most Important Aspects in Most Need of Improvement



Open Link Survey Results Compared with Random Survey Results

The comparison of the online open link survey with the random phone survey revealed several consistent perceptions. Patterns emerged illustrating strong support for the importance of parks, trails, and outdoor recreation facilities, and a lack of time and awareness of opportunities as barriers to participation in outdoor recreation.

Environmental protection and improving the quality of life were a high priority for both sets of respondents. For phone respondents, promoting healthy lifestyles was the most important benefit of land conservation and outdoor recreation. For the online respondents, connecting people with nature was the highest priority. Both groups had a very high level of satisfaction with DNR’s efforts toward land conservation and outdoor recreation, and had similar responses to use of public lands for renewable and non-renewable energy resources as noted in **Figures 11** and **12** above.

4. Access Issues Identified at Statewide Regional Public Meetings

Four public meetings were held across the state during the planning process, one in each of the regions identified – Eastern, Central, Southern, and Western – with a total of 124 attendees. All meetings began with a presentation by the planning team to introduce stakeholders to the purpose of the plan, the planning process, and goals for outdoor recreation, natural resources, and open space in Maryland.

An interactive discussion was held with stakeholders to receive input on broad questions relating to outdoor recreation. A complete list of questions can be found in **Appendix C: Regional Stakeholder Meeting Notes**.

Attendees then discussed two additional questions in detail:

- What are strengths of Maryland’s outdoor recreation resources?
- What improvements could be made to the outdoor recreation experience in Maryland?



Based on the large group discussion, the planning team grouped responses from stakeholders into common themes for small discussion groups around the key issues identified. Each group was moderated by a planning team member and addresses the following points regarding each key issue:

- Define the problem
- Identify barriers to resolution
- Recommend 2-4 feasible actions

Detailed summaries of each regional meeting are provided in **Appendix C: Regional Stakeholder Meeting Notes**. Following are the highlights of the regional meetings.

Southern Region

The southern region identified off-highway vehicle (OHV) parks, hunting, equestrian facilities, and water access as key issues. Participants generated a list of feasible actions to address these issues, including:

- Use mine reclamation areas for development of OHV facilities
- Host public education seminars with DNR officials about wildlife management, safety, heritage, hunter safety classes, etc.
- Develop regional equestrian facilities
- Change land acquisition financing plans to require robust public access



Western Region

The western region identified off-highway vehicle (OHV) parks, educating youth, and trails as key issues. Participants generated a list of feasible actions to address these issues, including:

- Establish volunteer trail patrols for OHV trail systems
- Promote valuable unique cultural resources through tours and publications
- Expand partnerships for trail volunteers and increased funding for trail improvements

Eastern Region

The eastern region identified trail user conflicts and managing multiple uses on trails as key issues. Participants generated a list of feasible actions to address these issues, including:

- User groups should collaborate to publish and distribute a trail safety guide
- Employ Complete Street design approaches and multi-modal transportation planning at the local, regional, and state levels
- Practice sustainable trail design and maintenance (International Mountain Bicycling Association [IMBA] workshops)

Central Region

The central region identified youth outdoor time, connectivity, and user conflicts as key issues. Participants generated a list of feasible actions to address these issues, including:

- Include parents, educators, and youth leaders as champions of youth outdoor programs
- Begin dialogue with County Park/Planning Departments for collaboration on connectivity; suggest quarterly meetings with the DNR Land Trails Planner
- Design trails for multi-use

“I know the budget is small, but a lot of places that I have gone to are understaffed. We need more people to monitor visitors. I would stress that the staff they have are incredibly devoted and excellent at their jobs.”

Central Region Meeting Participant

Regional Stakeholder Meeting Summary

Attendees at the four regional stakeholder meetings provided thoughtful and valuable insights, guidance, and suggestions to inform the direction of the **Maryland Land Preservation and Recreation Plan**. The issues raised and feasible actions provided contributed to the process of identifying the four key strategies and recommendations outlined in **Chapter 6: Recommendations and Actions**.

5. Trails Committee

As part of the year-long planning process, the DNR created a **Trails Committee** to ensure that the **Maryland Land Preservation and Recreation Plan** included a section dealing specifically with trails. The committee included 15 people representing a broad range of perspectives, priorities, and expertise related to trails, and met four times during 2013. The goals established by the Trails Committee are listed below, and a complete discussion of trails is included in **Chapter 4: Connecting People and Places**.

- Create a statewide network of trails that provides motorized and non-motorized links between DNR lands, water trails, and the communities where people live, learn, work, shop, and play.
- Educate citizens about the trail network’s social, ecological, economic, and wellness benefits.
- Build, maintain, and renovate trails to create a sustainable system on DNR land that provides a quality and diverse user experience and promotes environmental stewardship.
- Map all DNR trails and make the data/information available in a user-friendly format.

- Address barriers to trail development, including funding and access, through partnerships with other State agencies, local governments, and trail stakeholder groups.

C. Demographic Profile and Analysis

Overview

Key demographic information and trends for the State of Maryland, including an analysis of four regions as identified by DNR staff, have been compiled for this plan. Several sources were used to sufficiently represent historical, current, and future demographics. These sources include the 2010 U.S. Census, Maryland Department of Planning, the 2006 – 2010 American Community Survey, and ESRI Business Solutions.

Key Demographic Highlights for Maryland Based on 2010 U.S. Census

- The estimated median household income for Maryland residents was \$70,075 in 2012.
- The median age for Maryland in 2010 was 37.8, slightly higher than the average age (37.1) for the United States.
- Population in Maryland, at 5,775,562 in 2010, is projected to increase by 18.8 percent to 6,863,940 by 2040.
- The Central Region of Maryland ranks highest in population (3,197,920), followed by the Southern Region (1,741,515).
- The Western Region ranks third (485,999), while the Eastern Region has the lowest population (348,118) for 2010.

Population Demographics

According to Emilyn Sheffield, a researcher and Professor in the Department of Recreation and Parks Management at California State University, the Hispanic population in the United States has increased by 43 percent over the last decade, compared to five percent for the non-Hispanic portion, and accounted for more than half of all population growth.

In 2010, 8.3 percent of Maryland’s population was Hispanic, and this percentage is expected to rise to 10.1 percent by 2017. The growing racial and ethnic diversity is particularly important to recreation and leisure service providers since family and individual recreation patterns and preferences are strongly shaped by cultural influences⁷.

While the DNR has begun to address the impacts of national population trends within the operations of the State Park system, this data underscores the importance of continuing to provide relevant services for a multi-lingual visitor population including:

- Multi-lingual signage, technology, and print publications throughout the DNR system
- Cross-cultural programming, cultural festivals, and events
- Spanish speaking staff in parks and nature centers
- High visibility of the Spanish language option on the DNR website

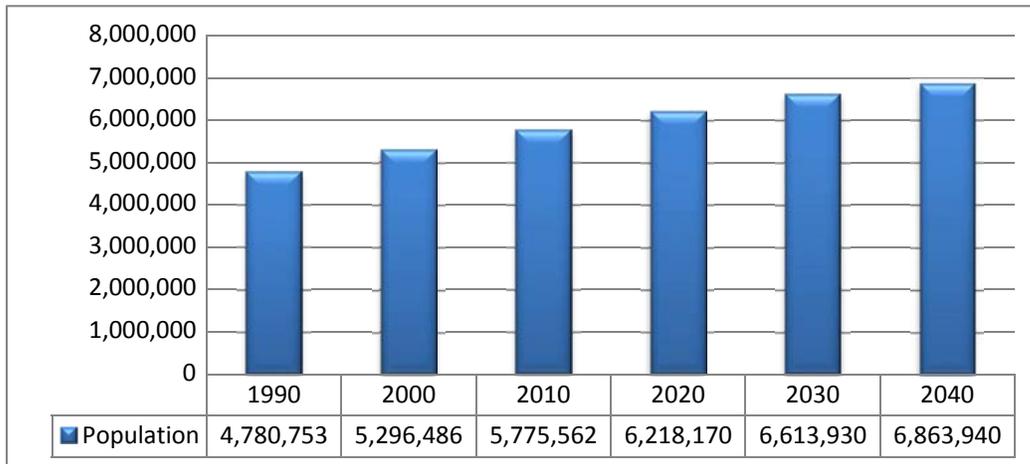
⁷ Sheffield, Emilyn, “Five Trends Shaping Tomorrow Today,” *Parks and Recreation Magazine*, July 2012 p. 16-17.

Population Projections

The population in the State of Maryland is projected to continue to rise over the next 30 years, although not as quickly as it did from 1990 to 2000 (1.08 percent average annual growth), or from 2000 to 2010 (.87 percent average annual growth). According to the U.S. Census, the population in 2000 was 5,296,486, and in 2010, it was 5,775,562. As shown in **Figure 13**, The Maryland Department of Planning projections to 2040 estimate that the State of Maryland will reach 6,863,940 residents by 2040.

Maryland’s population is forecast to grow by 18.8 percent in the next 30 years from 2010 to 2040, adding over 1,088,378 new residents.

Figure 13: State of Maryland Population Forecast (1990 - 2040)



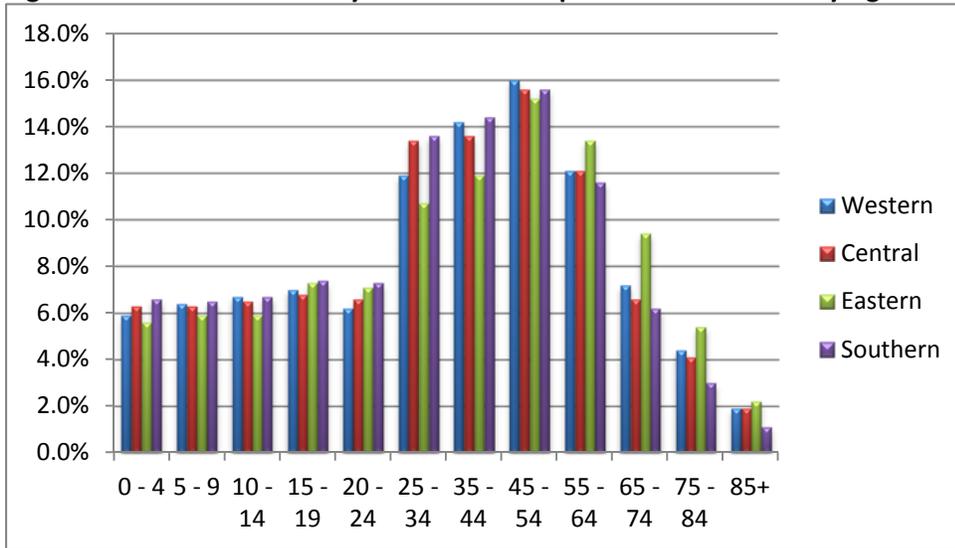
Source: Maryland Department of Planning

Age Distribution

As part of the population trend analysis, it is useful to examine age distribution in the State of Maryland as a whole as well as in each of the planning areas. A comparison of the planning areas is illustrated in **Figure 14**.

- The largest age cohorts in the Western (42.1%), Central (42.6%), and Southern Regions (43.6%) are in the 25-54 age range, close to the state-wide percentage of 40.0. The Eastern Region’s percentage in this age range dropping to 37.8.
- The Eastern Region, however, holds the greatest number of residents in the “over 55” age range, at 30.4 percent, while the “over 55” population in the other regions is in the 22 to 26 percent range, approaching the state-wide population of 26.4 in the “over 50” age cohort.

Figure 14: 2010 State of Maryland Subarea Population Breakdown by Age



Source: 2010 U.S. Census, ESRI Business Information Solutions, 2012

Regional Demographic Analysis

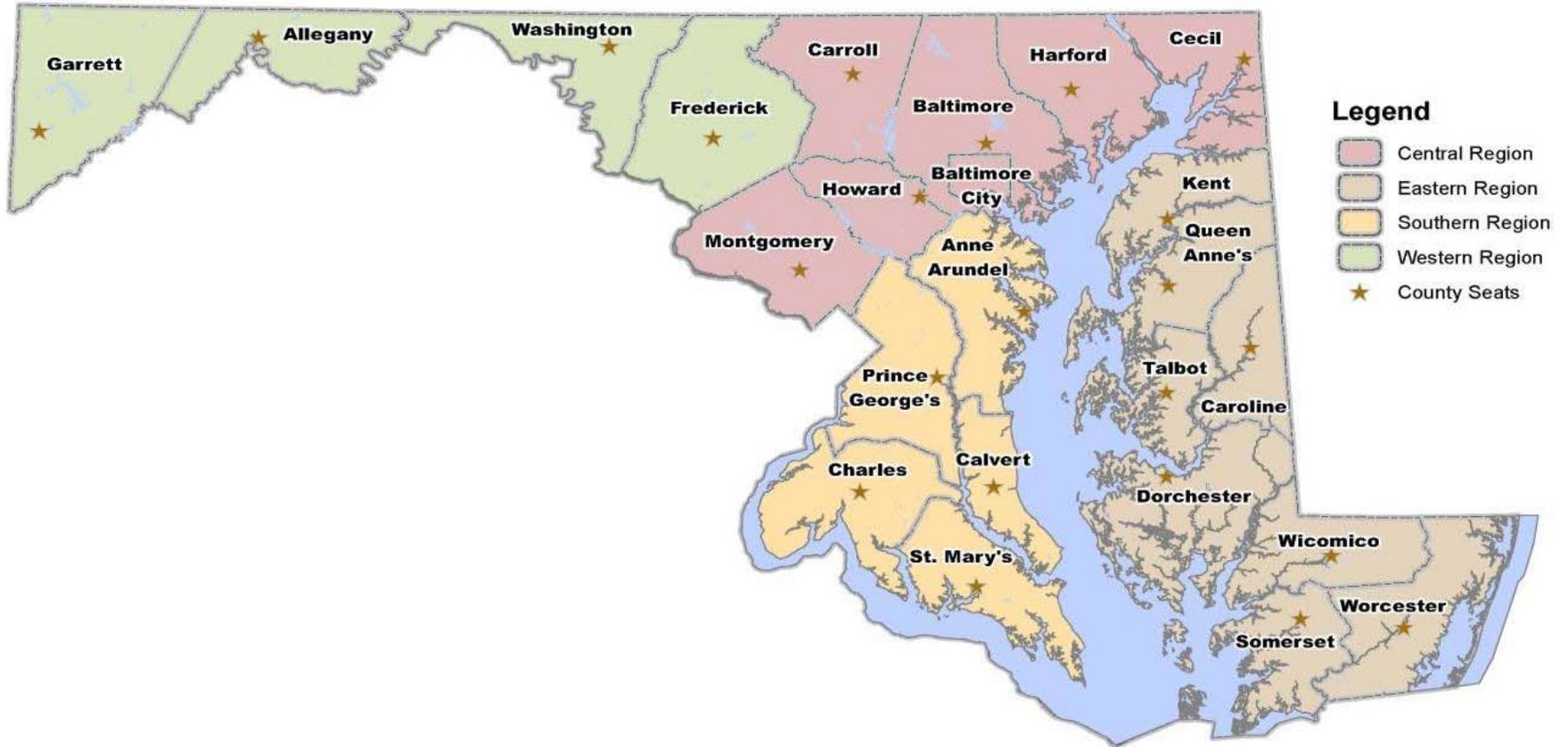
Examining regional demographics in the four regions identified provides guidance for future outdoor recreation activity focus areas and land protection and use priorities. The following map provides a visual layout of the DNR regions as defined by agency staff.

Map 1: Maryland DNR Regions

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Resource Map B: Counties and Regions

Connecting People and Places



Map Product for MD Dept. of Natural Resources by The GRASP® Team
This map is intended for planning and discussion only.
Please refer to the project document for map details.
GIS sources may include: MD Dept. of Natural Resources, ESRI, GRASP® Team
DNR August 2013



The information in **Table 4** was collected for each subarea using the 2010 U.S. Census data for median age, median income, and population percentage. Key information about median income differences among various Maryland counties and how they compare the state’s median income, \$70,075, is provided in the Summary section of this chapter. The following table sets out the estimated median income for the four regions, in 2012.

In the four regions, the median age ranges from 39.4 in the Western Region to 36.4 in the Southern Region. The median income ranges span from \$54,365 in the Eastern Region to \$76,866 in the Southern Region. The Central Region holds the greatest percent of the population at 55.4 percent with the Eastern Region holding the lowest population at six percent. For the state as a whole in 2010, the median age was 37.8.

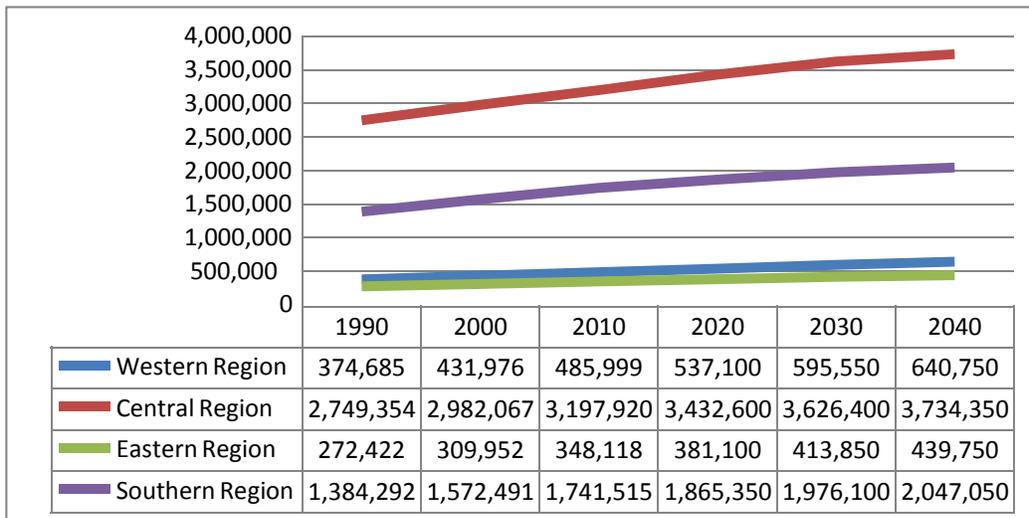
Table 4: Regional Demographic Overview

	Median Age (2010)	Median Income (2012 forecast)	Percent of State Population (2010)
Western Region	39.4	\$59,591	8.4%
Central Region	38.1	\$66,784	55.4%
Eastern Region	41.6	\$54,365	6.0%
Southern Region	36.4	\$76,866	30.2%

Source: ESRI Business Information Solutions, 2012

The population distribution represented in **Figure 15** shows the predicted growth for the four regions of the state through 2040. The Central region ranks highest in population (3,197,920 in 2010) and is predicted to grow by 16.8 percent to 3,734,350 by 2040. The next most populous region is the Southern region (1,741,515 in 2010), predicted to grow by 17.5 percent to 2,047,050 in 2040. While the Western region is considerably less populated than the Central and Southern regions (485,999 in 2010), it is predicted to grow by 31.8 percent to 640,750 by 2040. The Eastern region is the least populated region (348,118 in 2010) and is predicted to grow at the slowest rate, 5.3 percent, to 439,750 in 2040.

Figure 15: 2010 State of Maryland Regional Population Growth Projections



Source: Maryland Department of Planning

Key Demographic Facts by Region

Western Region

- Frederick County has the largest population in the Western Region with over 233,000 people, according to the 2010 U.S. Census.
- Allegany County is the only county in this region which has been losing population every decade since the 1970 U.S. Census.
- Garrett County has the lowest population in the Western Region – a little over 30,000 residents.
- The median income in three of the four counties in the Western Region is less than the median income of Maryland (\$70,075). Only Frederick County’s median income at \$77,872 is higher than the Maryland median income.
- With the exception of Garrett County, all of the counties in the Western Region have a net migration gain. Most of the net migration gains in Frederick County are from Montgomery County.

Central Region

- Montgomery County’s population (971,700) is the largest among all jurisdictions in Maryland. Three of the top five most populous jurisdictions are in the Central Region.
- Baltimore City is the only jurisdiction in this region that has been losing population every decade since the 1970 U.S. Census.
- Howard County has the highest median income among all the jurisdictions in Maryland, followed by Montgomery County – both of which are in the Central Region.
- Baltimore City has the second lowest median income among all of the jurisdictions in the State.
- According to the 2006 – 2010 American Community Survey, Baltimore County has the highest net-migration – around 13,700, most of which is from Baltimore City. Montgomery County has the second highest net migration around 5,100 with most of the in-migration from Prince George’s County.
- Baltimore City has the largest decline in net migration among all of the jurisdictions with a drop of 10,233.
- Overall, the Central Region has a net migration of 7,633.

Eastern Region

- All of the counties in the Eastern Region have populations less than 100,000. Wicomico County has the highest population in this region at 98,700.
- Kent County's population (20,200) is the lowest among all of the jurisdictions in Maryland.
- Somerset County in the Eastern Region has the lowest median income in the State.
- Except for Queen Anne's County, median income in all other counties is less than the Maryland State median income of \$70,075.
- Except for Dorchester and Worcester Counties all of the other counties in the Eastern Region have a net migration that is positive, meaning more people are moving into the counties than moving out.

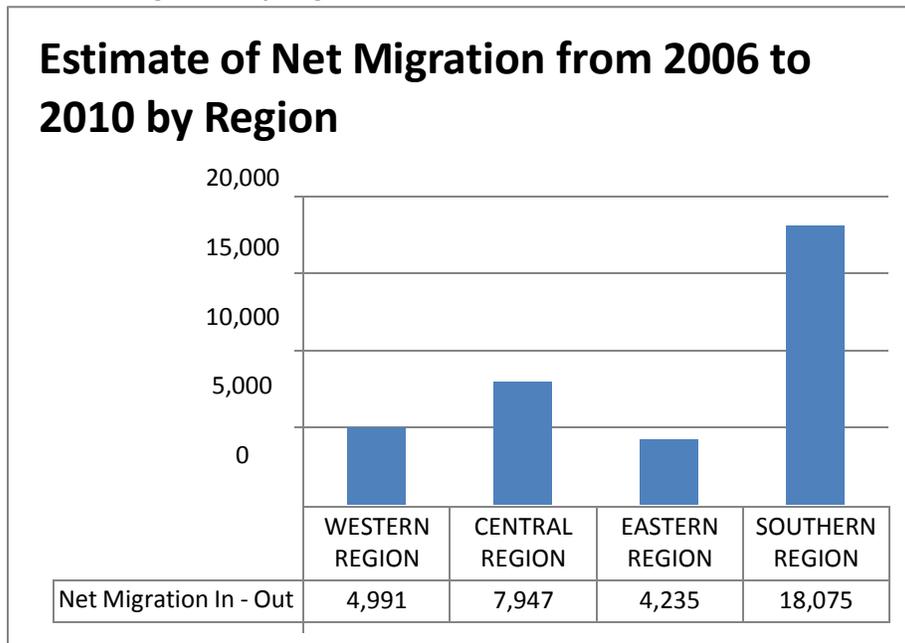
Southern Region

- Two of the five counties in the Southern Region have a population greater than 500,000. Prince George's County has the highest population in the region and the second highest among all jurisdictions in Maryland.
- The median income in all the counties in the Southern Region is higher than the median income in Maryland.
- Anne Arundel County has the second highest net-migration among all of the jurisdictions in the State, with most of the in-migration coming from Baltimore City and Prince George's County.
- A majority of the population gains in Prince George's county is in-migration from Montgomery County.
- Charles County gains a lot of in-migration from Prince George's County.
- Overall, the Southern Region has a net migration of 18,075.

Migration Flow by County and Region

The total net migration per region is shown on **Figure 16**. At 18,075, the Southern Region saw the greatest net in-migration from 2006 to 2010. The Eastern Region saw the smallest net in-migration (4,235).

Figure 16: Net Migration by Region from 2006 to 2010



Source: U.S. Census American Community Survey 2006 – 2010

Demographics Summary

Demographic information and trends have been used to supplement data gathered through the public engagement and GIS inventory and analysis to inform the overall strategies for the **Maryland Land Preservation and Recreation Plan**. Using population projections, migration patterns, age, income, and ethnic diversity information contributes to future priority setting, decision making, and resource allocation for land and water resource protection and outdoor recreation.

D. Trends Analysis

The following information highlights relevant outdoor recreation trends from various sources that inform the focus and recommendations of the **Maryland Land Preservation and Recreation Plan**.

National Outdoor Recreation Trends

Each year, the Outdoor Foundation releases a “Participation in Outdoor Recreation⁸” report. According to the 2012 report, while there continues to be fallout from the recent economic downturn, outdoor recreation reached the highest participation level in five years in 2011. The Outdoor Foundation’s research brought the following key findings.

Return to Nature: Nearly 50 percent of Americans ages six and older participated in outdoor recreation in 2011. That is a slight increase from 2010 and equates to a total of 141.1 million Americans.

⁸ “Outdoor Recreation Participation Report 2012”, Outdoor Foundation, 2012.

Accessibility is Important Factor: Activities that are affordable and accessible (Gateway Activities) have a contagious effect. Eighty-seven percent (87%) of hikers participate in one or more other activities. People with biking routes near their home get outdoors at a rate of 58 percent compared to a rate of 47 percent for those without easy access to biking routes.



First Time Participants: Activities with the highest percentage of first time participants in 2011 included stand up paddling, triathlons, freshwater fishing, and adventure racing.

Preservation of Land: The majority of Americans agree that preserving undeveloped land for outdoor recreation is important. A large percentage of outdoor participants also believe that developing local parks and hiking and walking trails is important and that there should be more outdoor education and activities during the school day.

The Outdoor Foundation reports that the top outdoor activities in 2012 were running, fishing, bicycling, camping, and hiking. Bird watching is also among the favorite outdoor activities by frequency of participation.

Outdoor recreation trends are also a recurring topic of study by the United States Forest Service through the Internet Research Information Series (IRIS). An IRIS report dated January 2012⁹ provided the following nature-based outdoor recreation trends:

- Participation in walking for pleasure and family gatherings outdoors were the two most popular activities for the U.S. population as a whole.
- These outdoor activities were followed in popularity by swimming, sightseeing, viewing/photographing wildlife and wild birds, picnicking, boating, bicycling, fishing, snow/ice activities, and developed or primitive camping.
- There has been a growing momentum in participation in sightseeing, birding, and wildlife watching in recent years.

⁹ "Recent Outdoor Recreation Trends", USDA Forest Service Internet Research Information Series (IRIS) Research Brief, January 2012, <http://warnell.forestry.uga.edu/nrrt/nsre/IRISRec/IRISRec23rpt.pdf>, accessed August, 2012.

Water Recreation Trends

Recreational boating is an extremely popular activity in Maryland, and public access to the water has become a statewide priority. In a statewide survey designed to identify participation rates in over 83 recreational activities during 2002, power boating was ranked as the 12th highest statewide and participation was substantially higher in Southern Maryland (8th) and the Eastern Shore (7th).

Passive boating such as canoeing, kayaking, and sailing also attracted significant participation among Marylanders. Boaters traveling from neighboring states are thought to increase the numbers of those recreating on Maryland waterways substantially.



The *National Outdoor Recreation Participation Report* for 2012, produced by the Outdoor Recreation Foundation, states that participation in recreational paddling/kayaking grew by 32 percent over the past three years and by 27 percent in the past year. The report also found that almost 60 percent of stand-up paddling participants tried the activity for the first time in 2011, and participation in the sport grew by 18 percent nationwide. The increased interest in non-motorized boating and paddle craft has resulted in an increased demand for public access sites that accommodate these types of vessels in Maryland.

It is estimated that recreational boating and marine-related industry contribute approximately \$2.41 billion to Maryland's economy every year. The Maryland Tourism Development Board and the Department of Business and Economic Development report that in 2011, visitor spending on tourism involving recreation and entertainment was approximately \$1.2 million, an increase of 8.5 percent from 2010.

Throughout the public participation process for the *Maryland Land Preservation and Recreation Plan*, water quality and conservation, access to water for boating, fishing, and swimming, and land acquisition for watershed protection were high priorities for Marylanders.

Winter Recreation Trends

While winter sports participation takes place largely in the mountain region of Western Maryland, particularly Garrett County, it is useful to understand national trends in winter recreation. In a 2012 report, Snow Sports Industries America (SIA) uncovered the following snow sports participation habits:

- Six-point-nine percent (6.9%) of the total U.S. population (+6 years old) participates in at least one snow sport discipline.
- Alpine skiers (44%) and snowboarders (31%) make-up three-fourths of all participants.
- Participation in snow sports is becoming more diverse, with minority ethnic groups making up over 25 percent of all participants.

The Outdoor Foundation's *Topline Outdoor Recreation Report for 2012*¹⁰ reflects a three-year increase in participation (from 2009 to 2011) in cross-country skiing (12.2%) and snowshoeing (40%). According to Global Industry Analysts, Inc., the snowmobiling industry has recovered from the recession and registered positive growth in 2011.

In the random survey, resident participation in winter recreation included sledding/snow play (36% of respondents), downhill skiing/snowboarding (17% of respondents), cross country skiing/snowshoeing (6% of respondents), and snowmobiling (4% of respondents).

Demographic Trends

Baby Boomer Trends – Planning for the Demographic Shift

The Baby Boomer age group exhibits characteristics of approaching retirement or already retired and typically enjoying grandchildren. In the book *Leisure Programming for Baby Boomers*¹¹, several trends related to this population are identified:

- Baby Boomers are a generation that consists of nearly 76 million Americans.
- Beginning in 2011, this influential population began their transition out of the workforce.
- As Baby Boomers enter retirement, they will be looking for opportunities in fitness, sports, outdoors, arts and cultural events, and other activities that suit their lifestyles.
- With their varied life experiences, values, and expectations, Baby Boomers are predicted to redefine the meaning of recreation and leisure programming for mature adults.

Active Seniors

According to the U.S. Census Bureau, current national population projections suggest that this group, aged 65 and older, will grow almost 70 percent in the next 13 years. Outdoor recreation planners and providers will need to be responsive to a more active, older population that seeks adventure in its outdoor experiences. Key trends for advancing this public health related agenda include:

- Active transportation and lifestyle programs, policy, and funding are getting recognition in communities across the country.
- Exercise walking, camping, and swimming are among the top ten athletic activities ranked by total participation.
- Trails, parks, and playgrounds are among the five most important community amenities considered when selecting a home.
- The majority of Americans agree that preserving undeveloped land for outdoor recreation is important and that there should be more outdoor education activities during the school day.
- Adventure racing, slack lines in parks, mountain bicycling, rock and ice climbing, trail running, and kayaking are growing in popularity nationwide.
- Geocaching, letterboxing, Segways for access to recreation, and tree top zip lines are recognized outdoor recreation activities.

¹⁰ "Outdoor Recreation Participation Report 2012", Outdoor Foundation, 2012

¹¹ Cochran, Lynda J., Rothschild, Anne M., and Ruddick, Jodi L. *Leisure Programming For Baby Boomers*, Human Kinetics, 2009.

Youth Participation in Outdoor Recreation

In his book Last Child in the Woods: Saving Children from Nature Deficit Disorder¹², Richard Louv introduced the concept of restorative nature, highlighting the profound impact of the natural world on both children and adults. This concept, and research in support of it, has led to a growing movement promoting connections with nature in daily life. Related trends in youth participation in outdoor recreation are outlined below:

- **Downward Trend Reversed:** For the first time since 2006, the downward trend of participation in outdoor sports among young boys has reversed to the upward direction. Female teenager participation has grown to the highest rate recorded in the Outdoor Foundation's annual reports.
- **The Influence of Family:** Most youth are introduced to outdoor activities by parents, friends, family, and relatives.
- **Physical education in schools:** The importance of physical education in the school curriculum cannot be overstated. Among adults ages 18 and older who are current outdoor participants, 82 percent say they had PE in school between the ages of 6 and 12.
- Among youth ages 6 to 17, bicycling is the most popular outdoor activity.

Environmental Literacy Programming

Noted as early as 2003 in *Recreation Management* magazine, park agencies have been seeing an increase in environmental-oriented "back to nature" programs. In 2007, the National Recreation and Park Association (NRPA) sent out a survey¹³ to member agencies in order to learn more about the programs and facilities that public park and recreation agencies provide to connect children and their families with nature. The most common programs include:

- Nature hikes
- Nature-oriented arts and crafts
- Fishing-related events
- Nature-based education in cooperation with local schools

The growth of these programs is thought to come from replacing grandparents as the teacher about the "great outdoors." It is also speculated that a return to natural roots and renewed interest in life's basic elements was spurred as a response to September 11, 2001.¹⁴

¹² Richard Louv, Last Child in the Woods: Saving Children from Nature Deficit Disorder, Algonquin Books of Chapel Hill, North Carolina, 2005.

¹³ National Recreation and Parks Association (NRPA), "NRPA Completes Agency Survey Regarding Children and Nature," www.narpp.org/assets/Library/Children_in_Nature/nrpa_survey_regarding_children_and_nature_2007.pdf, April 2007.

¹⁴ Ahrweile, Margaret, "Call of the Wild – From Beautiful Blossoms to Bugs and Guts, Nature Programs are Growing as People Return to Their Roots" *Recreation Management* magazine, <http://recmanagement.com/200310fe04.php>, October 2003.

Diversity in Outdoor Recreation Participation

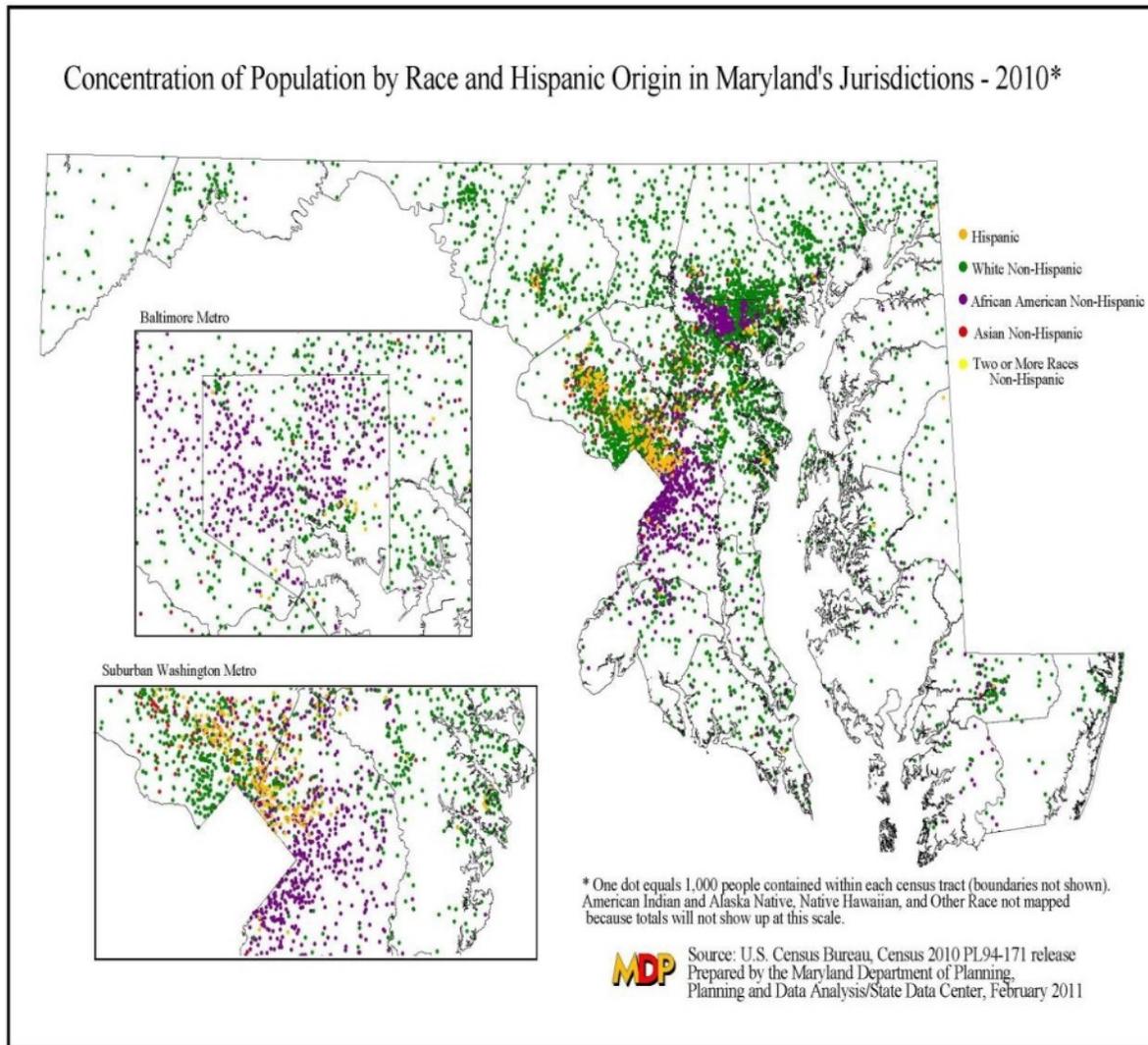
More than ever, recreation, natural resource, and park professionals will be expected to work with, and have significant knowledge and understanding of, individuals from many cultural, racial, and ethnic backgrounds. Additional observations related to multicultural recreation participation:

- **Outdoor Participation Varies by Ethnicity:** Participation in outdoor activities is higher among Caucasians than any other ethnicity and lowest among African Americans in nearly all age groups.
- **Minority Youth More Focused on School:** Minority youth participants cite school work as the top reason they do not get out more often – a barrier they cite more prominently than Caucasian youth.
- **Hispanics Looking for Nearby Outdoor Recreation:** Hispanic participants and nonparticipants alike cite a lack of access to nearby places to participate in outdoor activities as a barrier to participation more often than other ethnicities.
- **The U.S. Hispanic Population has Grown:** From 14.6 million in 1980 to nearly 52 million as of 2011 (U.S. Census 2010). Maryland’s Hispanic population has experienced astonishing growth between 2000 and 2012. **Figure 17** shows the concentration of Maryland’s diverse population in a map prepared by the Maryland Department of Planning using U.S. 2010 Census Bureau data.

“The Parks and People Foundation is honored to work in partnership with the Department of Natural Resources to implement Maryland’s Civic Justice Corps program. Taking young people from around the state who are at risk and connecting them to nature in State Parks, teaching them job skills, and helping them to restore our natural resources is important work that benefits not only those enrolled in the program, but every citizen in Maryland.”

Jacqueline M. Carrera
CEO & President

Figure 17: Concentration of Population in Maryland



Source: Maryland Department of Planning

Health Trends

Chronic diseases such as heart disease, cancer, and diabetes are the leading causes of death, disability, and health care costs in Maryland. Eliminating the three risk factors of smoking, poor eating habits, and physical inactivity would prevent 80 percent of heart disease and stroke, 80 percent of Type 2 diabetes, and 40 percent of cancers.¹⁵ In 2006, Maryland's Department of Health and Mental Hygiene developed a ten-year *Nutrition and Physical Activity Plan*. The goal of the plan is to encourage the citizens of Maryland to adopt and maintain healthy eating habits and lead physically active lifestyles to prolong the length and quality of life.

¹⁵ Shell, Donald, Director, Cancer and Chronic Disease Bureau, Prevention and Health Promotion Administration, Maryland Dept. of Health and Mental Hygiene, Presentation "What is a Healthy Community?", Maryland Healthy Eating and Active Lifestyle Coalition Spring 2013 Meeting, May 7, 2013.

Heritage Tourism Trends

The National Trust for Historic Preservation defines heritage tourism as “traveling to experience the places, artifacts, and activities that authentically represent the stories and people of the past.” Maryland’s Executive Order 13287 defines heritage tourism as “...*the business and practice of attracting and accommodating visitors to a place or area based especially on the unique or special aspects of that locale’s history, landscape, and culture.*” Studies have consistently shown that heritage travelers stay longer and spend more money than other kinds of travelers.

For many communities in Maryland, heritage tourism is an important economic development tool.

A successful heritage tourism program requires a strong stewardship component. Conservation of the irreplaceable cultural, historical, and natural resources that make a place appealing to the heritage traveler is necessary for heritage tourism to thrive. Collaboration between cultural and natural resource interests is also critical.

During 2011, 34.4 million domestic travelers visited Maryland, an increase of 6.8 percent over the previous year. These visitors spent more than \$14.3 billion on travel-related expenses in 2011, while generating close to \$2 billion in state and local taxes, and providing more than 130,000 jobs for Marylanders. Due to proximity to major population centers, the drive market is the primary market for Maryland. Scenic Byways are one of the primary marketing tools utilized by the Maryland Office of Tourism Development in partnership with the Maryland State Highway Administration.

The United Health Foundation has ranked Maryland 19th in its 2012 *State Health Rankings*, up from 24th in 2010. The State’s biggest strengths include:

- Low percentage of children in poverty
- Low prevalence of smoking
- Ready availability of primary care physicians

Some of the challenges the State faces include:

- High levels of air pollution
- High prevalence of low birth weight and high infant mortality rate
- High violent crime rate

NOTE: Maryland’s air quality ranked 40th in air quality nationwide two years in a row.



19TH CENTURY BACKPACKER



The Civil War Soldier



ANTIETAM CAMPAIGN 1862



An unnamed citizen of Frederick City said the following of the Confederates he had beheld marching through his hometown: "I have never seen a mass of such filthy strong-smelling men. Three in a room would make it unbearable, and when marching in column along the street the smell from them was most offensive... The filth that pervades them is most remarkable... They have no uniforms, but are all well armed and equipped, and have become so inured to hardships that they care but little for any of the comforts of civilization... They are the roughest looking set of creatures I ever saw, their features, hair and clothing matted with dirt and filth, and the scratching they kept up gave warrant of vermin in abundance." Another observer described the Confederates simply as "a lean and hungry set of wolves."



Veteran soldiers learned just how much (or how little) they needed to carry on their persons to sustain life in the field, where fast-marching armies often left their supply wagons well to the rear.

- Canvas Bag (with 48 paper-wrapped cartridges)
- Canteen and Mess Cup
- Knapsack (with blanket, socks, tarp, extra clothing and personal items)
- Rucksack (with ration)
- Bayonet and Scabbard
- Head Blanket
- "Mussawler" (leaving left)
- Journal
- Extra Socks
- Pocket Mirror
- Toothbrush
- Candle
- Extra Drawers
- Cap Pouch (for pressing blanket)
- Wallut
- Knapack Tracts



Programs like the Maryland Heritage Areas Program, administered by the Maryland Historical Trust, and the Scenic Byways Program, led by the State Highway Administration, are examples of how tourism and conservation goals can be mutually supportive.

Today, tourism, land preservation, heritage, and culture are much more likely to overlap. For example, the Maryland Heritage Area Authority, which is administered by the Maryland Historical Trust and the Maryland Department of Planning and funded by Maryland Department of Natural Resources Program Open Space, supports and collaborates with local agencies to advance heritage tourism.

The **Maryland Land Preservation and Recreation Plan** telephone survey finding that visiting historic sites is the most popular outdoor recreation activity in Maryland – tied only with walking – is remarkable. Clearly, Marylanders value and enjoy these types of experiences. This finding speaks to the need for state and local government to prioritize funding of outdoor recreation opportunities that incorporate both cultural and natural resource experiences for Marylanders and visitors.

The majority of Maryland residents (78%) would like to see the DNR pursue an emphasis that focused on a balance between natural resource preservation/protection and providing outdoor recreation in natural settings.

2013 Maryland Land Preservation and Recreation Survey Report

Climate Change Trends and Impacts on Outdoor Recreation & Natural Resources

An extensive discussion on climate change is provided in **Chapter 5: Land Protection & Conservation**. However, a brief mention of the potential impacts of climate change on outdoor recreation, natural resources, and public safety may help raise awareness of this issue. Consideration must be given to outdoor recreation facility siting; storm event preparedness; energy conservation measures; water, forest, and farm management practices; and public information systems. The following conditions resulting from climate change have the potential to negatively impact the Maryland outdoor recreation experience:

- Erosion Vulnerability
- Wetland Adaptation Areas
- Storm Surge Risk
- Drought Hazard Risk
- Wildfire Priority Risk
- Loss of High Quality Cold Water Resources
- 100 and 500-Year Floodplain
- Coastal Flooding

E. Accessibility and Equity

Understanding demand for outdoor recreation provides DNR, counties, and local communities with guidance in policy development and planning for the future needs of Maryland’s citizens and visitors. A collaborative approach among social service professionals, public health practitioners, educators and state, county, and local officials is essential to providing all Maryland with access to public lands and water resources.

Americans with Disabilities Act (ADA) – Compliance

On September 14, 2010 the U.S. Department of Justice (DOJ) issued amended regulations for implementing the Americans with Disabilities Act (ADA 2010 Standards). On March 15, 2011 the amended Act became effective and, for the first time in history, includes public recreational facility and amenity design and construction requirement. Compliance with the regulations became effective March 15, 2012. This includes the development of a three-year transition plan. By March 15, 2015, implementation of the three-year transition plan must be complete.

The DNR is continually working to expand opportunities for people with disabilities to enjoy Maryland's great outdoors. For example, the DNR recently completed a multiple year project at Martinak State Park that enhanced access to camping, fishing, picnic areas, park amphitheater, information kiosks, a fitness trail, and boat ramp for park visitors with disabilities. More information on accessible facilities and programs at DNR managed properties can be found online at DNR’s [“Access for All”](http://www.dnr.state.md.us/publiclands/accessforall.asp)¹⁶ website.



¹⁶ <http://www.dnr.state.md.us/publiclands/accessforall.asp>

Maryland's Park Equity Analysis Tool

The Park Equity Analysis provides a quantitative and statewide analysis to increase the access of public lands for children of unserved communities. For these purposes, unserved communities are those communities that have little to no access to nature and open space. The analysis is built upon the U.S. Census Data combined with statewide layers identifying public and local parks. The model prioritizes unserved areas of Maryland in need of park space by identifying areas with:

- High concentration of children under the age of 16
- High concentration of populations below the poverty line
- High population density
- Low access to public park space



CHAPTER 3: MARYLAND OUTDOOR RECREATION SUPPLY

A. Public Lands Inventory & Level of Service Analysis

A primary goal of the **Maryland Land Preservation and Recreation Plan** is to assess supply and demand for outdoor recreation and proximity of Maryland residents to outdoor recreation and natural resources statewide. For this purpose, the LPRP involved the following activities to determine Maryland’s **supply** of outdoor recreation and natural resources:

- Updated the inventory of existing state and federal public lands
- Conducted a level of service analysis to determine resident proximity to public lands and access to water

“It (outdoor recreation) brings families closer together and more quality time. Helps kids understand the importance of it all. Don't close any state parks because we need them.”

Public Input Comment

The following activities were also conducted to determine Maryland’s **demand** for outdoor recreation and natural resources:

- Conducted statistically-valid survey and online open link surveys
- Received input from the Technical Advisory Committee, Trails Committee, stakeholders, and DNR Staff

Inventory

An inventory of state recreation assets was conducted, and included all publicly accessible Maryland DNR lands and waters, as well as all National Park Service (NPS) parks in the state. Other outdoor recreation assets owned and managed by counties, municipalities, and private providers were not included in this inventory due to a lack of comprehensive data. Completion of a comprehensive inventory of all outdoor recreation assets at a future date would provide a complete picture of outdoor recreation opportunities in Maryland. In addition, there is a gap in available data relative to the state’s historic and cultural resources which needs to be addressed.

Only natural resource-based recreation sites were included in the inventory. User-based recreation facilities, such as sports complexes or swimming pools, were excluded, as such amenities are not within the purview of the DNR.

Data was gathered on all recreation amenities at each location such as facilities (shelter, boat ramp, etc.), permitted activities (hunting, swimming, etc.), and resources (natural area, beach, etc.). A detailed description methodology for compiling inventory data may be found in **Appendix F: Inventory and Level of Service Analysis Methodology and Maps**.

The following lists all amenities included in this inventory:

Beach	Equestrian Trails	Picnic Tables
Bicycling Trails	Exhibit or Interpretive Center	Playground
Boat Ramp	Fishing	Restrooms
Boat Rentals	Food	RV Sites/Shelters
Cabins	Hiking Trails	Shelter (Picnic)
Camper Cabins	Historic Site or Museum	Shooting Range
Camping	Hunting	Snowmobiles
Camping-Primitive	Lodging	Snowshoeing or X-Country Skiing
Camping-Youth	Mountain Bike Trails	Swimming
Canoeing	Park Store	Visitor Center
Dump Station	Pet Loop	Wheelchair Access

DNR Land Unit Designations

Below is a listing of DNR land unit designations:

- **State Parks (SP)** are operated primarily for outdoor recreation purposes. Improvements to facilitate users' access and comfort are typically found in sections of the property, although much of the land remains as undeveloped natural area in most cases.
- **State Forests (SF)** are managed for multiple purposes, including water quality protection, wildlife enhancement, timber, natural beauty, and low-intensity recreation. Recreational Improvements are generally very limited.
- **Wildlife Management Areas (WMA)** focus on wildlife enhancement and low intensity wildlife-related recreation, including hunting and observation. Recreational improvements are minimal.
- **Natural Resources Management Areas (NRMA)** are managed for optimal use of the resources on the site, which may suggest varying levels or intensities of recreational development.
- **Natural Environment Areas (NEA)** are large preserved land units of important natural attraction or unique geological or biological significance and high scenic landscape value. Recreational development is generally very limited.
- **Fish Management Areas (FMA)** are managed the Fisheries Service and includes major aquatic features such as a highly specialized fish propagation facility or a public fishing pond.
- **Wildlands** are areas of state-owned land or water that have retained their wilderness character or contain rare or vanishing species of plant or animal life. Designated by the Maryland General Assembly, they may include unique ecological, geological, scenic, and contemplative recreational areas.

Level of Service Analysis

The level of service analysis for this plan was based on GIS data provided by DNR, 2010 U.S. Census data, and random survey results of self-reported public use of recreation amenities throughout the state. The level of service analysis evaluated residents' proximity to state and federal public lands, assessed where within the state and to what extent these amenities are available.

B. Analysis Methodology

A statistically-valid phone survey was undertaken to collect data analyzed in the ***Maryland Land Preservation and Recreation Plan***. One part of this survey asked respondents to note those recreation activities they commonly use. This data provided a basis for map analysis based on the inventory compiled, specifically to examine those amenities the survey indicated to be most common.

Only those recreational activities in which most respondents tend to participate were targeted for analysis. Target activities chosen for analysis were:

- Walking
- Picnicking
- Visiting natural areas
- Water recreation including swimming, fishing, paddling, motor boating, and/or sailing

While the random survey respondents ranked visiting historical sites nearly as high as walking, GIS data was inadequate to develop a complete analysis of this activity. It is recommended that DNR work with the staff of the Maryland Historical Trust to develop a GIS layer to assess statewide levels of service for historic and cultural sites.

Popular license fee-based activities that deserve a more focused examination were also chosen for analysis. These activities were:

- Hunting
- Fishing

Site amenities that support these activities were determined by the consultant and verified by DNR staff. All locations with a particular type of amenity, such as hiking trails or picnic tables, were isolated and analyzed using specialized GIS tools developed for examining outdoor recreation included in Geo-Referenced Amenities Standards Program (GRASP®) methodology.

Proximity Analysis

All spatial analyses conducted for the Maryland LPRP were “proximity analyses.” These analyses examine the extent of available recreation amenities. A specific distance, called a catchment, is applied to each location being analyzed. Such analysis reveals how many of each type of outdoor recreation amenity are available within that specified distance. The results are mapped to indicate greater or lesser proximity to the amenities across the state. These analyses do not indicate proximity to an actual amenity but rather show proximity to the property boundary of the location at which that amenity is provided.

A catchment distance of five miles was used for all final analyses. This distance approximately corresponds to a 10-15 minute drive or a reasonable bike ride. It is intended to capture the casual visitor using a recreation amenity after work or for just a couple of hours and assumes access to all included locations via roads, sidewalks, trails, or other circulation routes. This five-mile distance was chosen as most useful in determining proximity to recreation amenities for a project of this size and extent, and correlates to the unprecedented 72 percent visitor increase between 2008 and 2012 at state parks with accessible waterfront areas, swimming beaches, lakes, oceans and rivers.

Proximity vs. Access

A distinction must be made between proximity and access. The analyses conducted for the LPRP are intended solely to indicate areas of greater or lesser proximity to amenities within the state. These should not be read to suggest better or worse access, as that implies a host of other considerations beyond the scope of this study. Further, any indication of proximity to more or fewer amenities is relative to other areas of the State of Maryland. No comparison is being made to recreation systems in other states, or to any established standard for such resources.

C. Inventory and Level of Analysis

The level of service analysis is based on the proximity analyses and results from the statistically-valid survey. These are indicative of supply and demand, respectively, and are particularly useful in determining areas within the State of Maryland where level of service may be improved. Mapping these results can yield information that may directly inform and help guide future planning decisions.

Level of Service:
The capacity of the park system's components to meet the needs of the public.

5-Mile Analysis

Determining gaps in level of service used a 5-mile catchment area. This distance was determined to approximate a 15 minute drive, and is intended to reflect how far the casual visitor to an outdoor recreation area may travel by car or other modes including public transit, by bicycle, or on foot.

Gaps in service emerge as well as those areas with proximity to a greater number of locations providing a chosen amenity. This distance was used for all analyses and resulting findings discussed herein. To illustrate gaps in service using the 5-mile catchment area, two types of maps were produced for the **Maryland Land Preservation and Recreation Plan**. Resource maps, used for reference, and Perspective maps that display analysis results.

D. Resource Maps (Reference)

Resource maps include a state base map (A), four regional key maps to identify inventory locations (B, C, D, and E), and a state population density map (F). The assets included in this inventory serve as the basis for all gap analyses conducted for the **Maryland Land Preservation and Recreation Plan**.

The state population density and regional key maps are provided for an overview of DNR and NPS lands and a detailed inventory of natural and water based resources in each of the four regions – Central, Western, Southern, and Eastern. The resource maps, together with the Perspective maps, provide a well-rounded view of available resources and areas to target for land acquisition to achieve a balanced level of service throughout the DNR service areas.

Resource Map F: State Population Density

To provide context for analysis, this map displays population density in the state of Maryland by census tract as reported in the 2010 U.S. Census. Population densities range from five people per square mile, found in south Dorchester County, to nearly 50,000 people per square mile within the Langley Park area of Prince Georges County. The majority of Maryland residents are concentrated in and around the City of Baltimore and in the vicinity of Washington D.C.

These high density areas are worth noting in review of map analyses as gaps in service in densely populated areas can have a more significant impact than such gaps in less populated areas of the state. Improving level of service in such higher population areas can provide a greater return on investment for development of new amenities or enhancement of existing ones.

Resource Maps B, C, D, and E: Regional Public Lands Inventory

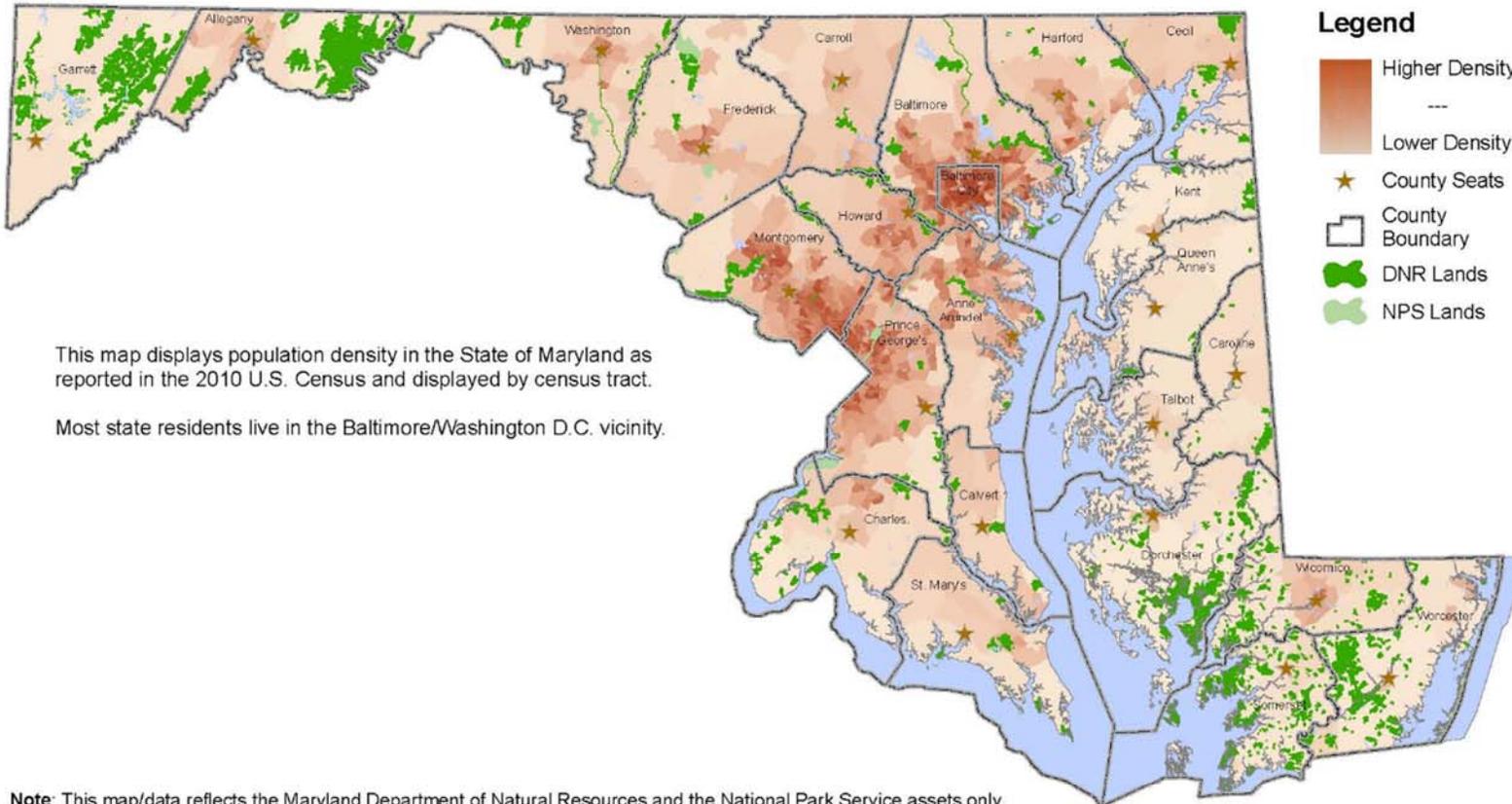
Regional inventory resource maps provided a detailed reference showing the distribution of different types of publicly accessible DNR and NPS natural and water based resources. These include state parks, wildlife management areas, state forests, National Park Service properties, and other DNR assets.

Map 2: Resource Map F: State Population Density

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Resource Map F: State Population Density

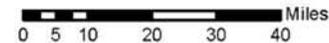
Connecting People and Places



Note: This map/data reflects the Maryland Department of Natural Resources and the National Park Service assets only.

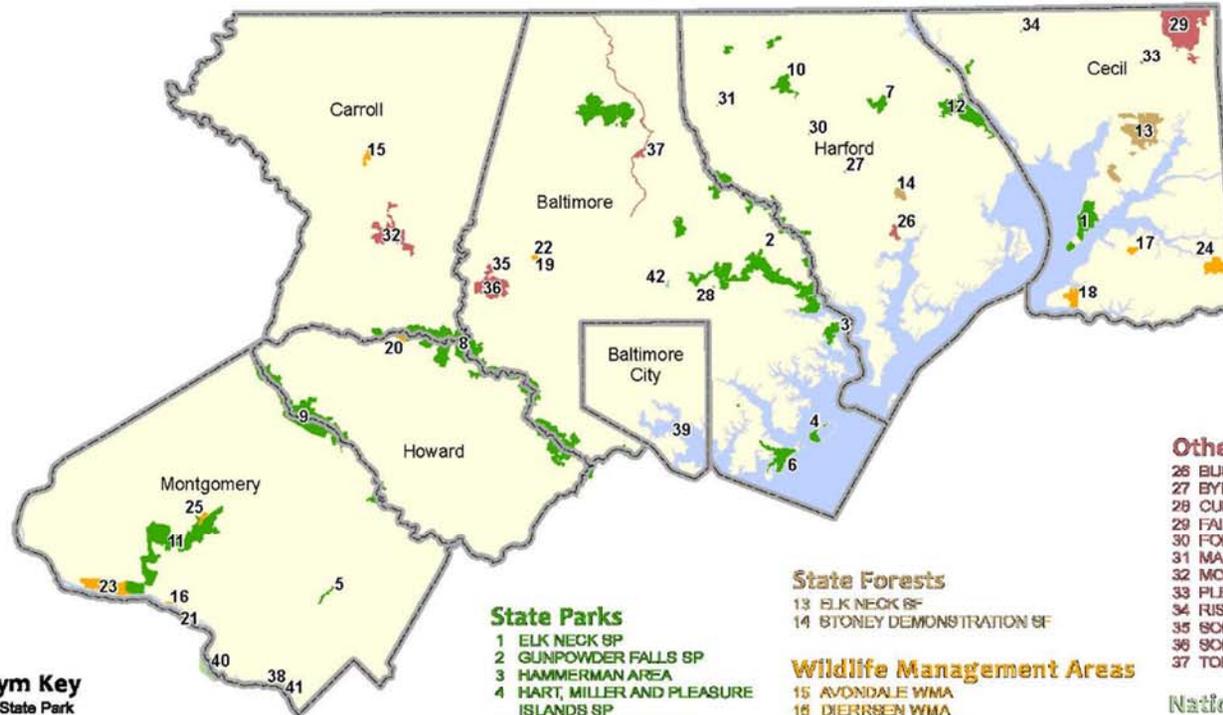


Map Product for MD Dept. of Natural Resources by The GRASP® Team
 This map is intended for planning and discussion only.
 Please refer to the project document for map details.
 GIS sources may include: MD Dept. of Natural Resources, ESRI, GRASP® Team
 DNR November 2013.



Map 3: Resource Map B: Central Region Inventory

Maryland Department of Natural Resources: Land Preservation and Recreation Plan
Resource Map B: Central Region Inventory



Note: This map/data reflects the Maryland Department of Natural Resources and the National Park Service assets only.

- Acronym Key**
- SP State Park
 - SF State Forest
 - WMA Wildlife Management Area
 - HCF Heritage Conservation Fund Site
 - NEA Natural Environment Area
 - NRMA Natural Resource Management Area
 - FMA Fish Management Area
 - FT Fire Tower
 - MPT Marine Police Terminal

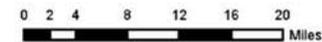
- State Parks**
- 1 ELK NECK SP
 - 2 GUNPOWDER FALLS SP
 - 3 HAMMERMAN AREA
 - 4 HART, MILLER AND PLEASURE ISLANDS SP
 - 5 MATTHEW HENSON SP
 - 6 NORTH POINT SP
 - 7 PALMER SP
 - 8 PATAPSCO VALLEY SP
 - 8 PATUXENT RIVER SP
 - 10 ROCKS SP
 - 11 SENECA CREEK SP
 - 12 SUSQUEHANNA SP

- State Forests**
- 13 ELK NECK SF
 - 14 STONEY DEMONSTRATION SF

- Wildlife Management Areas**
- 15 AVONDALE WMA
 - 16 DIERRSEN WMA
 - 17 EARLEVILLE WMA
 - 18 GROVE FARM WMA
 - 10 GWYNNBROOK WMA
 - 20 HUGG-THOMAS WMA
 - 22 L-1 MPT
 - 23 MICKEE BESHERS WMA
 - 24 OLD BOHEMIA WMA
 - 25 STRIDER WMA

- Other DNR Assets**
- 26 BUSH DECLARATION NRMA
 - 27 BYNUM RUN POND FMA
 - 28 CUB HILL FT
 - 29 FAIR HILL NRMA
 - 30 FOREST HILL LAKE FMA
 - 31 MADONNA FT
 - 32 MORGAN RUN NEA
 - 33 PLEASANT HILL FT
 - 34 RISING SUN POND FMA
 - 35 SOLDIERS DELIGHT HCF
 - 36 SOLDIERS DELIGHT NEA
 - 37 TORREY C BROWN RAIL TRAIL

- National Park Service**
- 38 CLARA BARTON NATIONAL HISTORIC SITE
 - 38 FORT MCHENRY NATIONAL MONUMENT AND HISTORIC SHRINE
 - 40 GEORGE WASHINGTON MEMORIAL PARKWAY
 - 41 GLEN ECHO PARK
 - 42 HAMPTON NATIONAL HISTORIC SITE



Map 4: Resource Map C: Southern Region Inventory

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Resource Map C: Southern Region Inventory

State Parks

- 1 CALVERT CLIFFS SP
- 2 CHAPEL POINT SP
- 3 CHAPMAN SP
- 4 FRANKLIN POINT SP
- 5 GREENWELL SP
- 6 JONAS GREEN SP
- 7 NEW TOWNE NECK SP
- 8 POINT LOOKOUT SP
- 9 PURBE AREA
- 10 ROSARYVILLE SP
- 11 SANDY POINT SP
- 12 SMALLWOOD SP
- 13 ST MARYS RIVER SP
- 14 ST. CLEMENTS ISLAND SP

Note: This map/data reflects the Maryland Department of Natural Resources and the National Park Service assets only.

State Forests

- 16 CEDARVILLE SF
- 16 DONCASTER DEMONSTRATION SF
- 17 SALEM STATE FOREST
- 18 ST INIGOES SF

Wildlife Management Areas

- 19 BOWEN WMA
- 20 CEDAR POINT WMA
- 21 CHELTENHAM WMA
- 22 CHICAMUXEN WMA
- 23 MYRTLE GROVE WMA
- 24 RIVERSIDE WMA

Other DNR Assets

- 25 BELT WOODS HCF
- 26 BELT WOODS NEA
- 27 BEN DOANE AREA
- 28 BILLINGSLEY NRMA
- 29 CALVERT MARINE POLICE RADIO TOWER
- 30 CHANEY NRMA
- 31 CROOK NRMA
- 32 DOUGLAS POINT AREA
- 33 FULL MILL BRANCH NRMA
- 34 HALL CREEK NRMA
- 35 HALLOWING POINT BOAT RAMP
- 36 HONEY BRANCH NRMA
- 37 HOUSE CREEK NRMA
- 38 HUGHESVILLE POND FMA
- 39 INDIAN CREEK NRMA
- 40 KINGS LANDINGS NRMA
- 41 LONGHILL FT
- 42 MANNING HATCHERY FMA
- 43 MATTAWOMAN NEA
- 44 MAXWELL HALL NRMA
- 45 MERKLE WILDLIFE SANCTUARY NRMA
- 46 MILLTOWN LANDING NRMA
- 47 NANJEMOY NRMA
- 48 PARKER CREEK HCF
- 49 PATUKENT OXBOW HCF
- 50 PINEY BRANCH BOG HCF
- 51 PRIDE FINANCE NRMA
- 52 SEVERN RUN NEA
- 53 SPICE CREEK NRMA
- 54 UHLER NRMA
- 55 WELCOME FT
- 56 WILSON FARM AREA
- 57 ZEKIAH SWAMP NEA

National Park Service

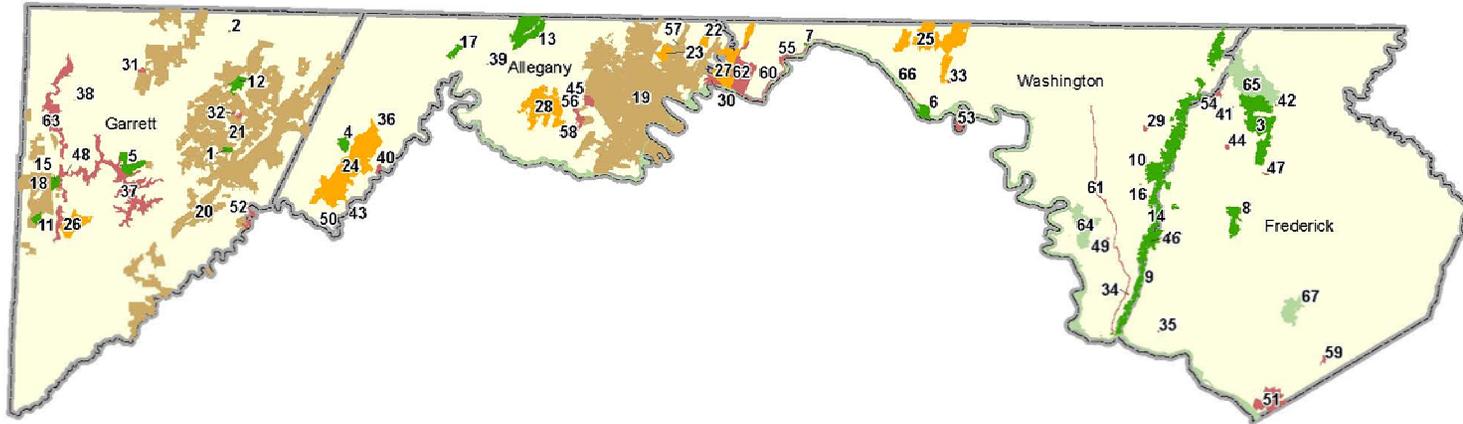
- 58 BALTIMORE WASHINGTON PARKWAY
- 59 FORT POOTE PARK
- 60 FORT WASHINGTON PARK
- 61 GREENBELT PARK
- 62 COSON COVE PARK AND COSON HILL FARM
- 63 PISCADAWAY PARK
- 64 THOMAS STONE NATIONAL HISTORIC SITE



Map 5: Resource Map D: Western Region Inventory

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Resource Map D: Western Region Inventory



State Parks

- 1 BIG RUN SP
- 2 CASSELMAN BRIDGE SP
- 3 CUNNINGHAM FALLS SP
- 4 DANS MOUNTAIN SP
- 5 DEEP CREEK LAKE SP
- 6 FORT FREDERICK SP
- 7 FORT TONOLOWAY SP
- 8 GAMBRILL SP
- 9 GATHLAND SP
- 10 GREENBRIER SP
- 11 HERRINGTON MANOR SP
- 12 NEW GERMANY SP
- 13 ROCKY GAP SP
- 14 SOUTH MOUNTAIN SP
- 15 SWALLOW FALLS SP
- 16 WASHINGTON MONUMENT SP
- 17 WILLS MOUNTAIN SP

State Forests

- 18 GARRETT SF
- 19 GREEN RIDGE SF
- 20 POTOMAC SF
- 21 SAVAGE RIVER SF

Wildlife Management Areas

- 22 BELLE GROVE WMA
- 23 BILLMEYER WMA
- 24 DANS MOUNTAIN WMA
- 25 INDIAN SPRINGS WMA
- 26 MT. NEBO WMA
- 27 SIDELING HILL WMA
- 28 WARRIOR MOUNTAIN WMA

Other DNR Assets

- 29 A.M. POWELL HATCHERY FMA
- 30 AARON STRAUS HCF
- 31 BEAR CREEK HATCHERY FMA
- 32 BEAR PEN HEADWATERS HCF
- 33 BOYD MOUNTAIN POND HCF
- 34 BROWNSVILLE POND FMA
- 35 BRUNSWICK POND FMA
- 36 DANS ROCK FT
- 37 DEEP CREEK LAKE NRMA
- 38 ELDER HILL FT
- 39 EVITTS CREEK POND FMA
- 40 FORT HILL HCF
- 41 FOXVILLE LOOKOUT TOWER
- 42 FRANK BENTZ POND FMA
- 43 GARY A YODER FMA
- 44 GRAVEL HILL SWAMP HCF
- 45 HANGING PRAIRIE SHALE BARREN HCF
- 46 LAMBS KNOLL FT
- 47 LEWISTOWN HATCHERY FMA
- 48 LOWER DEEP CREEK HCF
- 49 MCCLELLAN'S LOOKOUT FT
- 50 MCCOOLE FMA
- 51 MONOCACY NRMA
- 52 NORTH BRANCH POTOMAC FMA
- 53 PRATHERS NECK HCF
- 54 RIDENOUR SWAMP HCF
- 55 ROUND TOP HILL HCF
- 56 SUGAR HOLLOW HCF
- 57 TOWN HILL FT
- 58 TURKEY CAMP SHALE BARREN HCF
- 59 URBANA LAKE FMA
- 60 WESTERN MARYLAND RAIL TRAIL
- 61 WEVERTON ROXBURY CORRIDOR RAIL TRAIL
- 62 WOODMONT NRMA
- 63 YOUGHIOGHENY RIVER NEA

Note: This map/data reflects the Maryland Department of Natural Resources and the National Park Service assets only.

National Park Service

- 64 ANTIETAM NATIONAL BATTLEFIELD
- 65 CATOCTIN MOUNTAIN PARK
- 66 CHEESAPEAKE AND OHIO CANAL NATIONAL HISTORICAL PARK
- 67 MONOCACY NATIONAL BATTLEFIELD

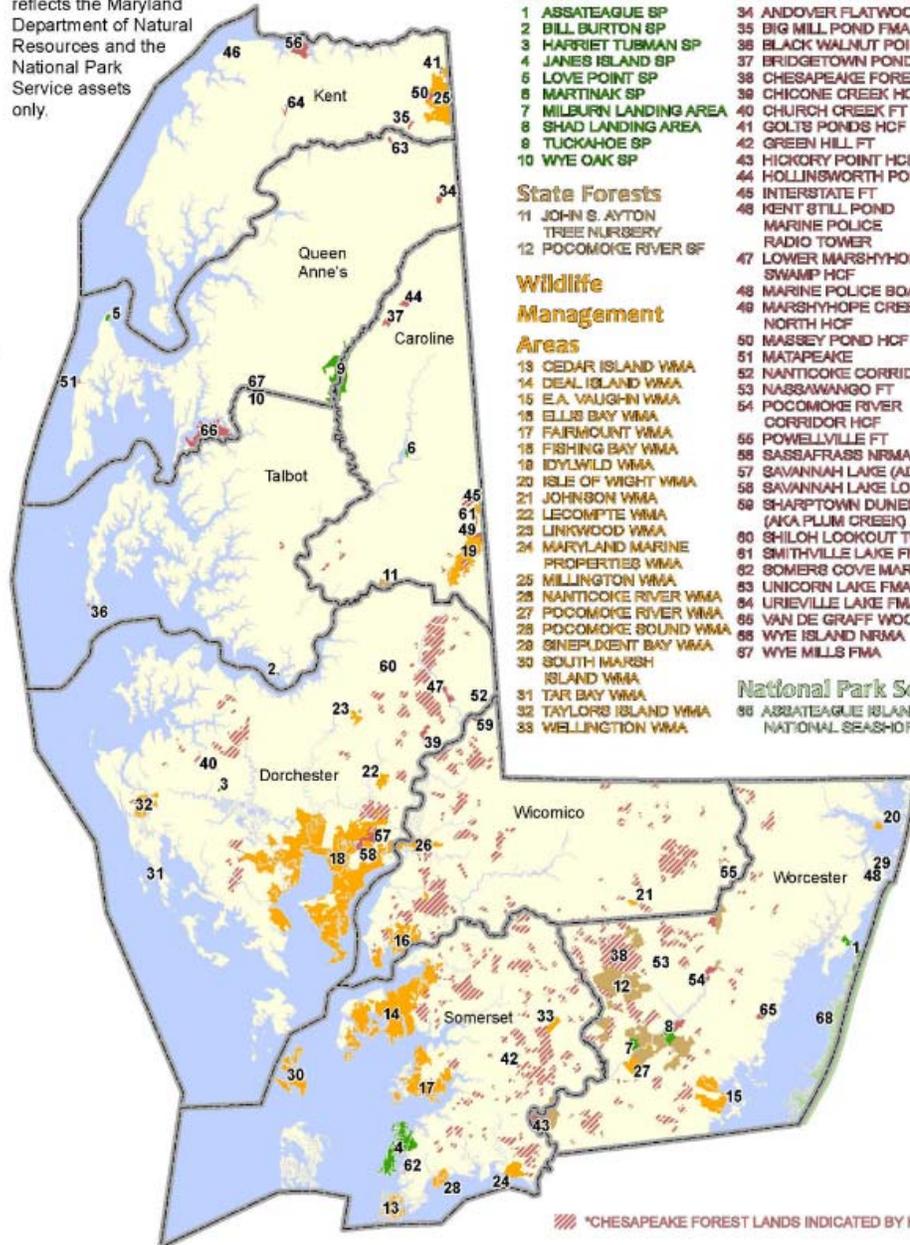


Map 6: Resource Map E: Eastern Region Inventory

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Resource Map E: Eastern Region Inventory

Note: This map/data reflects the Maryland Department of Natural Resources and the National Park Service assets only.



State Parks

- 1 ASSATEAGUE SP
- 2 BILL BURTON SP
- 3 HARRIET TUBMAN SP
- 4 JAMES ISLAND SP
- 5 LOVE POINT SP
- 8 MARTINAK SP
- 7 MILBURN LANDING AREA
- 8 SHAD LANDING AREA
- 8 TUCKAHOE SP
- 10 WYE OAK SP

State Forests

- 11 JOHN S. AYTON TREE NURSERY
- 12 POCOMOKE RIVER SF

Wildlife Management Areas

- 13 CEDAR ISLAND WMA
- 14 DEAL ISLAND WMA
- 15 E.A. VAUGHN WMA
- 16 ELLIS BAY WMA
- 17 FAIRMOUNT WMA
- 18 FISHING BAY WMA
- 18 IDYLWILD WMA
- 20 ISLE OF WIGHT WMA
- 21 JOHNSON WMA
- 22 LECOMPTE WMA
- 23 LINKWOOD WMA
- 24 MARYLAND MARINE PROPERTIES WMA
- 25 MILLINGTON WMA
- 26 NANTICOKE RIVER WMA
- 27 POCOMOKE RIVER WMA
- 28 POCOMOKE SOUND WMA
- 28 SENECA BAY WMA
- 30 SOUTH MARSH ISLAND WMA
- 31 TAR BAY WMA
- 32 TAYLORS ISLAND WMA
- 33 WELLINGTON WMA

Other DNR Assets

- 34 ANDOVER FLATWOODS HCF
- 35 BIG MILL POND FMA
- 36 BLACK WALNUT POINT NRMA
- 37 BRIDGETOWN PONDS HCF
- 38 CHESAPEAKE FOREST LANDS*
- 39 CHICONE CREEK HCF
- 40 CHURCH CREEK FT
- 41 GOLTS PONDS HCF
- 42 GREEN HILL FT
- 43 HICKORY POINT HCF
- 44 HOLLINSWORTH POND HCF
- 45 INTERSTATE FT
- 46 KENT STILL POND
- MARINE POLICE RADIO TOWER
- 47 LOWER MARSHHOPE SWAMP HCF
- 48 MARINE POLICE BOAT HOUSE
- 49 MARSHHOPE CREEK NORTH HCF
- 50 MASSEY POND HCF
- 51 MATAPEAKE
- 52 NANTICOKE CORRIDOR HCF
- 53 NASSAWANGO FT
- 54 POCOMOKE RIVER CORRIDOR HCF
- 55 POWELLVILLE FT
- 56 SASSAFRASS NRMA
- 57 SAVANNAH LAKE (ADKINS) HCF
- 58 SAVANNAH LAKE LODGE HCF
- 59 SHARPTOWN DUNES (AKA PLUM CREEK) HCF
- 60 SHILOH LOOKOUT TOWER
- 61 SMITHVILLE LAKE FMA
- 62 SOMERS COVE MARINA
- 63 UNICORN LAKE FMA
- 64 URIEVILLE LAKE FMA
- 65 VAN DE GRAFF WOODS HCF
- 66 WYE ISLAND NRMA
- 67 WYE MILLS FMA

National Park Service

- 68 ASSATEAGUE ISLAND NATIONAL SEASHORE

/// CHESAPEAKE FOREST LANDS INDICATED BY HATCH



E. Perspective Maps (Analytical)

The perspective maps produced for the *Maryland Land Preservation and Recreation Plan* yield valuable information regarding supply and demand for outdoor recreation in the state. These maps only reflect the inventory included in the *Maryland Land Preservation and Recreation Plan*, which is limited to DNR and National Park Service (NPS) assets. Thus, the results of these map analyses are limited. ***Any indicated service gaps may in fact be served by counties, municipalities, districts, non-public facilities, or private providers.***

For the purposes of this study, the following terms are used:

- “Level of service” refers to proximity to greater or fewer focus amenities within five mile proximity.
- “Higher level of service” refers to more proximate amenities
- “Lower level of service” refers to fewer proximate amenities.
- “Gaps in service” or “unserved areas” refer to an absence of at least one location with such amenities within five miles. Such service gaps are highlighted by a red dotted line on the associated map graphic.

Most perspective map layouts actually include two maps. One displays the results of a proximity analysis, such as proximity to hiking trails or picnic tables. A smaller inset map is also included to show level of participation in a related activity, such as walking or picnicking, by county. Taken together, these two maps are intended to provide an understanding of both supply and demand of outdoor recreation in the state of Maryland.

Proximity analysis maps display five-mile proximity to an amenity or set of outdoor recreation amenities at DNR or NPS sites. The following key was used to illustrate proximity data on Perspective maps:

- **Gray** shaded areas indicate that such amenities or resources are not available within five miles of a location. It is important to note these areas as gaps in service.
- **Light orange** tones show that a given amenity or set of amenities is available in at least one location within five miles.
- **Deeper orange** tones indicate that more instances of such amenities are available.

Inset participation maps display the level of survey respondent participation in an activity by county. The percentage of county respondents participating in a given activity is displayed on the map, with lighter or deeper orange shading to represent lesser or greater intensity.

Findings as a result of these analyses focus on areas that are without service or are unserved based on level of participation in an activity. This focus is provided to facilitate future planning to improve levels of service and resource allocation.

“There is a direct link between a lack of exposure to nature and higher rates of attention-deficit disorder, obesity, and depression. In essence, parks and recreation agencies can and are becoming the ‘preferred provider’ for offering this preventative healthcare.”

Fran P. Mainella, former Director of the National Park Service & Co-Founder of the U.S. Play Coalition

The following discussion highlights findings for map analyses of natural areas, water access, picnicking, hunting, fishing, hiking, and the statewide network of various trail types.

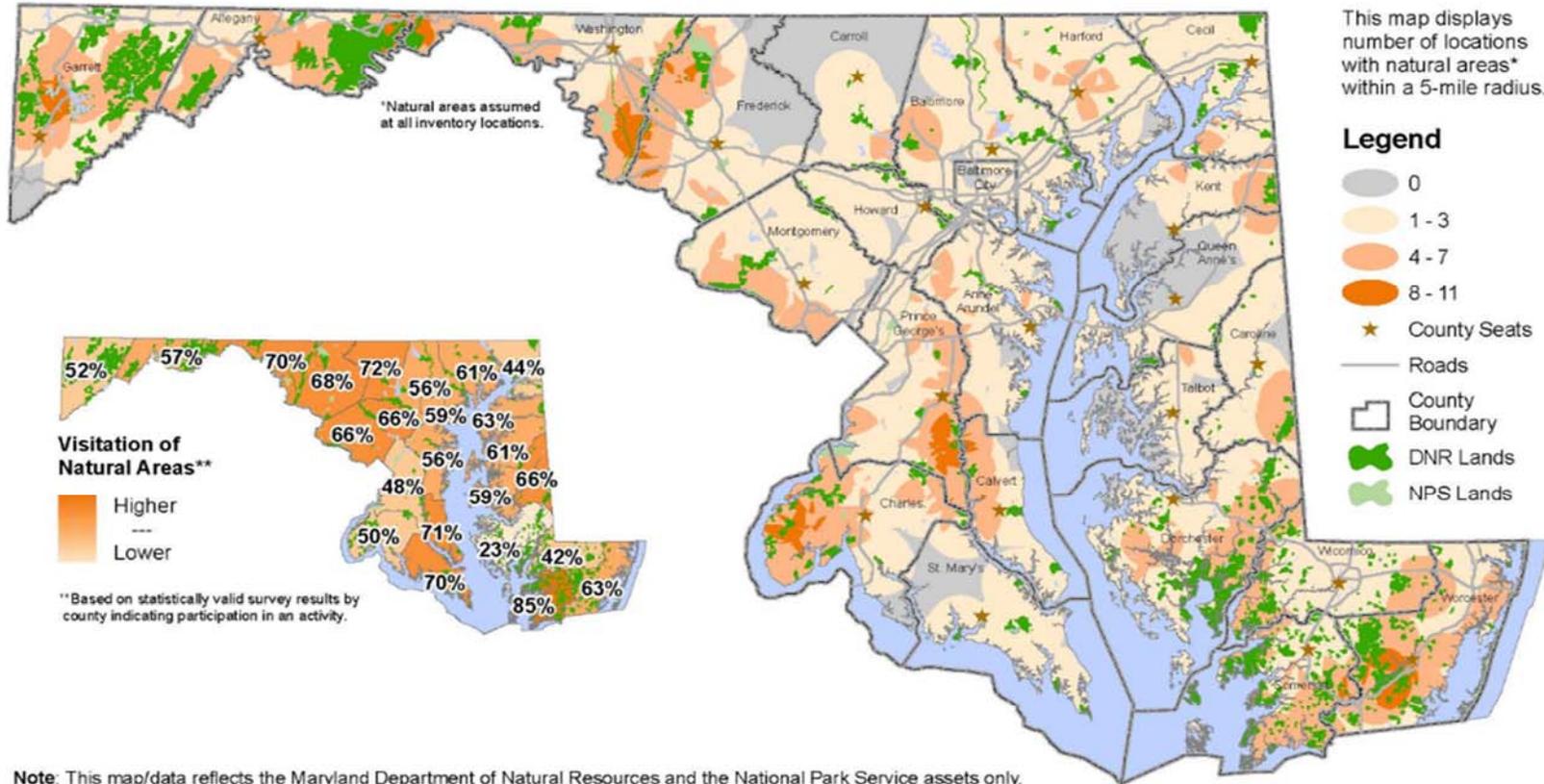
Perspective Map A: 5-Mile Proximity to Natural Areas

For the purposes of this analysis, all locations included in the inventory were assumed to have associated natural areas. Upon comparison with the level of visitation to natural areas by county, notable gaps in service emerge in north Carroll County, East Frederick County, north St. Mary's County, Kent County, Queen Anne's County, and Talbot County. At least two-thirds of survey respondents in these counties report visitation of natural areas as a common outdoor recreation activity. As no existing inventory locations fall within these areas, these may be good target areas for future land acquisition.

Map 7: Perspective Map A: Proximity to Natural Areas

Maryland Department of Natural Resources: Land Preservation and Recreation Plan
Perspective Map A: 5-Mile Proximity to Natural Areas*

Connecting People and Places



Map Product for MD Dept. of Natural Resources by The GRASP® Team
 This map is intended for planning and discussion only.
 Please refer to the project document for map details.
 GIS sources may include: MD Dept. of Natural Resources, ESRI, GRASP® Team
 DNR November 2013



Perspective Map B: 5-Mile Proximity to Water Access

The water access analysis included locations with beaches, boat ramps, boat rentals, canoeing, fishing, and/or swimming. Survey respondent participation in one or more of the following activities was used in the creation of this map: swimming, fishing, paddling, motor boating, and/or sailing.

The most outstanding gap in service exists as a contiguous band from Chesapeake Bay to the state border with Pennsylvania and extending to the City of Baltimore. This area with lesser proximity to water access includes seven counties in which at least two-thirds of respondents participate in outdoor water recreation in most counties. It is notable that this unserved area includes some of the highest population densities in the state. Unserved areas may be served by other outdoor recreation providers such as counties, municipalities and private providers.

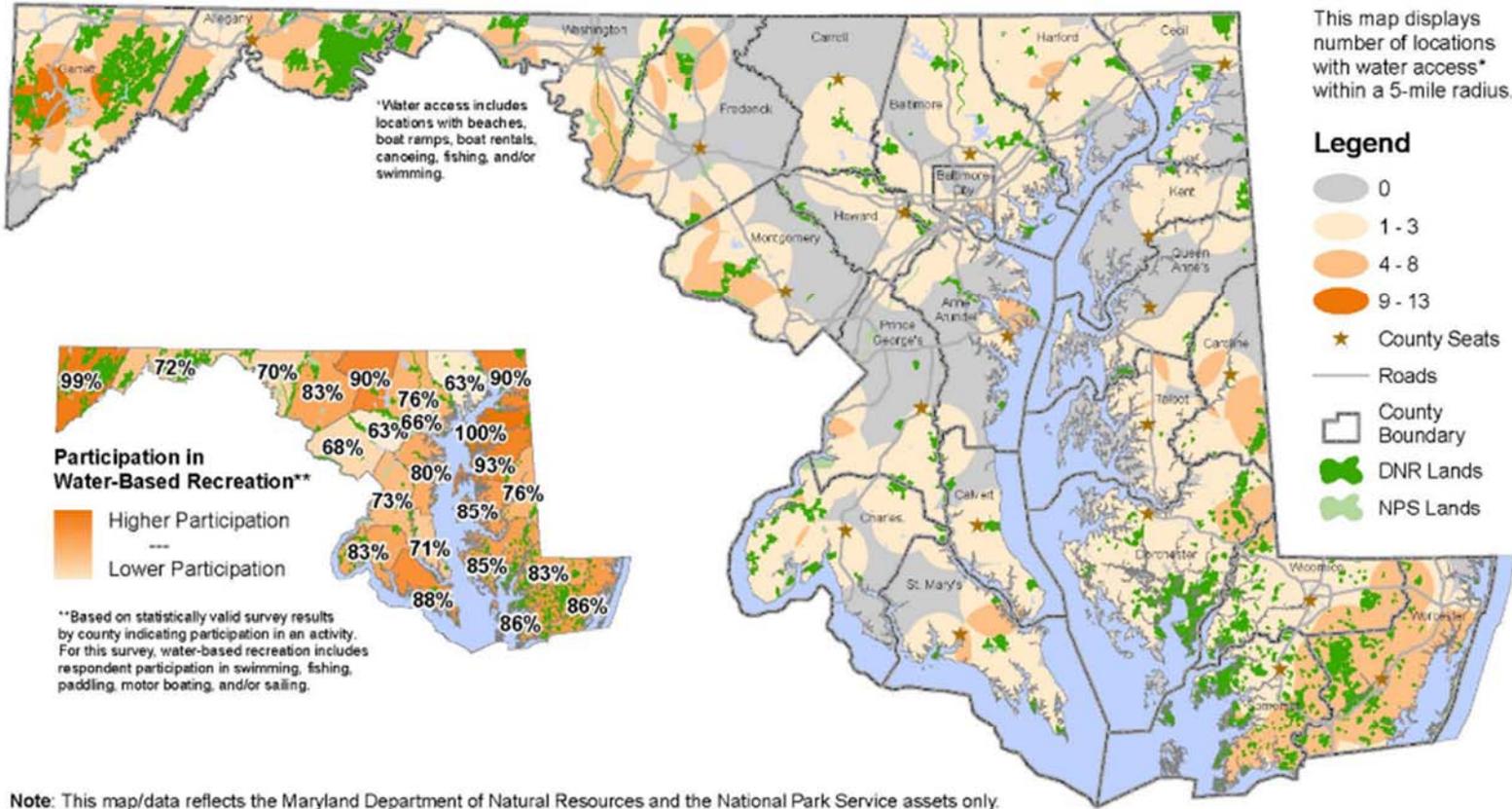
Some opportunity does exist to enhance outdoor water recreation in this area. Patuxent River State Park currently reports no water based recreation. Fishing or canoeing could potentially be made available at this location which runs the length of much of the unserved area and could fill part of this service gap. Bay and freshwater access could be provided at Franklin Point State Park or Severn Run Natural Environmental Area, both of which are currently undeveloped. Additionally, the expansive Patapsco Valley State Park is adjacent to much of this service gap area. There may be opportunities to further enhance this resource to better serve nearby residents. Unserved parts of Frederick and Carroll counties may be best addressed through future land acquisitions, as no inventory locations currently exist in those areas.

Map 8: Perspective Map B: Proximity to Water Access

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Perspective Map B: 5-Mile Proximity to Water Access*

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 DNR November 2013



Perspective Map C: 5-Mile Proximity to Picnicking

This analysis focused on all inventory locations with at least one picnic table. Comparison with the mapped survey results for participation may reveal a relationship in many counties between picnicking activity and proximity to an inventory location with a picnic area. This is not consistently true in all areas of the State.

Based on the inventory analysis, extensive gaps in service for picnicking facilities managed by DNR or NPS exist in every county in the State of Maryland. However, these unserved areas are likely to be served by other providers, such as city and county governments. Further, some locations may not be suitable for picnic areas due to environmental sensitivity, or they may be too remote for adequate maintenance or a consistent level of public use. These and other factors likely contribute to the wide gap in picnic facilities.

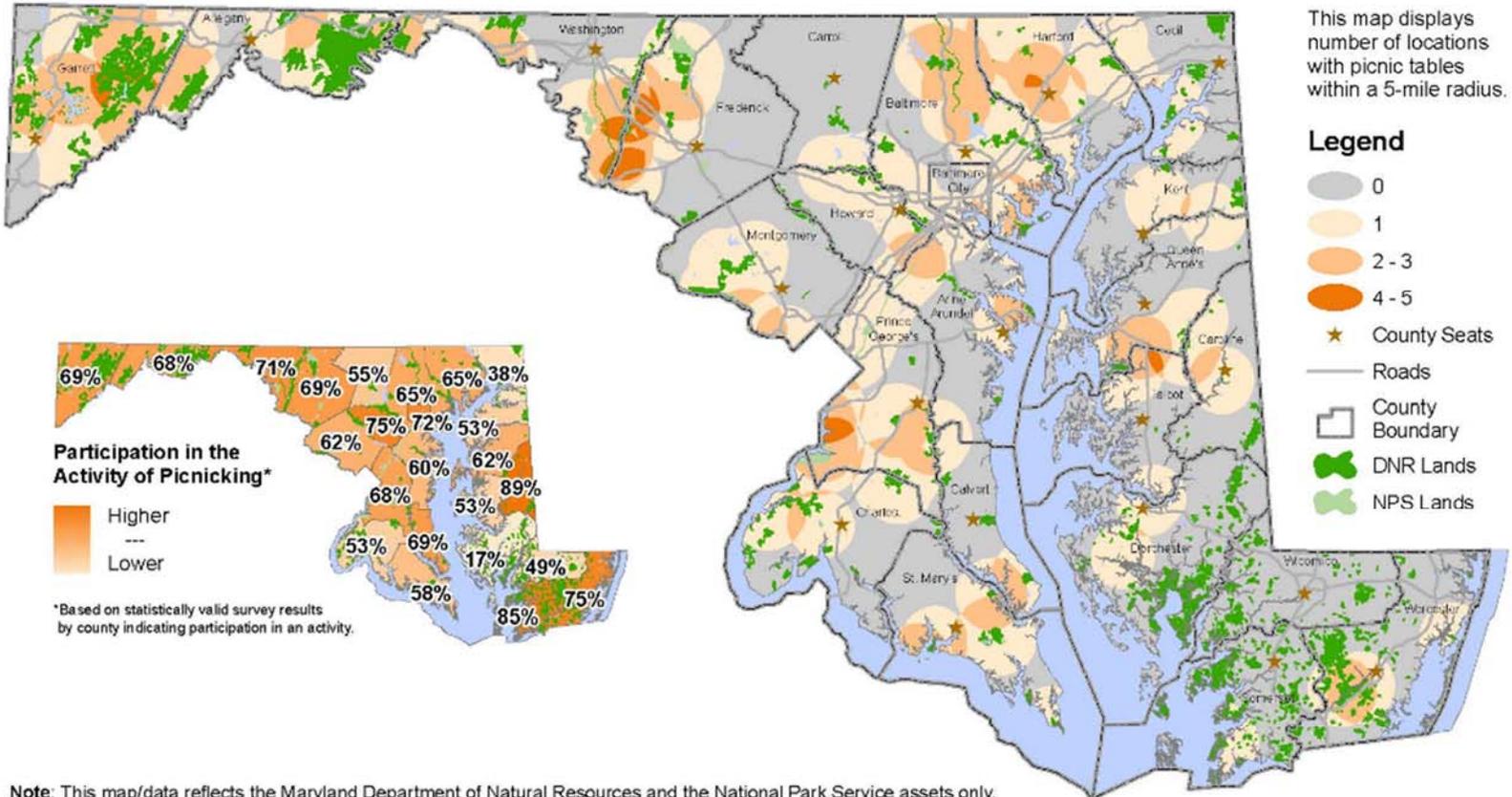
While certain areas of higher population density do show some level of service for picnicking, others could be enhanced. As noted in **Chapter 6: Recommendations and Actions**, a more complete data set to include alternative providers such as counties and municipalities is needed for greater clarity.

Map 9: Perspective Map C: Proximity to Picnicking

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Perspective Map C: 5-Mile Proximity to Picnicking

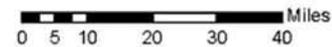
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Note: This map/data reflects the Maryland Department of Natural Resources and the National Park Service assets only.



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Perspective Map D: 5-Mile Proximity to Hunting

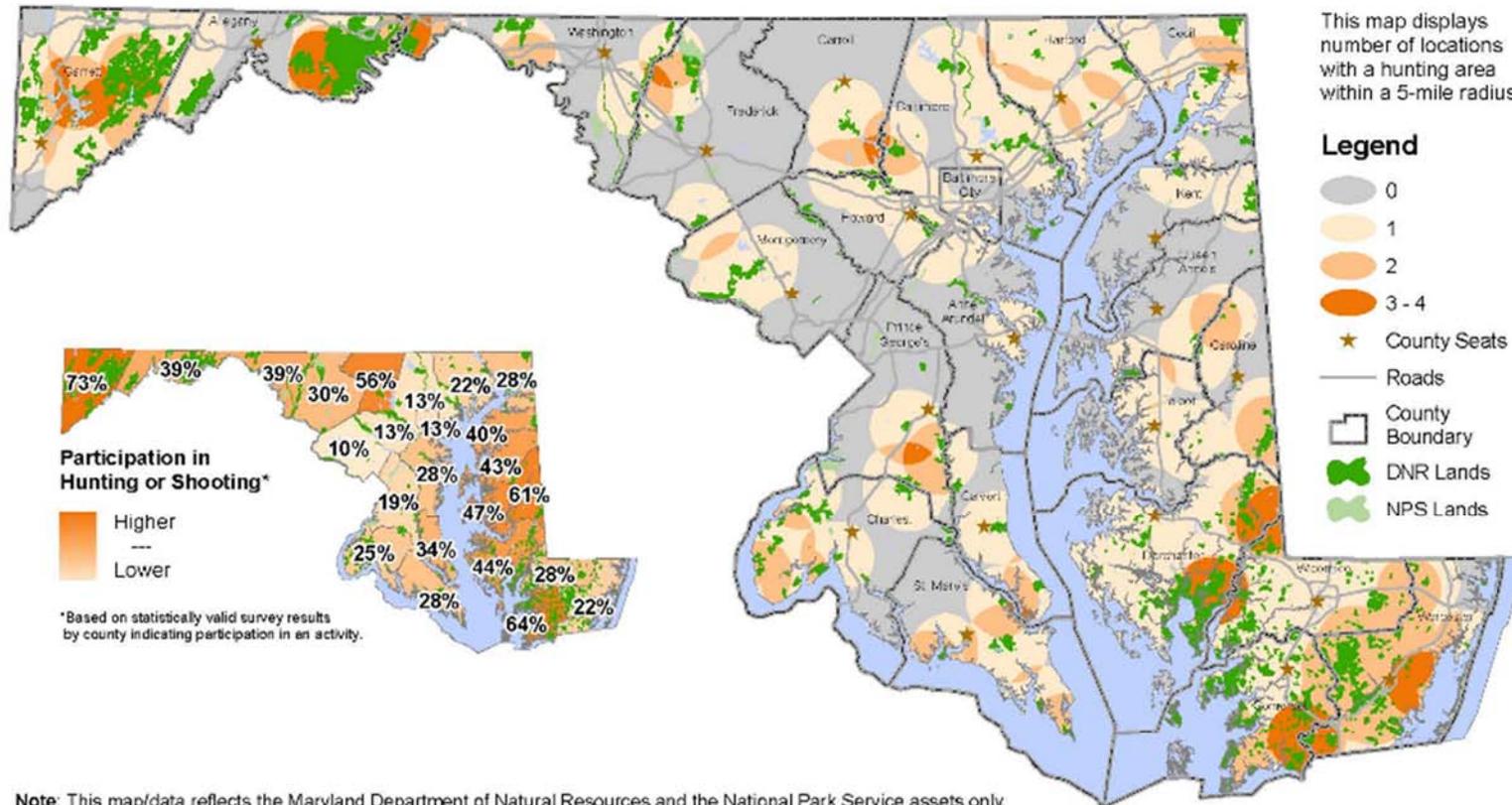
Participation in hunting or shooting is variable between Maryland counties, and ranges from as low as 10 percent of respondents to as high as 73 percent. Counties with higher participation tend to have the best proximity to more locations that allow hunting. These counties also tend to have lower population density.

It may not be desirable to fill gaps in service in more densely populated areas, as doing so could create a public safety hazard. Findings seem to indicate that the highest level of service for hunting is provided in the parts of the state where Marylanders most commonly participate in hunting and shooting sports. As such, hunting resources in the state appear to be adequate in terms of supply and demand.

Map 10: Perspective Map D: Proximity to Hunting

Maryland Department of Natural Resources: Land Preservation and Recreation Plan
Perspective Map D: 5-Mile Proximity to Hunting

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 GIS sources may include: MD Dept. of Natural Resources, USGS, GRASP Team
 DNR November 2018.



Perspective Map E: 5-Mile Proximity to Fishing

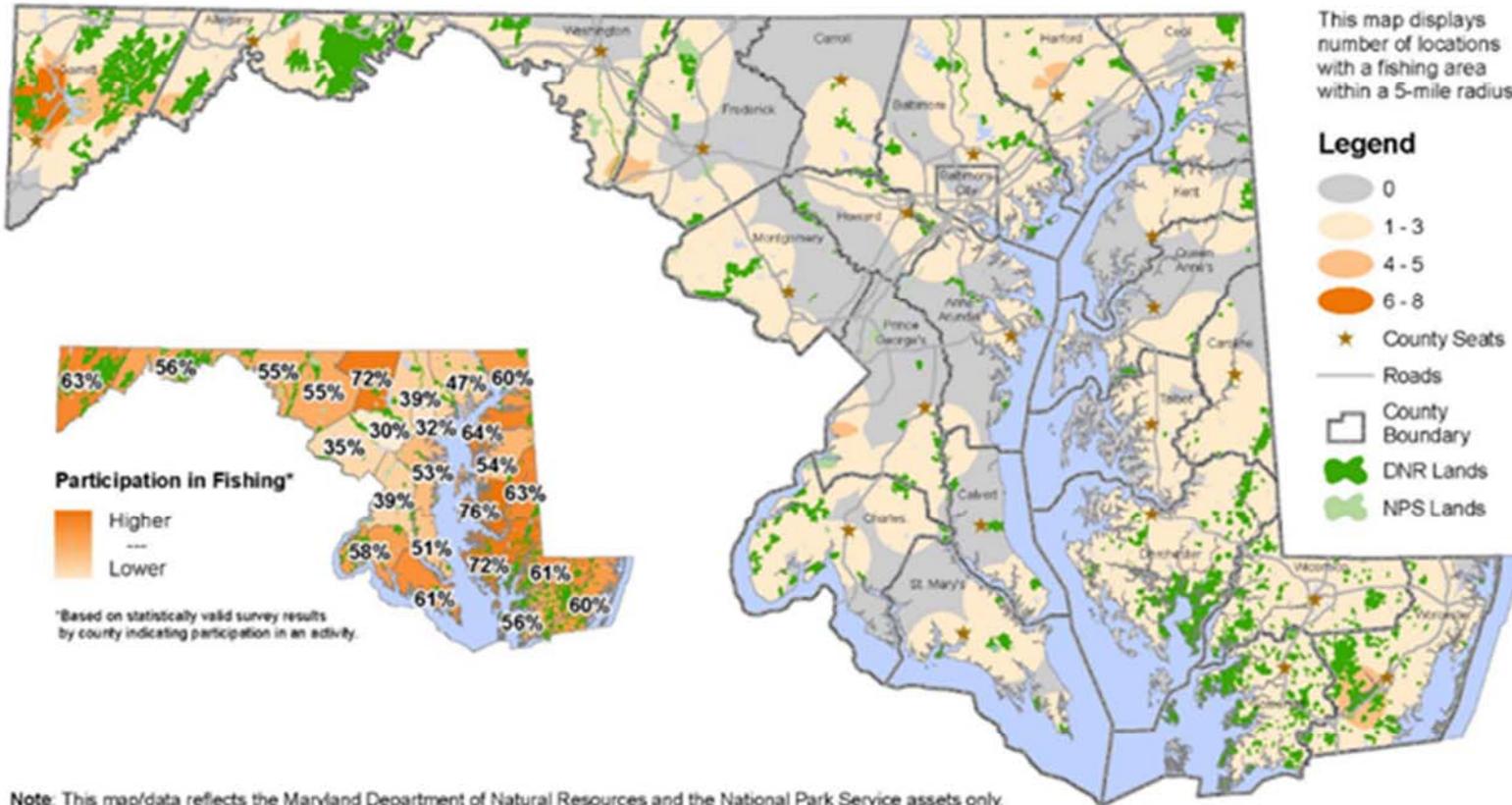
Level of service for fishing is higher in less densely populated areas. Comparison of levels of participation by county with proximity to inventory locations with fishing shows that fishing is a well distributed amenity statewide. Notable gaps in service exist in more highly populated areas around Baltimore and on the outskirts of Washington D.C. If opportunity exists to develop fishing amenities at Patuxent River State Park or Severn Run Natural Environmental Area such gaps could be minimized. Additional fishing amenities at the undeveloped Franklin Point State Park or at any of several Natural Resource Management Areas along the Patuxent River watershed would also serve this purpose.

Map 11: Perspective Map E: Proximity to Fishing

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Perspective Map E: 5-Mile Proximity to Fishing

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 DNR November 2013



Perspective Map F: 5-Mile Proximity to Hiking Trails

This Perspective highlights walking as the top participation activity among respondents in the statistically-valid survey. Three quarters (75%) of all respondents statewide indicated participation in the activity of walking, more than for any other activity mentioned. Though walking can be undertaken in a variety of contexts it is compared here with proximity to inventory locations with hiking trails. As a low cost, low impact activity walking is widely recognized to be highly beneficial for health and well-being for persons of all ages and may serve as an introductory activity to first time users of DNR lands. Level of service for hiking trails may have particular significance for this reason.

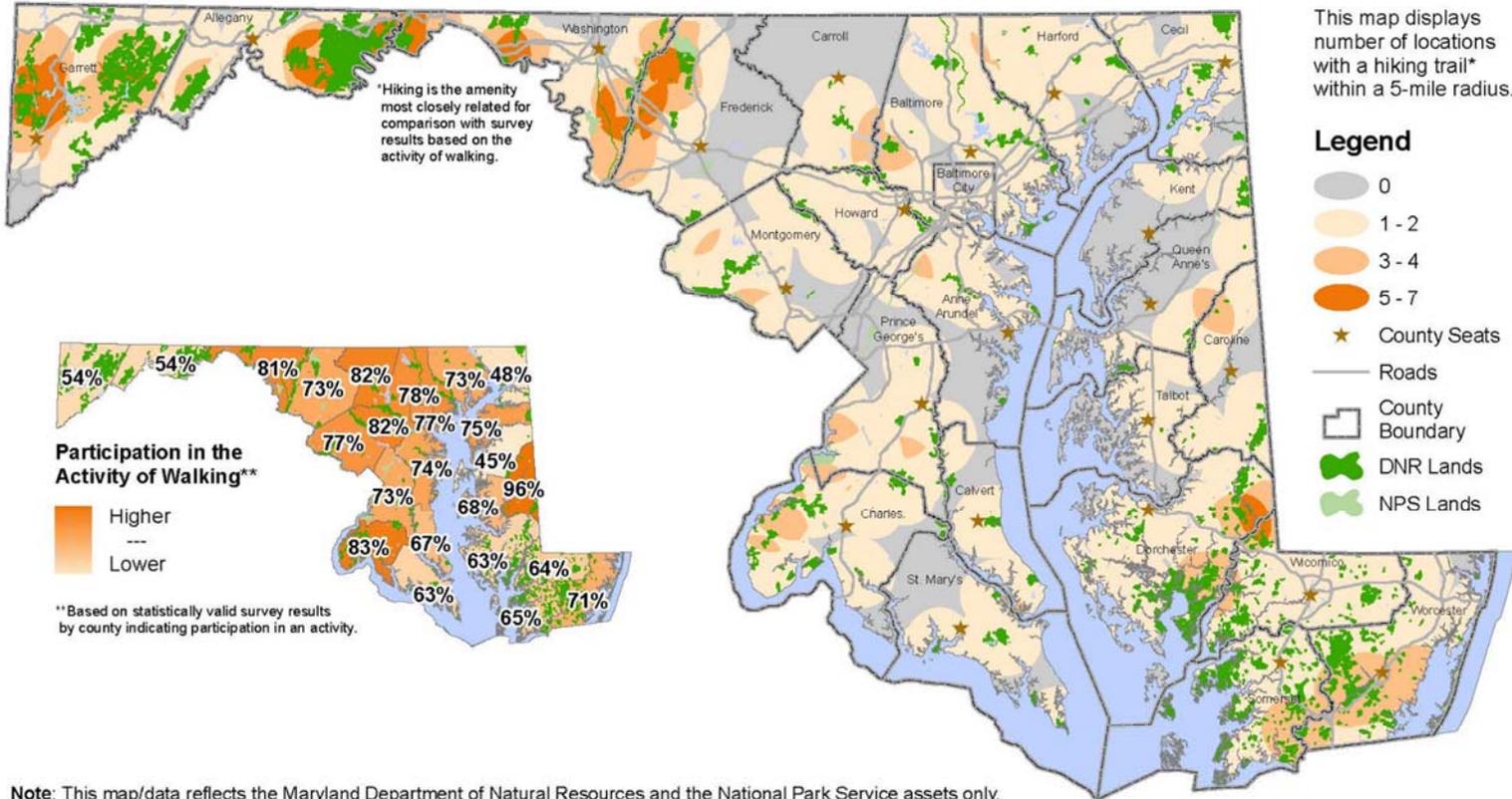
By county, participation in walking ranges from 54 percent to 96 percent of survey respondents. Of those counties with two-thirds or more of respondents indicating walking as a chosen activity, most show good proximity to locations with hiking trails. Notable gaps in service exist in highly populated areas of Baltimore City and outside Washington D.C. As hiking typically requires a natural or naturalized area, it is not surprising that such resources under DNR or NPS ownership are somewhat absent. Opportunity to improve level of hiking service to these greater metropolitan populations may be limited due to the densely populated nature of these areas. One existing inventory location within this service gap where hiking could be developed is Matthew Henson State Park, where a trail amenity is nearly complete. Additional land acquisition may be necessary to further improve proximity to hiking amenities for residents of these areas. A closer look at hiking trails provided by counties, municipalities and other providers would provide a greater understanding of the true gaps in service for hiking in densely developed areas.

Map 12: Perspective Map F: Proximity to Hiking Trails

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Perspective Map F: 5-Mile Proximity to Hiking Trails*

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 DNR November 2013.



Perspective Map G: 5-Mile Proximity to All Trails

This map displays proximity to locations with hiking, bicycling, mountain bicycling, and/or equestrian trails. Gaps in service for all trails are much the same as those for the hiking trails analysis, and are particularly notable in Baltimore City and around Washington D.C. As few DNR assets exist in these highly populated parts of the state, an examination of alternative providers and potential for additional land acquisition may be warranted to improve level of service in these areas.

Additionally, this map displays “unserved communities” as identified in the 2010 *Strategic Trail Implementation Plan* produced for the Maryland Department of Transportation (MDOT). This plan examines the state network of transportation trails and provides a planning approach and vision for the future. The focus of this MDOT plan was the use of trails for the purpose of transportation, as distinguished from recreational use. Display of this data on this map is intended for reference in consideration of a greater and more integrated statewide network of recreation and transportation trails.

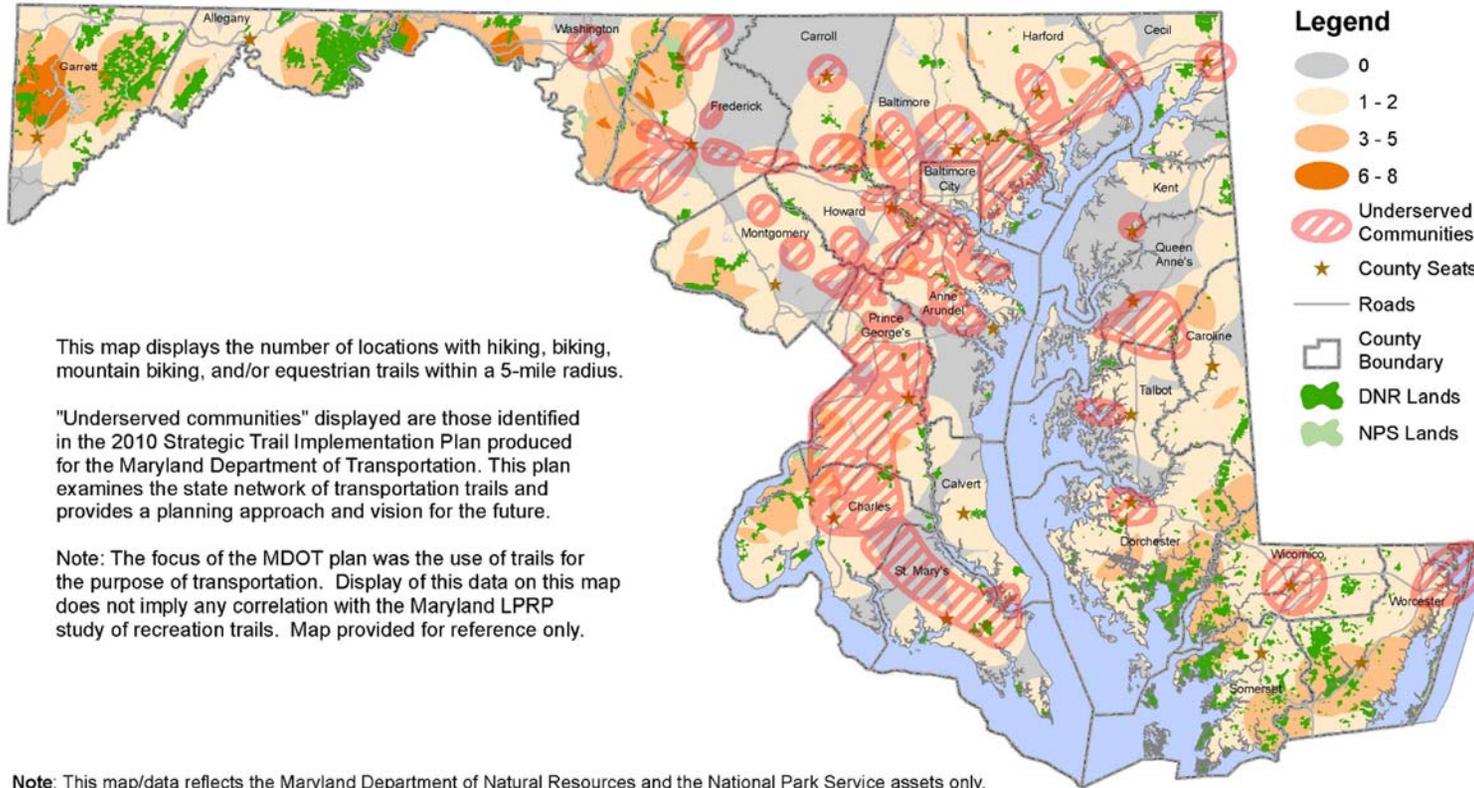
One notable finding is the extent to which areas unserved by transportation trails, as indicated in the MDOT study, seem to be relatively well served by recreational trails. Most areas unserved by transportation trails are within five miles of at least one (and as many as five) locations with some type of recreational trail. This might be interpreted to indicate the possibility of such recreational trails supplementing the existing transportation trail network under certain circumstances. It may not be realistic to expect such expanded functionality for all recreational trails with proximity to a gap in transportation trail service. However, the complementarity of the two trail systems is worth noting, as instances may exist for recreation trails to adequately serve this transportation trail function. There may be opportunity as well for transportation trails to supplement the DNR and NPS recreation trails included in this inventory and analysis. Future discussion between Maryland DNR and MDOT may be useful in determining a vision and strategies to enhance trail connectivity for Maryland residents.

Map 13: Perspective Map G: Proximity to All Trails

Maryland Department of Natural Resources: Land Preservation and Recreation Plan

Perspective Map G: 5-Mile Proximity to All Trails

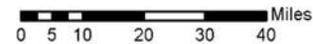
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 DNR November 2013



F. General Recommendations Based on Findings

Several general recommendations emerge from level of service analysis for the ***Maryland Land Preservation and Recreation Plan***. The most outstanding of these is the need for coordination of recreation system data among various providers in the State of Maryland. Level of service gaps indicated in this study by proximity analysis are limited to DNR and NPS public lands only. “Unserviced” areas are likely to be served by other outdoor recreation providers such as counties, municipalities, and private providers.

Inventory data from these and other providers is needed to paint a complete picture of recreational assets in the State. It is hoped that the LPRP process may provide an impetus for sharing of such data among various entities and between different levels of government. The data set compiled for this plan may serve as the basis for future data gathering and analysis.

Another limiting factor of this study is the fact that proximity to a given amenity was measured by the property boundary rather than the distance to the amenity being analyzed. Provided that more refined geospatial data for amenities becomes available, future analysis could focus on proximity to the actual location of an amenity rather than the property boundary of the amenity.

In the future, it may be more realistic to expect this refined level of data collection and analysis only for specific types of amenities. For example, an analysis of proximity to trailheads or park entries for county and municipal trail systems combined with DNR and NPS sites might prove particularly useful, as these access points could serve to connect users to a coordinated system of amenities.

In general, the significance of any service gaps identified by this analysis must be assessed individually. Several unserved areas stand out as lacking five-mile proximity to outdoor recreation locations as included in the inventory for this study. This suggests that further examination is necessary on a case by case basis to determine need for service in these areas. Unserved areas may be served by other outdoor recreation providers such as counties, municipalities and private providers. These unserved parts of the state are currently without any existing DNR assets, so further land acquisition would be necessary to improve level of service, at least based on a five mile proximity. However, it may be acceptable for unserved residents of these areas to expect a longer travel time to reach an outdoor recreation location. This may be particularly true, as these areas have a low population density relative to other parts of the state; thus, fewer residents affected by service gaps. Such areas may also be served by alternative providers, but this data is currently unavailable.



CHAPTER 4: CONNECTING PEOPLE AND PLACES

A. The Significance of Maryland's Trails

A common thread linking the variety of Maryland's outdoor, natural resource, and historic/cultural activities is trails. Trails come in all shapes and sizes and meet the needs of a wide range of users, from equestrians to snowmobilers to the physically challenged, and contribute millions of dollars to the state's economy.

According to a 2012 Trail Town User Survey Report conducted on the Great Allegheny Passage Trail by Frostburg State University and Saint Vincent College for the Laurel Highlands Visitors Bureau (LHVB), and Allegheny Trail Alliance (ATA), an average of \$120 per person is spent by trail users in groups on restaurants, snacks and beverages, clothing, equipment rental, and transportation. A similar survey of trail town businesses found that the estimated percentage of gross revenues attributed to users of the Great Allegheny Passage Trail for outdoor/trail businesses and lodging establishments was 53 percent and 32 percent respectively.

The cultural significance of Maryland's trails is demonstrated by the historical connection of land and water trails when telling the story of early Marylanders and especially Native Americans in the Chesapeake Bay region and the War of 1812.

B. DNR Trails Committee

As part of the year-long **Maryland Land Preservation & Recreation Plan** development process, Maryland DNR created a Trails Committee to contribute a comprehensive chapter dealing specifically with trails. The DNR Trails Committee included 15 members representing a broad range of perspectives, priorities, and expertise related to trails. The committee met four times during 2013.

The work of the DNR Trails Committee was framed by the **Maryland Land Preservation and Recreation Plan Survey 2013** which revealed the following key points relative to trails:

- The majority of respondents participate in outdoor recreation activities.
- The most popular outdoor recreation activities identified were walking, visiting historical sites, picnicking, and visiting natural areas located in state parks, forests, or wildlife areas.
- Over half of the respondents indicated that the availability of parks, trails, outdoor recreation facilities, and outdoor education programs is extremely important to their household.

C. The Challenge of Trail User Conflicts

Trails are relatively simple to develop and clearly support DNR’s mission of making outdoor experiences available to the public. However, conflicts between different trail users including hikers, bicyclists, equestrians, and off-highway vehicle drivers do occur and can be challenging to resolve.

Addressing user conflicts with trail design, International Mountain Bicycling Association (IMBA) studies have determined that singletrack trails are the ideal configuration for recreation and shared-use. Singletrack trails, defined as trails that are only wide enough for one person or mountain bicycle at a time, fit into the landscape, control erosion and result in winding alignments that encourage discovery and allow visitors to experience the environment they are passing through.



Most users prefer trails that facilitate travel in loops, allowing a visitor to have an experience that invites continual discovery over the course of a visit while increasing the carrying capacity of a given trail system. Exceptions are short trails that lead to specific destinations such as vistas and historical sites. Networks that offer a depth of experience via a variety of trail lengths and types acknowledge that trail users are a diverse group with different experiential goals and fitness levels.

D. DNR Trails Committee Goals and Objectives

The DNR Trails Committee established goals, objectives, and related actions to include in the ***Maryland Land Preservation & Recreation Plan***. Partnerships and long-term agreements with private user groups for trail maintenance will be necessary to sustainably implement the Trails Committee actions. The complete list of actions is included in ***Chapter 6: Recommendations and Actions***.

Trails Committee Goals

- Create a statewide network of trails that provides motorized and non-motorized links between DNR lands, water trails, and the communities where people live, learn, work, shop, and play.
- Educate citizens about the trail network’s social, ecological, economic, and wellness benefits.
- Build, maintain, and renovate trails to create a sustainable system on DNR land that provides a quality and diverse user experience and promotes environmental stewardship.
- Map all DNR trails and make the data/information available in a user friendly format.
- Address barriers to trail development, including funding and access, through partnerships with other State agencies, local governments, and trail stakeholder groups.

Trails Committee Objectives Aligned With LPRP Key Strategies

Coordinate Planning Efforts

- Create and enhance a statewide trail system on land and water that connects communities, parks, waterways, and schools.
- Utilize the existing network of sidewalks throughout the state to provide critical connections to trails and greenways.
- Participate and assist in the efforts to create and develop National Scenic & Historic Trails.

Promote Health, Environmental, and Economic Impacts of Outdoor Recreation and Natural Resource Protection

- Develop a statewide sustainable trails policy with respect to multi-use trails, including standard signage and appropriate protocols for design, maintenance, and other management concerns.
- Work with public and private trail partners to create regional trails that provide recreational opportunities and promote local economic development.

Connect People and Places

- Develop and implement a comprehensive program that improves opportunities for families and children (particularly those who live in unserved areas) to access natural areas and trails located close to state, county, or municipal roadways, with improvements the responsibility of the administering entity.
- Work with the Maryland Department of Transportation, the Maryland State Highway Administration, the Maryland Office of Tourism, the Maryland Department of Planning, and other state agencies, along with federal and local governments and private trail advocacy groups to achieve DNR's trails mission of connecting our public lands to the places where people live, work, shop, and play.
- Close the gaps between our DNR lands via targeted trail expansion and improved connectivity.

E. Multi-Agency Collaboration

Complementing the work of the DNR Trails Committee, a collaborative effort has begun between the Maryland Department of Transportation (MDOT) and the Maryland Department of Natural Resources to improve trails and pathway connectivity throughout Maryland.

In a multi-year process, MDOT is updating the Maryland Bicycle and Pedestrian Master Plan. As part of the public input process, over 3,300 survey responses were collected from Marylanders, yielding the following relevant results:

- Seventy percent (70%) of respondents said that suitability for biking or walking was important in choosing where to live or work.
- Approximately 79 percent of respondents indicated that they walk daily or regularly, and 65 percent bicycle daily or regularly.

The O'Malley administration's "Cycle Maryland" initiative is an effort to encourage more Marylanders to get outdoors and ride, and to make bicycling a true transportation alternative. Cycle Maryland promotes cycling as "a great way to connect to the community, support a cleaner environment, encourage a healthier lifestyle, reduce household transportation costs, and enjoy Maryland's magnificent landscape."
Maryland Department of Transportation

In addition to the survey, a poll of a statewide advisory group, a public forum, and an online poll were conducted on MDOT developed draft goals, objectives, and strategies to determine priorities for walking and bicycling. The poll found that the top priorities were:

- To fill gaps toward creating a seamless, multi-modal network
- Improve safety for bicyclists and pedestrians
- Deal with physical barriers in bicycle networks
- Address gaps in trail systems and connect trails to on-road facilities
- Provide assistance and/or incentives to local governments to improve bicycling and walking amenities

A collaborative approach to active transportation and recreation planning among MDOT, DNR, County, and local governments may serve to reduce funding challenges through resource sharing, coordinated capital funding requests, and multi-agency grant applications.

Trail Connectivity Level of Service Analysis

As a result of the level of service analysis pertaining to trail access conducted for the ***Maryland Land Preservation and Recreation Plan***, it is recommended that a detailed examination of trails data emphasize areas of higher population density in planning future trail connections. This strategy of focusing development of new resources in areas with more people tends to have a greater impact on overall level of service.

DNR staff has already identified several trail gaps as priorities for future improvements. All of these are indeed located in areas of higher population, where DNR investment may have significant “bang for the buck.” Trail connections under consideration include:

- BWI Trail to Patapsco Valley State Park and Patapsco State Park to Ellicott City
- Torrey C. Brown Rail Trail to Baltimore City
- Gunpowder Falls State Park trails to Torrey C. Brown Rail Trail and MA & PA Rail Trail
- Western Maryland Rail Trail to West Virginia

Though outside the scope of this project, consideration of trail connections between DNR lands and population dense areas of the state is critically important, particularly based on the overwhelming percentage of survey respondents reported to participate in walking as a priority activity.

F. Water Trails

From the open waters of the Chesapeake Bay and Eastern Shore to the intimate meandering creeks in Central Maryland, and raging whitewater of the Youghiogheny River in Western Maryland, Marylanders have a long history of reliance upon waterways and places that have attracted recreational boaters, paddlers, anglers, and others who just want to be by the water.



DNR's Public Access, Water Trails and Recreation Planning Program, in partnership with local governments, citizen associations, and non-profit organizations, is creating a statewide network of water trails that builds upon the State's existing infrastructure of public boating access sites. DNR provides technical and funding assistance to plan, develop, and promote water access sites and water trails.

To date, Maryland has over 600 miles of designated water trails. Existing trails and developing projects can be found in every region of the state. For more information, and to learn about existing water trails and water access in every region, see the DNR's Public Access, Water Trails and Recreation Planning website at <http://www.dnr.state.md.us/ccs/pawt.asp>.

Staff at DNR is responsible for the following:

- Coordinate the development of water trails and access sites statewide
- Provide technical, mapping, and design assistance to local governments to plan, implement, and promote water trails and water access
- Track and report on Maryland's progress in achieving the Chesapeake Bay Agreement goal for expanding public access
- Promote safe and responsible boating and paddling practices

Designation as an Official Maryland Water Trail Requires the following:

- The trail route must follow an identified route along a waterway or waterways in Maryland, and the route must be reviewed and approved by DNR.
- There must be identified public access sites along the trail route that are owned, managed, and maintained by a specific entity or entities such as a municipal, local, state, or federal agency, to ensure user safety, legal access, and compliance with state rules, regulations, and goals.
- The trail and its associated access site(s) must be accessible and open to the general public.
- The trail must have an existing map and/or guide.
- The trail must have an interpretive component that: educates the boating public about state boating regulations and requirements, promotes boating safety, fosters natural resources stewardship ethics, and helps to share historical or cultural information relevant to the setting of the trail.



The Public Access, Water Trails and Recreation Planning Program also produces and maintains the [Maryland Online Boating Access Guide](#) which provides visitors with a user friendly resource to locate public boating access facilities in Maryland and to obtain basic information regarding those facilities. Officially designated water trails are posted on the Maryland Water Trails web page and included in promotional materials.

Funding Sources for Waterway Access and Water Trails

In recent years, State programs that provide funding to plan, develop and maintain public boating facilities, water trails, and waterfront facilities have experienced serious budget cuts and declining revenues. While the programs are still in operation, the competition for existing resources and technical assistance has increased substantially.

Program Open Space

[Program Open Space](#) (POS) is a nationally recognized program with two components, a local grant component often called Local-side POS and a component that funds acquisition and recreation facility development by the State. The Local-side component:

- Provides financial and technical assistance to local subdivisions for the planning, acquisition, and/or development of recreation land or open space areas.
- Acquires outdoor recreation and open space areas for public use.
- Administers funds made available to local communities for open and recreational space by the Outdoor Recreation Land Loan of 1969 and from the Land and Water Conservation Fund of the National Park Service, U.S. Department of the Interior.

Established under the Department of Natural Resources in 1969, POS symbolizes Maryland's long term commitment to conserving our natural resources while providing exceptional outdoor recreation opportunities for our citizens. Today more than 6,100 park and conservation area projects have been assisted through the [Program Open Space application process](#).

Recreational Trails Program

The Recreational Trails Program funds the development of community-based, motorized, and non-motorized recreational trail projects. The program provides funds for all kinds of recreational trail uses including water and land trails hiking, walking, wheelchair use, bicycling, equestrian use, cross-country skiing, off-road motorcycling, and all-terrain vehicle riding.

The program is administered by the State Highway Administration (SHA) and matches federal funds with local funds or in-kind contributions to implement trail projects. Projects can be sponsored by a county or municipal government, a private non-profit agency, a community group or an individual (non-governmental agencies must secure an appropriate government agency as a co-sponsor).

Federal funds administered by the State Highway Administration are available for up to 80 percent of the project cost, matched by at least 20 percent of funding from the project sponsor. Matching funds must be committed and documented in the local jurisdiction's budget. A Memorandum of Understanding outlining funding and project implementation responsibilities will be prepared by SHA and signed by all parties before the project funds are released. For more information visit www.marylandroads.com/Index.aspx?PageId=98

The Waterway Improvement Fund

The Waterway Improvement Fund provides financial support to local governments, the Department of Natural Resources, and federal agencies in the form of grants and/or loans for a wide variety of capital projects and services for the boating public.

The Fund was created in 1966 by Natural Resources Article 8-701 to support the development, use, and enjoyment of all waters of the State of Maryland for the benefit of the general boating public. Revenues for the Fund are obtained primarily from the one-time five percent excise tax that is paid to the State when a boat is purchased and titled in the State. For more information visit www.dnr.state.md.U.S./boating/grants.asp

Maryland Heritage Areas Grant Program

The Maryland Heritage Areas Authority (MHAA) provides dollar-for-dollar matching grants to non-profit organizations and governments for capital and non-capital projects located within a Maryland Certified Heritage Area (CHA). Grants can support projects involving historical, cultural, or natural resources, sites, events, or facilities. Eligible projects must have a heritage tourism component, and support local heritage area management plans. Water trail development, signage, and interpretation as well as acquisition or development of soft landing sites are all potentially eligible for funding. Water trail sponsors should contact their local heritage area management entity to learn more about local priorities and funding schedules. For more information visit http://mht.maryland.gov/grants_heritagearea_partners.html or http://mht.maryland.gov/grants_heritagearea.html

Water Based Recreation Trends

The *National Outdoor Recreation Participation Report* for 2012, produced by the Outdoor Recreation Foundation, states that participation in recreational paddling/kayaking grew by 32 percent over the past three years and by 27 percent in the past year. The report also found that almost 60 percent of stand-up paddling participants tried the activity for the first time in 2011, and participation in the sport grew by 18 percent nationwide.

Use of non-motorized paddle craft is soaring in popularity in Maryland and across the nation. The market for human powered craft such as canoes, kayaks, and paddleboards has expanded due to the fact that they are relatively inexpensive, are easy to transport, and offer easier access to many different types of waterways. At this time non-motorized craft such as canoes, kayaks, and paddle boards are not required to be registered. As a result there is no accurate estimate regarding the number of these paddle craft in Maryland.

Economic Impact of Recreational Boating

The increased interest in non-motorized boating and paddle craft has resulted in an increased demand for public access sites that accommodate these types of vessels in Maryland. It is estimated that recreational boating and marine-related industry contribute approximately \$2.41 billion to Maryland's economy every year. The Maryland Tourism Development Board and the Department of Business and Economic Development report that in 2011, visitor spending on tourism involving recreation and entertainment was approximately \$1.2 million, an increase of 8.5% from 2010.

Vessel and User Types

In 2012, the State issued certificates of number for 188,317 vessels with principal operation in Maryland. Motorized vessels make up 85 percent of all registered boats and the majority of those motorized vessels (71%) are small vessels that can be transported on trailers. The strongest facility needs identified by trailered boat owners were launch ramps, parking and restroom facilities. **Table 5** below summarizes motorized vessels registered in the State of Maryland according to size.

Table 5: DNR Vessels and User Types

Motorized Vessels	Vessels issued Certificates of Number by DNR	Number of vessels in this category
Under 16 feet	29.74%	47,588
16 feet to less than 26 feet	52.10%	83,374
26 feet to less than 40 feet	15.54%	24,878
40 feet to 65 feet	2.57%	4,119
Over 65 feet	.05%	79
Other registered vessels (personal watercraft, sailboats, other boats)*	---	25,588
Commercial vessels (passenger, fishing and other)	---	2,691

** This figure includes 334 sailboats that are not mechanically propelled*

Water Access Facilities

Maryland has 628 boating facilities that provide over 43,000 wet slips at public and private facilities throughout the state. There are 257 public boat ramps that primarily serve trailered boats and 320 facilities that provide access for soft launching and several other facilities that provide docking or transient use. The majority of the public boat ramps in Maryland are managed and maintained by the local jurisdictions in which they are located so fees and permits vary by jurisdiction. Marinas, boat ramps, public landings, and transient tie-up facilities are the key facilities that support recreational boating activity. Auxiliary amenities such as restrooms, pump-out stations, and other support services are available at some of these key facilities.

Over the years, rapid residential waterfront development and the increase in permanent and seasonal residents of Maryland have placed intense demands, especially during the summer months, on areas near waterways. While Maryland has ample miles of shoreline and acres of water, much of the boating activity is clustered around the portion of the Chesapeake Bay adjacent to Anne Arundel County on both the western and eastern shores, Baltimore City, Solomon's Island, and Havre de Grace.

Waterway related congestion includes upland support facilities such as launch ramps, parking areas, and pedestrian access. All of these support facilities are expanding in their requirements for land due to larger boats, access for persons with disabilities, and the increased popularity of non-motorized craft such as kayaks, canoes, and paddleboards.

Use of paddle craft and development of public soft access sites geared specifically to them has increased. However, paddle craft operation does not require any form of license or registration and therefore does not contribute the associated fees to the Waterway Improvement Fund. This Fund provides the resources to plan, develop, and maintain public boating access facilities. Concerns regarding conflicts, between motorized and non-motorized users at access sites and increased demand on limited resources, have spurred discussion about requiring non-motorized craft to contribute to the Waterway Improvement Fund in the future via purchase of a decal or other payment method.

G. 2009 MDOT Trails Strategic Implementation Plan

The 2009 MDOT Trails Strategic Implementation Plan identifies four goals and supporting objectives. These goals support the DNR Trails Committee recommendations, and are provided to demonstrate potential synergies between state agencies. These goals, together with the goals of the *Maryland Land Preservation & Recreation Plan* trails chapter, will encourage the multi-agency vision of a connected system of pathways for recreational use and alternative transportation.

Goal 1: Increase Trail Usage for Transportation Purposes: Enhance the user experience as well as access to trails and to destinations across Maryland’s transportation trail network.

- Expand trail accessibility and connectivity
- Foster intermodal linkages and amenities to support trail travel
- Provide capital and engineered safety enhancements for safe travel across Maryland’s trail network
- Maintain existing trails

Goal 2: Strategically Expand Trail Network Capacity: Systematically develop and enhance trails throughout the state where Maryland residents and visitors live, learn, work, and play.

- Explore trail development in underutilized rail and utility corridors
- Focus trail development on linkages with existing infrastructure
- Integrate trails into existing communities
- Routinely inventory trail assets

Goal 3: Address Barriers to Trail Development: Explore policy and process oriented solutions to address programming and physical challenges to trail development.

- Streamline management and policy processes to relieve administrative burden of trail funding programs
- Maximize resources to support local sponsors
- Promote trail design standards
- Foster preplanning and engineering to address physical barriers to trail development

Goal 4: Expand Partnerships and Coordination to Support Trails: Facilitate collaborative relationships among stakeholder groups and pursue new approaches to promoting trail development.

- Attract state agency, local, and non-traditional partners in trail development and promotion
- Practice coordinated inter-agency and inter-jurisdictional trail planning
- Refine roles and responsibilities of state agencies, local governments, and outside stakeholders
- Engage in innovative marketing and outreach techniques

H. Cycling and Walking Trends

Cities in the United States have become more bicycle friendly over the last ten years. Cycling has become a popular mode of transportation as people consider the rising costs of fuel, desire for better health, and concern for the environment. Some people also use cycling as a mode of transportation just for the fun of it.

The Alliance for Biking and Walking published *Bicycling and Walking in the United States 2012 Benchmark Report*.¹⁷ This report shows that increasing bicycling and walking are goals clearly in the public interest. Where bicycling and walking levels are higher, obesity, high blood pressure, and diabetes levels are lower. Higher levels of bicycling and walking also coincide with increased bicycle and pedestrian safety and higher levels of physical activity. Increasing bicycling and walking can help curb many serious public health, environmental, and transportation problems facing our nation.

Maryland ranks 34th among states for bicycling safety and 39th for safe places to walk, according to the 2012 *Bicycling and Walking Report*. In 2013, the League of American Bicyclists ranked Maryland #11 in Bicycle Friendly States, and #1 for bicycle-friendly universities.

According to the 2012 Benchmark Report, public health trends related to bicycling and walking include:

- Bicycling and walking levels fell 66 percent between 1960 and 2009, while obesity levels increased by 156 percent.
- Between 1966 and 2009, the number of children who bicycled or walked to school fell 75 percent, while the percentage of obese children rose 276 percent.
- In general, states with the highest levels of bicycling and walking have the lowest levels of obesity, hypertension (high blood pressure), and diabetes and have the greatest percentage of adults who meet the recommended 30-plus minutes per day of physical activity.

Economic Benefits of Bicycling and Walking

In a 2011 study by the Political Economy Research Institute at UMASS Amherst, research showed that bicycling and walking construction projects create 11-14 jobs per \$1 million spent, compared to just seven jobs created per \$1 million spent on highway construction projects. Cost benefit analyses show that up to \$11.80 in benefits can be gained for every \$1 invested in bicycling and walking.

¹⁷ The Alliance for Biking and Walking published *Bicycling and Walking in the United States 2012 Benchmark Report*

Trails and Health

A connected system of trails increases the level of physical activity in a community. This has been scientifically demonstrated through the *Trails for Health* initiative of the Center for Disease Control (CDC). Trails can provide a wide variety of opportunities for being physically active, such as rollerblading, walking/running/hiking, wheelchair recreation, bicycling, cross-country skiing and snowshoeing, fishing, hunting, and horseback riding.

“I think there should be more trails for bikers and a safer environment besides the highway.”

LPRP Random Phone Survey Respondent

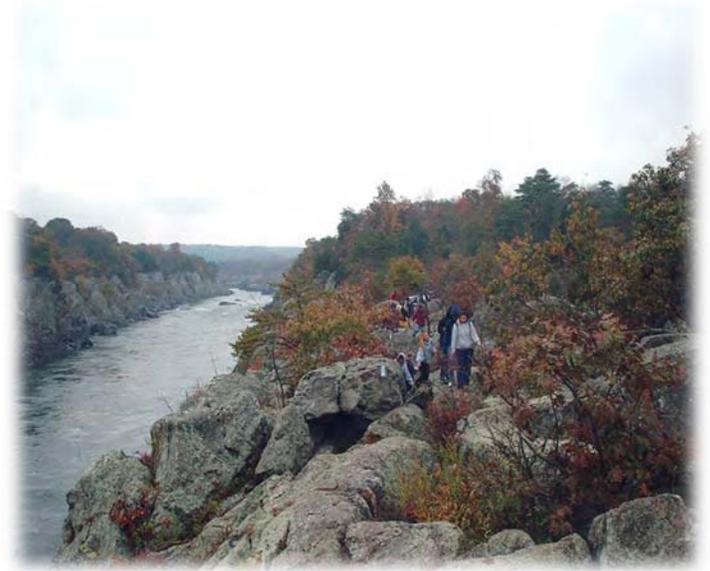
Emphasis on community connectivity through trails, greenways, and active transportation initiatives is receiving increased attention by communities committed to public health, environmental conservation, and economic development.

Recognizing that active use of trails for positive health outcomes is an excellent way to encourage people to adopt healthy lifestyle changes, American Trails has launched a “*Health and Trails*” resource section on its website. Additional information about Healthy Trails initiatives can be found at the DNR Maryland Trails website at http://www.dnr.state.md.us/land/MD_Trails/Trails_in_MD.asp.

I. 2009-2013 LPRP Plan Accomplishments

In the five years since the previous Land Preservation & Recreation Plan, a number of accomplishments relative to trail administration have been accomplished. A detailed list of accomplishments is included in **Appendix A: Status of Recommendations: 2009-2013 Maryland Land Preservation, Parks, and Recreation Plan Volume II.**

- Created the Maryland Trails Development Office and hired a Maryland Trails Coordinator to staff that office.
- Established relationships with local volunteers, like the Mid-Atlantic Off Road Enthusiasts (MORE), the International Mountain Bicycling Association (IMBA), Garrett Trails, and our dedicated land managers around the state, to make all of our DNR trails sustainable.
- Initiated interdepartmental cooperation through the creation of the DNR Interdisciplinary Team, comprised of reps from each DNR department, who meet periodically to review trail projects at their earliest stage.
- Initiated Interagency cooperation through the creation of the State Trails Team, comprised of representatives from all state agencies dealing with trails, who meet periodically to review major trail projects and pinpoint potential problems at the earliest stage of the project.
- Conducted a statewide trails summit.



J. Maryland's Trail and Greenway Success Stories

There are many excellent examples within Maryland that showcase the success of DNR's best practices in planning and management of trails for connectivity, natural and cultural resource stewardship, promoting healthy lifestyles, and economic viability.

Connectivity: Patapsco Valley State Park

Patapsco Valley State Park extends along 32 miles of the Patapsco River, encompassing 16,043 acres and eight developed recreational areas. Recreational opportunities include hiking, fishing, camping, canoeing, horseback riding, and mountain bicycling, as well as picnicking for individuals or large groups in the park's many popular pavilions.

The park is nationally known for its trails and natural scenery. With 170 miles of trails (70 miles identified as maintained trails), there are hiker only trails as well as multi-use trails accessible from many areas of the Patapsco Valley.

As one of Maryland's first state parks (1907), the Patapsco Valley and its natural and cultural resources have been enjoyed by the Native Americans, explorers, settlers and present-day citizens. One of the park's most remarkable historic resources is the Thomas Viaduct, a National Historical Landmark built in 1835.

Urban Trails: Gwynns Falls Trail

Located in the Baltimore National Heritage Area, the Gwynns Falls Trail travels through an environmentally valuable urban greenway park in west and southwest Baltimore City along the Gwynns Falls stream valley – a historically and culturally significant area. The Gwynns Falls Trail is the most complete system of linear parks in Baltimore as originally envisioned by the Olmsted Brothers in their 1904 plan for Greater Baltimore Public Grounds. The trails includes more than 2,000 acres of publicly owned land within the Gwynns Falls stream valley and includes one of the largest urban wilderness woodland parks in the Eastern United States-Gwynns Falls/Leakin Park.



Photo by: Parks and People Foundation

The Gwynns Falls Trail is a continuous recreation corridor that connects over 30 neighborhoods in west and southwest Baltimore with parklands, unique urban environmental features, cultural resources, and historical landmarks. Local residents and visitors are able to bike, hike, roller blade, fish in the stream, picnic, watch for birds and other wildlife, undertake environmental education activities, find solitude and enjoy nature, host community festivals, and meet friends and neighborhood residents along the trail.

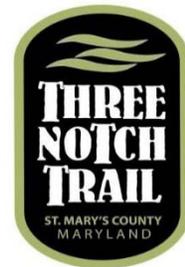
Suburban Trails: Connecting Columbia

The Columbia Association is developing an Active Transportation Action Agenda called “Connecting Columbia” to establish a new vision for a 93.5-mile pathway system, with the goal of creating a more interconnected and comprehensive bicycle and pedestrian circulation system for health, recreational, and transportation purposes.

Among the desired outcomes of the project are an implementable action agenda that establishes priorities for Columbia bicycling and pedestrian network improvements, targets implementation projects including a pathway signage/wayfinding pilot, creates a series of route maps, recommends partnerships, and identifies responsible parties for implementation projects.

Rural Trails: Three Notch Trail

The Three Notch Trail is a non-motorized pedestrian and bicycle trail being constructed on the St. Mary’s County railroad right-of-way. The trail will provide a linkage between the St. Mary’s County Welcome Center in Charlotte Hall to historic Leonardtown, providing trail users with linkages to the Religious Freedom Byway Route, War of 1812 sites (Sotterley and Tudor Hall), and the Leonardtown Arts and Entertainment District.



The trail is constructed of asphalt and is ten feet wide in most sections, with 2-3 ft. grass shoulders. Pending improvements to the multi-use trail include appropriate signage, rest benches, and landscaping. Upon completion, the trail will feature an asphalt surface, meeting ADA requirements making it accessible to all.

Rail Trails

Western Maryland Rail Trail

The Western Maryland Rail Trail (WMRT) is one of Maryland’s most popular rail trails and follows a path rich in history. The Potomac River valley has been an important transportation corridor for hundreds of years. From the Native Americans to the National Road to the C&O Canal, people have always traveled along the Potomac River.



In its heyday, the WMRT was a lifeline to the tri-state area of Maryland, Pennsylvania, and West Virginia. Through the construction of the WMRT on this abandoned railroad bed, numerous opportunities are now available to visit old ruins of days past. There are interpretive signs along the length of the trail at many of these locations.

The WMRT currently offers about 23 miles of flat, paved, accessible trail surface paralleling the C & O Canal for its entire length. Big Pool Station, the eastern terminus of the trail, is located one-half mile west of historic Fort Frederick State Park in Washington County. The western terminus is located in Pearre, near Sideling Hill Wildlife Management Area.

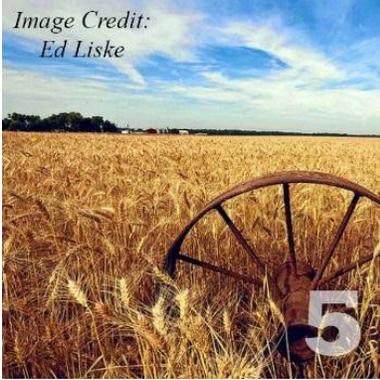
Common activities that people enjoy on the trail include nature study, hiking, biking, jogging, and inline skating. The easy grade and paved surface make this path ideal for families, the elderly, and persons with disabilities to enjoy a trek outside.

Torrey C. Brown Trail

The Torrey C. Brown Rail Trail (TCB) extends from Ashland, Maryland north to the Maryland-Pennsylvania line, and passes through historical communities, including Ashland, Phoenix, Monkton, White Hall, Bentley Springs, and Freeland. TCB Rail Trail users can continue their journey north into Pennsylvania by traveling on the York County Heritage Trail.

Recognizing the abandoned rail line's potential as a recreational trail, Maryland DNR purchased the abandoned line between Cockeyville and the Pennsylvania Line in early 1980s. Thanks to volunteers and a great believer and advocate for the trail, Dr. Torrey C. Brown, the first section of the Northern Central Railroad Trail opened to the public in 1984. The TCB is one of the oldest rail trails in the United States, and it has developed into a popular recreational destination. In honor of Dr. Brown's overwhelming support for the trail, it was renamed the Torrey C. Brown Rail Trail in 2007 (formerly the Northern Central Railroad Trail).

Image Credit:
Ed Liske



CHAPTER 5: LAND PROTECTION AND CONSERVATION

A. Sustaining Maryland's Legacy

Conserved lands lie at the heart of the bountiful, diverse natural resources and exceptional outdoor experiences that Maryland's public lands provide. In this chapter, we focus on several key components of land protection and conservation, including the following:

- How the DNR identifies lands that are critical for conservation – our GreenPrint priorities.
- Maryland's four key land conservation programs and how they work to protect the State's rich history in land conservation and GreenPrint priorities.
- Emerging issues that our land conservation programs are addressing to ensure that a land conservation ethic continues to be a fundamental element for a healthy, prosperous, and resource-rich Maryland.
- How key land protection and conservation partnerships work and why they are so important to our mutual success, both to protect sensitive resources and make land available for outdoor recreation.
- All programs must adapt and change as our environment, our society and our economies change. State land conservation programs cannot take on this task alone. Without partnerships across state agencies, without federal and local governments and our non-profit, feet-on-the-ground partners, the job will not be done.
- The shift from a focus on the ecological value of protected lands to both ecological and social benefits, insuring equitable access by all Maryland residents.
- The development of Heritage Tourism as an important component of Maryland's economic vitality, demonstrating an important nexus of trails, land and property acquisition, and cultural landscapes.

Maryland's land conservation programs address emerging issues to ensure that a sustainable land conservation ethic continues to be a fundamental component for a healthy, prosperous, and resource-rich Maryland. Partnerships across state agencies, federal and local governments, and non-profit, feet-on-the-ground partners are key to mutual success; both to protect sensitive resources and make land available for outdoor recreation.

B. Maryland's GreenPrint

Maryland's GreenPrint is one of the State's three cornerstone plans to prioritize where limited public funds are spent in order to achieve the greatest public benefits. In combination with AgPrint and GrowthPrint, these plans work together to achieve the conservation of irreplaceable natural resources and rural working landscapes while minimizing sprawl development. Visit [Maryland's Smart, Green and Growing](#)¹⁸ on-line resources to obtain more information on these and other statewide initiatives.

[Maryland's GreenPrint](#)¹⁹ is central to the Department's effort to conserve the most important natural resources in the state. GreenPrint is a map for guiding the investment of State conservation funds by identifying the state's most ecologically valuable areas. These areas, which are designated "Targeted Ecological Areas (TEAs)" are the "best of the best." The majority of Stateside Program Open Space (POS) funds are directed toward protecting Targeted Ecological Areas, because once they are lost, they cannot be replaced. These lands support the rich natural heritage and biodiversity that characterizes Maryland. These lands provide exceptionally high-quality public benefits that are critical to the health and protection of Maryland's citizens and the natural-resource-based economies that many depend on for clean water and air, flood protection, recreational and commercial fishing, wood products, forestry, and ecotourism, just to name a few.

GreenPrint TEAs were identified by prioritizing and mapping the State's most ecologically important lands and waters. These maps are based on the analysis of over 30 years of collected data and the expertise of numerous agency ecologists. Because Maryland's natural heritage is a diverse assemblage of forests, wetlands, meadows, streams, and other natural systems, this process was completed for each type of natural resource. The Department has grouped the various resource values into five distinct types of natural resource areas that are described below.

1. Green Infrastructure Hubs

Green Infrastructure Hubs are large blocks of forests and wetlands that are significant to protecting water quality. The Green Infrastructure Assessment operates at a landscape scale and identifies a statewide network of hubs and corridors. Hubs are composed of large blocks of forests and wetlands. These areas are becoming rare as sprawl development fragments these large expanses of habitat into smaller and smaller pieces. As habitats are diminished, many species, such as the Red-shouldered Hawk or Scarlet Tanager, which require large forested areas, will decline or be lost altogether. Connectivity between hubs is provided by corridors, which act like habitat highways. Corridors provide the means for plants and animals to disperse from one habitat to another. More information can be found online at [Maryland's Green Infrastructure Assessment](#)²⁰ website.

In addition to providing high quality habitats, forested areas are also critical for preventing nutrient and sediment pollution of streams, rivers, and the Chesapeake Bay and other coastal areas. Not all forests are created equal in providing this water quality function. Some forests, particularly those on steep slopes, along streams or in wetland areas provide exceptional pollution prevention benefits and receive conservation priority. More information on [Maryland's Forests for Healthy Watersheds](#)²¹ can be found on-line.

¹⁸ <http://www.green.maryland.gov/whatis.html>

¹⁹ <http://www.greenprint.maryland.gov/>

²⁰ <http://www.dnr.state.md.U.S./greenways/gi/gi.html>

²¹ <http://dnr.state.md.U.S./forests/programapps/wbfm.asp#mfhw>

2. Wildlife and rare species habitat

Maryland's wildlife and rare species habitats have been specifically identified for their importance in sustaining the State's rich biodiversity. Specific habitat areas have been identified that support rare, threatened, and endangered species, rare and high quality plant and animal communities, species of Greatest Conservation Need, wildlife concentrations, and important habitats needed for wildlife migration and movements related to climate change. These areas have been mapped and prioritized through the Department's BioNet initiative. More detail on [BioNet](#)²² and the wildlife and biodiversity that these areas support can be found on line.

3. Non-tidal streams and fisheries

Non-tidal freshwater fish, amphibians, reptiles, mussels, and benthic macro-invertebrates are dependent on healthy watersheds. Some watersheds, including non-tidal streams and fisheries, are especially significant for supporting high biodiversity, primarily due to the unique physical and hydrologic characteristics of the stream habitats and the lack of development within the watershed. Development leads to more impervious surface, which causes greater stormwater runoff and pollution to these streams. Aquatic resources are also vulnerable to mining activities. If not managed properly, these activities could introduce acid mine drainage, more sedimentation and other toxic pollutants to receiving streams. The consequences are a loss in biodiversity and decline of important fish species, such as brook trout, which are renowned for providing high quality fishing experiences. A series of stream resource assessments has identified key watersheds that have been elevated to priorities for targeted land conservation. More information can be found on line about these watersheds, which include [stronghold watersheds](#),²³ valued for their high aquatic biodiversity and [Tier II watersheds](#),²⁴ which support high quality streams that are protected by the Maryland Department of the Environment's anti-degradation regulations.

4. Tidal fisheries, bay and coastal ecosystems

As a coastal state, Maryland places a high priority on conserving the functions and values of coastal and tidal ecosystems. The [Blue Infrastructure Assessment](#)²⁵ has identified specific shoreline and watershed areas that provide high quality coast habitat and are important for supporting productive shellfish beds and anadromous fisheries spawning and nursery habitats. These areas are critical for supporting commercially and recreationally viable populations of striped bass, shad, herring, and perch. A convincing and mounting body of evidence proves that changes in land use, particularly to more developed and paved conditions, have significant detrimental effects on fish populations. More information on how GreenPrint implements the concept that [land conservation is fish conservation](#)²⁶ can be found online.



²² http://www.dnr.maryland.gov/wildlife/Plants_Wildlife/digitaldata.asp

²³ <http://www.streamhealth.maryland.gov/stronghold.asp>

²⁴ http://www.mde.maryland.gov/programs/water/tmdl/water%20quality%20standards/pages/antidegradation_policy.aspx

²⁵ <http://dnr.maryland.gov/ccp/bi.asp>

²⁶ <http://dnr.maryland.gov/fisheries/fhpep/index.asp>

5. Wetland areas important for climate change adaptation

A recent report issued by Maryland’s Commission on Climate Change, “[Updating Maryland’s Sea-level Rise Projections](#),”²⁷ recommends that Maryland residents plan for the state’s coastal waters to rise by 2.1 feet by the year 2050 and by 3.7 feet or more by the century’s end. Land conservation can play a role in maintaining healthy coastal wetlands that provide valuable habitat for plants, animals and fisheries, as well as buffering coastal communities from the impacts of coastal flooding. As sea level rises, wetlands along the coastline may move landwards in response. Conservation efforts will be focused on high priority wetland adaptation areas that have been identified as potential future wetland habitats. These areas can provide migration or transition zones for wetlands to move landward as sea levels rise. More information on [coastal habitats, sea-level rise and how wetland adaptation areas](#)²⁸ were identified is available on line.



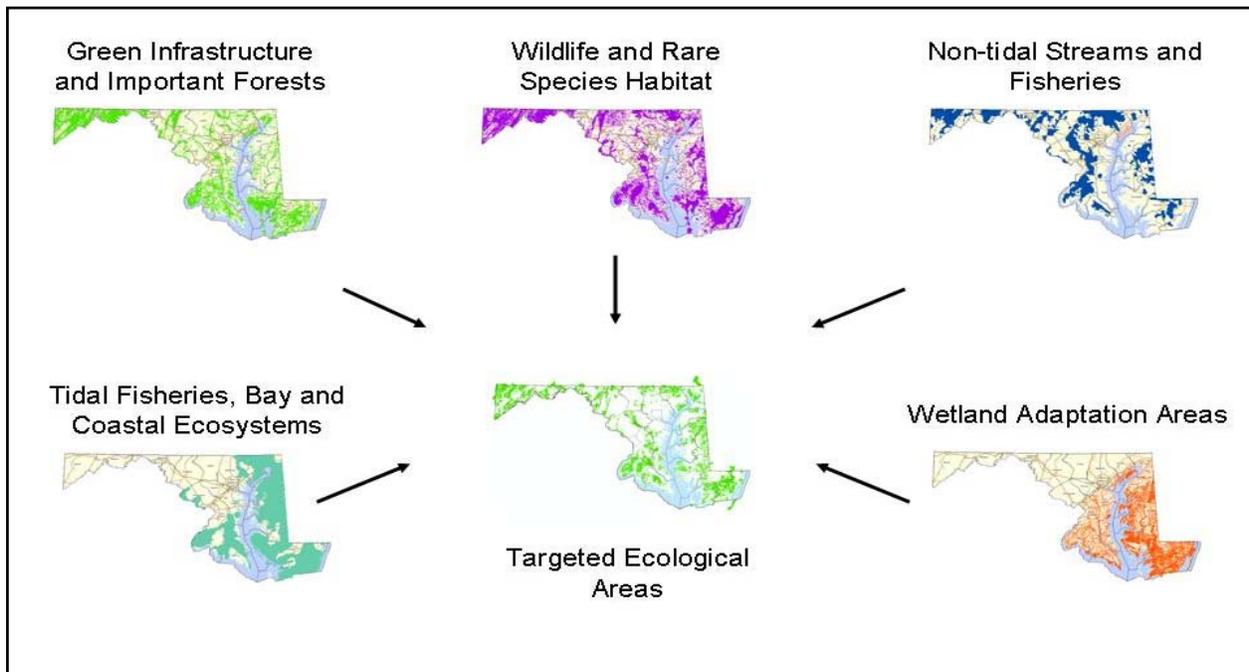
The “best of the best” within each of these conservation priority categories were combined to identify the GreenPrint TEAs, as illustrated below in **Figure 18**. The TEA map was further refined by removing land along the coast that was likely to be submerged by sea level rise. Based on current projections, sea level is expected to rise at least two feet by 2050. Any TEA lands that fell within the 0-2 foot zone were removed from the map to avoid spending limited funds in areas likely to be submerged. This decision implements DNR’s Policy for Building Resilience to Climate Change, which guides the Department’s investments in and management of land, resources and assets to better understand, mitigate, and adapt to climate change. More information on [DNR’s climate change response strategies](#)²⁹ can be found on line.

²⁷ http://www.mdsg.umd.edu/sites/default/files/files/Sea-Level_Rise_Projections_Final.pdf

²⁸ http://dnr.maryland.gov/ccp/habitats_slr.asp

²⁹ <http://www.dnr.state.md.U.S./climatechange/>

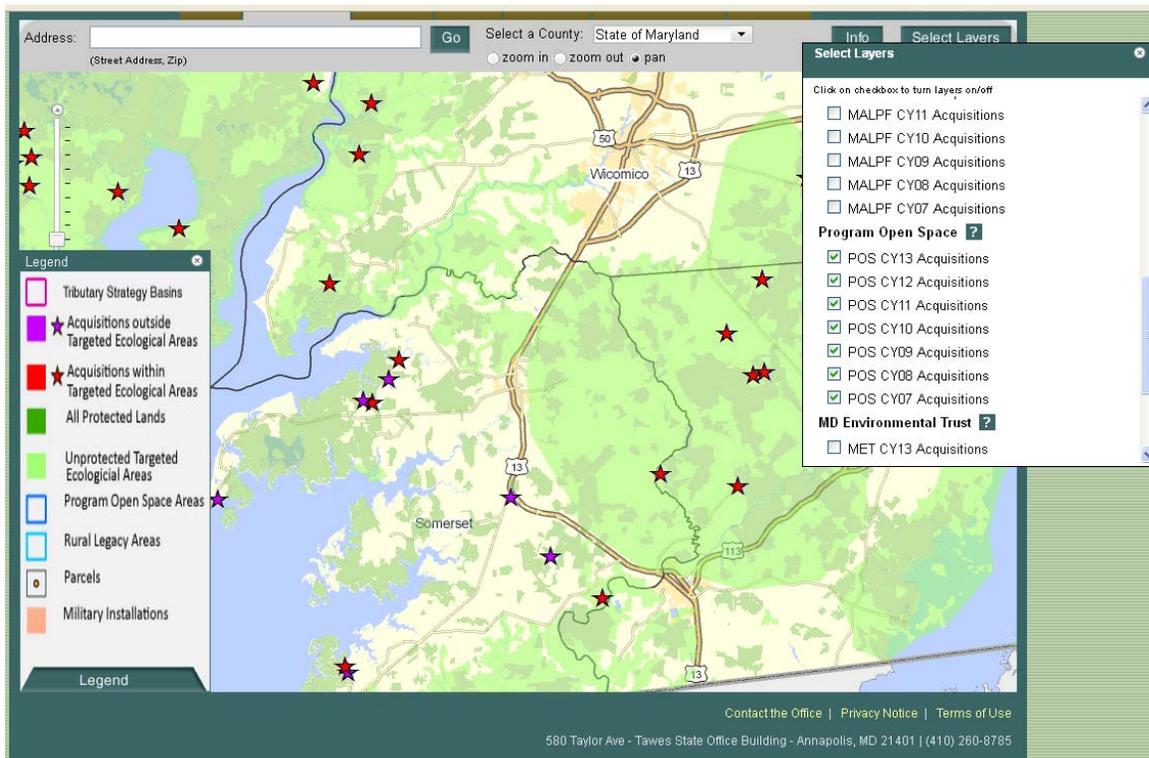
Figure 18: GreenPrint TEAs Conservation Priorities



Once a project or potential land acquisition with a willing landowner is identified that falls within a TEA, it is then forwarded to an internal stewardship review team for additional evaluation based on field assessments, public access and recreation opportunities, and management responsibilities. Based on this stewardship review and the ecological GreenPrint benefits, DNR will decide if the project should be considered for funding, and if so, will present the project to the Board of Public Works (BPW) for approval. The BPW is the highest administrative body in Maryland state government and consists of the Governor, the Treasurer, and the Comptroller. Together, the BPW members are responsible for the expenditure of all capital appropriations and the oversight of nearly all state public works projects.

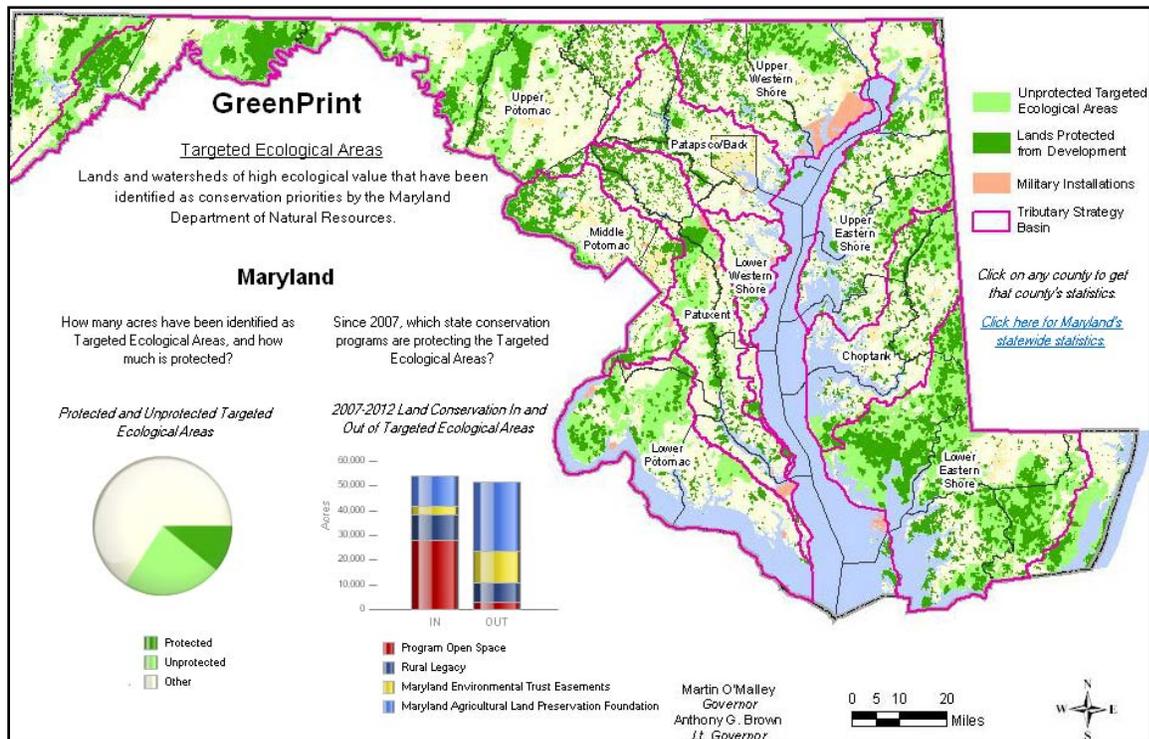
The [Maryland GreenPrint website](#) (sample page shown in **Figure 19**) provides access to the TEA map through an interactive mapping application. Land trusts, conservancy organizations, and other government programs can use this application to identify cooperative projects that meet Stateside POS ecological criteria. Local governments can identify areas suitable for resource conservation zoning that complements state land conservation investments. Maryland GreenPrint also ensures transparency and accountability by tracking the location of all state funded conservation projects and the funding amount approved by the BPW.

Figure 19: GreenPrint TEAS Website



GreenPrint also provides summary statistics (illustrated in **Figure 20**) to provide an overview of how well the State is achieving GreenPrint TEA protection goals. These statistics are available at the statewide scale and also for individual counties. The pie chart in the following graphic shows the amount of land identified for its high ecological value (TEAs) and how much of those valuable areas have been protected (the dark green slice of the pie). In addition, the bar chart identifies how Stateside POS is meeting its GreenPrint TEA goals. The bar on the left illustrates the acres of land protected that are within the GreenPrint TEAs, while the right hand bar shows acres of land that do not lie within GreenPrint TEAs. Stateside POS projects are identified by the red bar segment; most of those protected acres fall within the TEAs. Another interesting point to note is that the State's three other major land conservation programs also work to conserve GreenPrint TEAs. Tracking this information across all state conservation programs illustrates the opportunity for collaboration with Maryland Environmental Trust (MET), Rural Legacy and Maryland Agricultural Land Preservation Foundation (MALPF) to achieve mutually complementary conservation goals. The section following the discussion of wetland preservation provides a more detailed description of the State's conservation programs and the specific goals and conservation approaches that are unique to each.

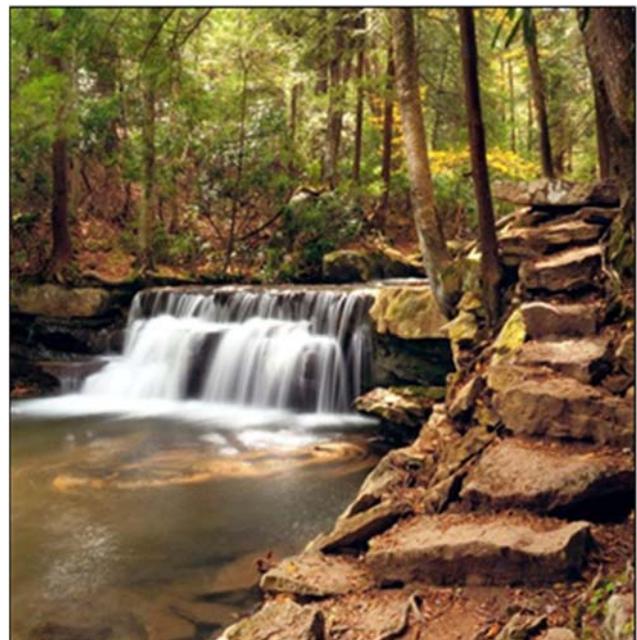
Figure 20: GreenPrint Summary Statistics



C. Wetlands Preservation

In the course of conserving forests, farms, and other important natural areas, many wetlands are also preserved. Stateside POS, through its GreenPrint TEA targeting system, specifically identifies and prioritizes high value wetland areas for conservation action based on their:

- Wildlife and rare species habitat value
- Importance for protecting water quality and maintaining stream biodiversity
- Role in supporting tidal fisheries production
- Protection of coastal and floodplain areas from flooding associated with extreme storm events and rising sea level
- Value in facilitating adaptation to a changing climate and rising sea level



The Emergency Wetlands Resources Act of 1986 provides for the use of federal and stateside Land and Water Conservation Funds for the acquisition of wetlands, provided that the State Conservation and Outdoor Recreation Plan (this plan) contains or references a wetland priority component. At a minimum, the wetland priority component must meet the following four criteria.

1. Be consistent with the [National Wetlands Priority Conservation Plan](#),³⁰ prepared by the U.S. Fish and Wildlife Service

The primary purpose of the National Wetlands Priority Conservation Plan is to assist decision makers in focusing their acquisition efforts on the most important, scarce, and vulnerable wetlands in the nation. The Maryland GreenPrint TEA targeting system places a priority on those wetland types that provide an exceptionally high degree of public benefit based on rarity, biodiversity support, and maintenance of water quality, protection from flooding, coastal storm surge and sea level rise, and provision of outstanding passive outdoor recreational uses such as hiking, boating, bird, and wildlife watching.

2. Provide evidence of consultation with the state agency responsible for fish and wildlife resources

DNR is the agency responsible for the State’s fish and wildlife resources. The GreenPrint TEA targeting system relies heavily on the wetland assessment and prioritization efforts that are described in [Maryland’s Wildlife Diversity Conservation Plan](#).^{31,32} The Plan meets the criteria of the U.S. Fish and Wildlife Service’s requirements for the State Wildlife Action Plan (SWAP) and was approved in May 2006. The Plan recognizes wildlife species of greatest conservation need and their key habitats, many of which are wetland habitats. This information is incorporated in the GreenPrint conservation theme, referred to as “BioNet,” which maps and prioritizes important wildlife and rare species habitats.

3. Contain a listing of those wetland types which should receive priority for the conservation of fish and wildlife resources

The following table identifies the acreage of all wetlands identified as a conservation priority for fish and wildlife resources through the GreenPrint Targeted Ecological Area (TEA) targeting system. The table is organized by wetland type which follows the National Wetland Inventory³³ classification system of wetland habitats at the system level. Systems represent wetland and deep water habitats that share similar hydrologic, geomorphologic, chemical, or biological characteristics. The wetland types relevant to land conservation include 1) Estuarine



wetlands which are the salt and brackish marshes and non-vegetated tidal flats and 2) Palustrine wetlands which are freshwater wetlands that are often characterized by the type of vegetation they support (forested, scrub shrub, and emergent). Sixty-five percent (65%) of the freshwater wetlands (palustrine) in Maryland have been identified as a GreenPrint conservation priority, while only two percent of all estuarine wetlands have been similarly ranked. The difference lies in the fact that many of the estuarine wetland habitats are unvegetated tidal flats or have been eliminated from the Targeted Ecological Area because these areas are likely to be submerged as sea level rises.

³⁰ <http://digitalmedia.fws.gov/cdm/ref/collection/document/id/1356>

³¹ http://dnr.maryland.gov/wildlife/Plants_Wildlife/WLDP/divplan_about.asp

³² http://dnr.maryland.gov/wildlife/Plants_Wildlife/WLDP/pdfs/WCDP_Chapter4_Part2_20050926.pdf

³³ Tiner, R.W., and D.G. Burke. 1995. Wetlands of Maryland. U.S. Fish and Wildlife Service, Ecological Services, Region 5, Hadley, MA and Maryland Department of Natural Resources, Annapolis, MD. Cooperative publication. 193 pp. plus. Appendices

The information presented below also show the extent of protection for these high value wetlands, as well as those that remain unprotected and are future acquisition priorities. Not only does this listing identify state wetland conservation priorities for land acquisition, but it also provides for the exact geographic location, which is critical for conserving the rarest and most threatened fish and wildlife resources.

Wetland Type	Acres Statewide	% Acres within GreenPrint TEA	GreenPrint TEA Acres Unprotected	GreenPrint TEA Acres Protected
Estuarine	1,343,030	2.1	19,638	8,437
Palustrine	407,643	65.2	169,637	95,965

Data source: Maryland Department of Natural Resources Wetlands Survey (1988-1995)

4. Consider outdoor recreation opportunities associated with its wetland resources for meeting the State’s public outdoor recreation needs

Every property considered for acquisition by DNR must undergo an internal stewardship review. The opportunity for public access and the provision of exceptional outdoor recreational experiences are two of the considered factors. The presence of high quality wetlands is rated highly because they support superb opportunities for wildlife and bird viewing.

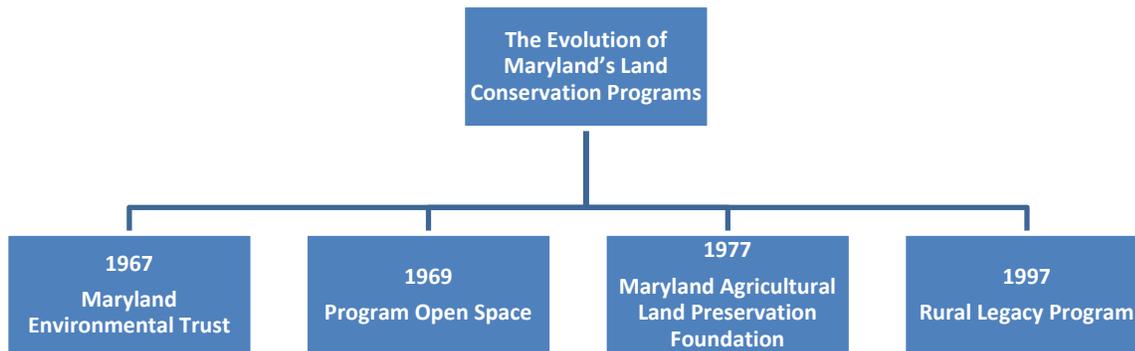
D. Maryland’s Land Conservation Programs

Four major state funded land conservation programs operate throughout Maryland to protect natural resources, farmland, and recreational open space. Each of these programs has a unique conservation objective and strategy. These conservation tools are complementary and, when stitched together much like an “implementation quilt,” have resulted in the conservation of many valuable rural landscapes composed of intermingled farms, forests, wetlands, and meadows. In addition, each program is flexible enough to respond to new initiatives in land conservation, creating opportunities to engage citizens more directly in the enjoyment and stewardship of open spaces across the land use spectrum from urban to rural and to ensure that the benefits of natural lands continue to enrich the lives of future generations.

The Evolution of Maryland’s Existing Land Conservation Programs

This section’s primary focus is on the four state funded conservation programs discussed below, emphasizing those administered by the Maryland Department of Natural Resources (DNR). Some of these programs conserve private land through easements, meaning that the land remains private, but is protected from development, while some lands are purchased and owned by the state for public recreation or specific resource management objectives.

This abbreviated timeline documents Maryland’s long history in state conservation efforts, which began in 1967. These programs are described in more detail in the following section.



Effective and Strategic Land Conservation Operates Across the State

Currently, effective and strategic land conservation rests on several fundamental guiding principles:

- Objective and transparent conservation criteria need to be established in order to ensure that limited conservation funding is meeting the intended conservation objectives.
- Conservation approaches, such as easement and acquisition options, creative financing, partnership agreements, and other tools, need to be diverse in order to meet the interests of landowners and should be nimble enough to quickly take advantage of new opportunities.
- Adaptive program administration provides the means to use the power of land conservation as a way to incorporate emerging conservation standards and strengthen the connection between community values and the public benefits provided by nature and open space.

A more detailed view of the individualized approaches taken by Maryland’s state land conservation programs will highlight the variety of ways in which these guiding principles are applied.

Maryland Environmental Trust³⁴ (MET)

Maryland Environmental Trust was created in 1967 by the General Assembly to preserve open land, such as farmland, forest land, and significant natural resources through donated conservation easements. Landowners are willing to donate easements because of the tax benefits. It is operated by the Maryland Department of Natural Resources (DNR) and governed by a citizen Board of Trustees.

For the last 40-plus years, MET focused its efforts on protecting large parcels of scenic open space in rural areas. While this remains part of its core mission, in 2012 MET adopted a new policy for accepting conservation easements in urban areas, citing the considerable public benefits which can be achieved by protecting open space in densely developed areas, including providing green space for outdoor recreation and improving water quality protection. This policy has made it possible for MET to partner with urban land trusts to help people connect to urban open space, parks and community gardens, and to enhance greenways and waterways. MET can now co-hold a conservation easement on an urban property if it possesses significant environmental and/or public benefit. These easement donations provide a tax benefit to the landowners.

³⁴ <http://www.dnr.state.md.U.S./met/>

MET Case Studies: 2012 Urban Conservation Easements

- **The Commissioners of East New Market, 9.634 acres, Town of East New Market** – DNR staff worked closely with the Mayor and Commissioners of East New Market, the State Attorney General’s Office, and the Eastern Shore Land Conservancy, Inc., to establish the first urban easement based on the new MET policy. Having granted this easement to MET, the Commissioners ensured that 9.6 acres of existing parkland will forever remain parkland. MET accepted and holds the easement together with the Eastern Shore Land Conservancy, Inc.
- **Jennifer Stanley Trust, 1.34 acres, Town of Oxford** – This urban land easement was accepted by MET and the Eastern Shore Land Conservancy, Inc. to protect wetlands and a portion of Town Creek, and to open public access to a wooded waterfront area in Oxford. Through her donation of this easement, Mrs. Stanley has ensured that the woodlands and habitat will be protected forever and has created a public park in Oxford.

Program Open Space³⁵ (POS)

POS was established in 1969 under DNR as the first state conservation program in the nation with legislatively mandated dedicated funding. Funding is generated through the real estate transfer tax to ensure that land conservation keeps pace with the amount of land converted to development. POS symbolizes Maryland’s long term commitment to conserving our natural resources while providing exceptional outdoor recreation opportunities for our citizens. The funds are split between State and local governments.

- Stateside POS³⁶ funds are used for the acquisition of parklands, forests, and wildlife habitat, as well as natural, scenic, and cultural resources for public use. Stateside POS focuses on the conservation of lands identified through the Maryland GreenPrint initiative.
- Local POS³⁷ funds are provided to local governments to help buy land, develop trail system connections, and build park facilities. Additional discussion of POS objectives and related case studies are continued in a section that specifically focuses on “Community Connections.”

Maryland Agricultural Land Preservation Foundation³⁸ (MALPF)

MALPF was established in 1977 and is administered by the Maryland Department of Agriculture and by county agricultural preservation programs with four statutory goals:

- To preserve productive farmland and woodland for the continued production of food and fiber for all of Maryland’s citizens.
- To curb the expansion of random urban development.
- To help curb the spread of urban blight and deterioration.
- To help protect agricultural land and woodland as open space.

³⁵ <http://www.dnr.state.md.U.S./land/index.asp>

³⁶ http://www.dnr.state.md.U.S./land/pos/pos_stateside_targeting.asp

³⁷ <http://www.dnr.state.md.U.S./land/pos/index.asp>

³⁸ <http://www.malpf.info/>

A 13-member Board of Trustees and a staff of seven administer MALPF's programs. The Board of Trustees is composed of four ex officio members (the Comptroller, the Treasurer, and the Secretaries of Agriculture and Planning) and nine Governor-appointed members. The Governor's appointed members include representatives of the Maryland Farm Bureau, the Maryland Grange, the Maryland Agriculture Commission, the Young Farmers Advisory Board, and the State's forestry industry. The Board seeks a diverse membership based on geography, gender, race, and type of farming operation.



MALPF is based on a partnership with local governments, which generally appoint advisory boards of five members to assist in the administrative process. The local agricultural land preservation advisory board works with local governing authorities to develop local easement ranking systems, approve easement applications, and review requests from program participants, making recommendations on those requests to MALPF's Board of Trustees. No easement purchase is approved by the State that has not already been reviewed and approved by individual counties.³⁹

Each county has a designated program administrator to act as the primary contact with and liaison between the agricultural community, county government, and MALPF. County program administrators also have day-to-day responsibility for monitoring easement properties, helping landowners prepare easement applications, and subsequent requests to be reviewed by the county and MALPF. County program administrators are in an excellent position to advise landowners on the range of options and programs in addition to MALPF that are available to help landowners seeking to preserve their properties.

³⁹ The MALPF statute originally required landowners to enter a temporary preservation district before they could sell an easement. However, legislation passed by the 2012 General Assembly and signed by Governor O'Malley eliminated all reference to districts and district agreements, since most districts were set to be terminated by July 1st, 2012 per previous legislation. The counties, however, have the option of retaining the districts for their own purposes, such as the allocation of property tax credits.

Rural Legacy Program⁴⁰ (RLP)

The Rural Legacy Program, created in 1997 as part of a package of Smart Growth measures and administered by DNR, is designed to discourage sprawl development and protect rural areas for future generations to enjoy. The Program provides farmers and landowners an alternative to developing (or subdividing) their land or selling their property to developers. Landowners can sell or donate their development rights while still retaining ownership to manage their land for its natural resource, agricultural and forestry values. In addition to buying easements, as MALPF does, Rural Legacy will pay landowners extra for active conservation measures, such as the planting of a naturally vegetated stream buffer. The RLP is funded by a combination of POS funds and general obligation bonds from the state's capital budget.

The RLP encourages local governments and private land trusts to identify Rural Legacy Areas and to competitively apply for funds to complement existing land conservation efforts or create new ones. Local sponsors must apply annually to the Rural Legacy Board for participation in the Program and to receive funding.

The Rural Legacy Advisory Committee reviews all applications for annual Rural Legacy grants, the creation of new Rural Legacy Areas, or a requested change to the boundaries of existing Rural Legacy Areas. It sends its recommendations to the Rural Legacy Board which, in turn reviews the applications each spring and makes recommendations to the Governor and Board of Public Works. The Board of Public works makes the final decision about designating or altering Rural Legacy Areas and approving the grants for Rural Legacy funding.

Rural Legacy Areas are evaluated for the following:

- The significance and extent of agricultural, forestry, natural, and cultural resources proposed for protection
- The threat to resources from development pressure and landscape changes
- The significance of historical and cultural resources proposed for protection
- The economic value of the resource-based industries or services proposed for protection through land conservation, such as agriculture, forestry, tourism, and recreation

Additionally, Rural Legacy applications are evaluated on:

- Their overall quality and completeness
- Ability of zoning and other land use tools to protect the state's investment in land preservation
- The strength and quality of partnerships created for land conservation
- Extent of matching funds
- Sponsor's ability to carry out the proposed rural legacy plan, as well as the goals and objectives of the program

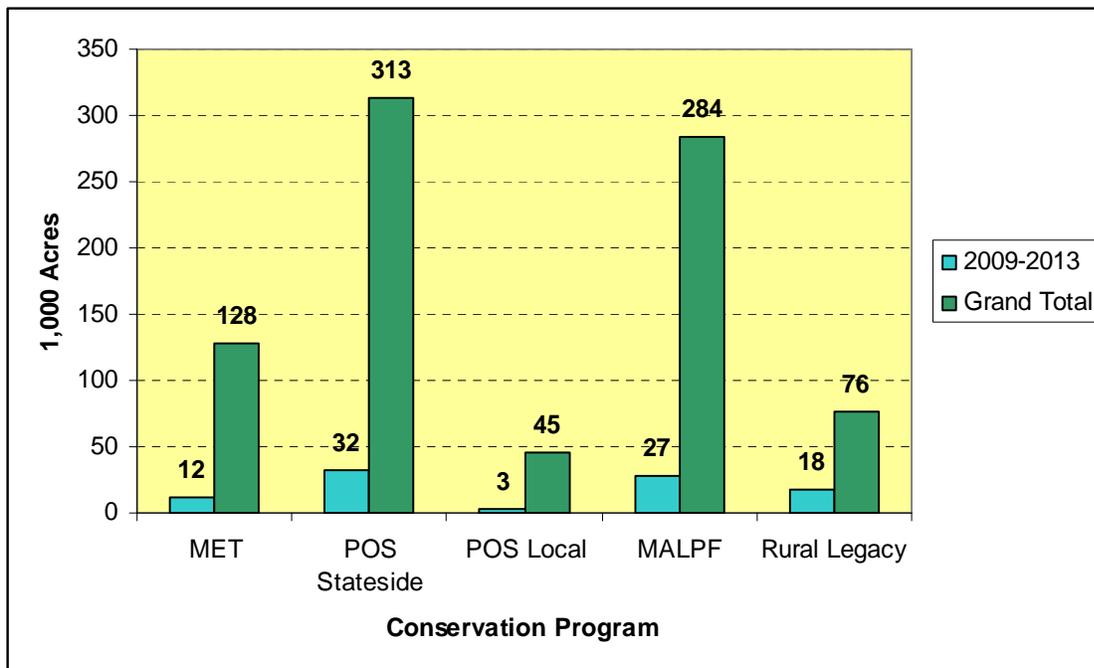
The [Maryland Protected Lands Reporting Site](http://www.dnr.state.md.us/land/rurallegacy/index.asp)⁴¹ provides a single point of reference for tracking protected land in Maryland. As of June 2013, these four state conservation programs, combined with the protection efforts of local and federal governments, private land conservancies, and other state programs, have protected a total of 1,483,036 acres in Maryland. In general, the lands protected through MET, Rural Legacy and MALPF are under easement, while Stateside and Local POS lands are typically owned by governments. About 24 percent of Maryland's 6,256,000 land acres are protected.

⁴⁰ <http://www.dnr.state.md.us/land/rurallegacy/index.asp>

⁴¹ <http://dnrweb.dnr.state.md.us/gis/plreports/currenttotals.asp>

Of this total, 845,713 acres have been protected through the actions of the four state programs described above. **Figure 21** illustrates the rate of activity between 2009 and 2013 (the period of time since the completion of the last Land Preservation and Recreation Plan) and compares it to the historical grand totals for each program.

Figure 21: Protected Lands Activity History



Source: Maryland Protected Lands Reporting Site at <http://dnrweb.dnr.state.md.us/gis/plreports/currenttotals.asp>

E. Emerging Issues

This section briefly describes new and emerging issues for the Department of Natural Resources and statewide initiatives that are in the process of being addressed by the Department’s land conservation efforts.

Children in Nature

Current data and research have shown that today’s children are spending less time outside and have decreased access to nature. Whether due to over scheduling, lack of access or competing screen time, today’s families are spending less time connected to their surrounding natural areas. A [new study by the Kaiser Family Foundation](#) found that the average kid spends 7.5 hours *per day* using a smart phone, computer, television, or other electronic device, and at the same time the Centers for Disease Control report that 17 percent of all kids and teens in the U.S. are obese.



This missing outdoor time can go a long way not only toward providing active time, but it is important for children’s overall well-being. Evidence suggests that nature exposure can improve attention, promote self-confidence, calmness, and other psychological aspects of health. Research published in *Environment and Behavior* has shown that access to nearby nature acts as a buffer to these stresses, especially in children.

The benefits from unstructured outdoor play can have a positive effect on the health and mental well-being of all Maryland children including those from rural communities to urban and suburban neighborhoods. To address this and other issues, the [Maryland Partnership for Children in Nature](#) was created in 2008 to ensure that all young people have the opportunity to learn about their environment, connect with their natural world, and grow to become responsible stewards. At the same time, the Maryland Department of Natural Resources has developed policies for the preservation of lands; not only for ecological purposes, but also to support community connections to nature.

In addition to benefits of unstructured outdoor activity, in 2011, Maryland became the first state in the Nation to require students to be environmentally literate as a high school graduation requirement. The State Board of Education ruled that “each local school system shall provide in public schools (Pre-K-12) a comprehensive, multi-disciplinary environmental education program infused within current curricular offerings and aligned with the Maryland Environmental Literacy Curriculum.”⁴²



The requirement does not require a specific environmental course for students; instead, each local school system will shape its own environmental education program, but the program must align with Maryland Environmental Literacy Curriculum Standards. There are eight state standards: Environmental Issues; Interactions of Earth's Systems; Flow of Matter and Energy; Populations, Communities and Ecosystems; Humans and Natural Resources; Environment and Health; Environment and Society; and Sustainability.⁴³ In the future, DNR hopes to collaborate with school systems to coordinate the use of DNR properties as outdoor classrooms; places for hands on learning and interaction with nature.

Access to nature can be viewed as critical infrastructure as communities are developed and redeveloped. State and local land use and recreation planning efforts provide a wonderful opportunity to incorporate these Children in Nature goals and to develop policy that will support increased access to natural spaces for children and their families. Some specific examples are listed below:

- Consider access to green space when planning capital projects – paths near roads, connecting homes to green space
- Connect schools and public buildings to parks and paths
- Reclaim underused sites for green pocket parks – even a small space can make a difference

⁴²<http://www.maeoe.org/Elit%20Standards%20Overview.php>

- Plan for nature play areas instead of expensive structured playgrounds
- Establish expectations that access to nature is a necessary element to community design as much as transportation, schools, and other amenities
- Identify greenways, corridors, and trails that may provide access to green space and could also serve as alternative transportation routes (bike and walking paths) as well as support community health goals (active living through community design)
- Utilize open space for outdoor education to meet state requirements for environmental literacy

Providing Access to Unserved Communities: The Park Equity Analysis Tool

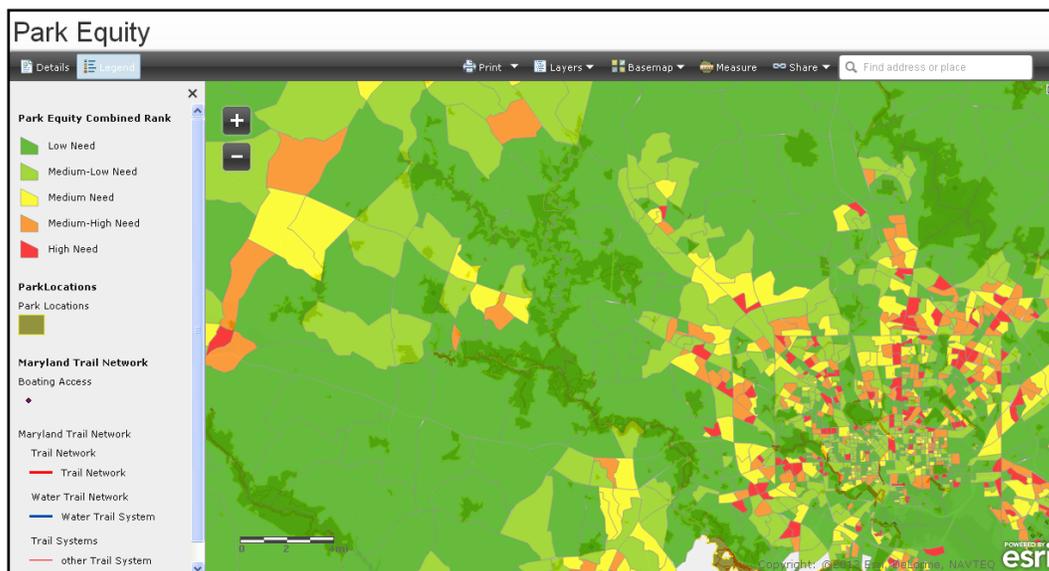
In 2006, the Trust for Public Land launched its “Parks for People” initiative in the belief that every American child should enjoy convenient access to a nearby park or playground. As part of this initiative, the Department of Natural Resources has developed a [Park Equity Analysis Tool](#) to aid in making these critical connections for unserved communities, illustrated in **Figure 22**. For the purpose of using the tool, unserved communities are those communities that have little or no access to nature and open space.

The analysis is built upon the U.S. Census Data combined with statewide data identifying public and local parks. The analysis and associated mapped model prioritizes unserved areas of Maryland in need of park space by identifying areas with:

- High concentration of children under the age of 16
- High concentration of populations below the poverty line
- High population density
- Low access to public park space

The Park Equity Analysis Tool provides a quantitative and statewide analysis used to determine where increased access to public lands for children is needed in unserved communities. These measures are combined into a score that is then displayed on maps to display various levels of access to parks and open space. Census blocks with the highest scores are shown in red, meaning that they show the greatest need for a local park. While the analysis is specifically geared toward children, the results can be interpreted broadly enough to address unserved communities in general.

Figure 22: Online Park Equity Analysis Tool



The Park Equity Analysis can also be used in a number of ways to benefit the public:

- Identify areas in significant need of access to park space
- Help streamline green space funding programs
- Aid local partners in planning for green infrastructure and park and recreation development opportunities
- Help identify green space needs in school construction and public facility planning
- Be combined with other data layers such as health data for planning purposes

Case Study: Carroll Park Children's Garden – Baltimore City



Carroll Park, in Baltimore City, is located on the western part of the City adjacent to the Southwest Baltimore Charter School. While the park has recreational amenities such as trails, basketball courts and playgrounds, a recent project deliberately connects the school children and community to nature with a children's garden. The Carroll Park Children's Garden is a collaborative effort between the Department of Recreation and Parks, the Friends of Carroll Park, and the Southwest Baltimore Charter School geared toward increasing the presence of natural materials and experiences in conjunction with play. The garden provides an arena for children to create

their own play experience while utilizing the plants, soil, rocks, logs, and branches made available. The project involved the students, teachers, parents, and community leaders in planting and celebrating the natural wonders of the garden.

Access to Boating, Fishing, and Water Trails

Recreational boating is an extremely popular activity in Maryland, and public access to the water has become a statewide priority. In a statewide survey designed to identify participation rates in over 83 recreational activities during 2002, power boating was ranked as the 12th highest statewide, and participation was substantially higher in Southern Maryland (8th) and the Eastern Shore (7th). Passive boating such as canoeing, kayaking, and sailing also attracted significant participation among Marylanders. Boaters traveling from neighboring states are thought to increase the numbers of those recreating on Maryland waterways substantially.

Whether a property is being considered for conservation because of its ecological value or its Community Connections values, the Department favors projects that increase opportunities for the public to interact with the natural world through boating, fishing, hiking, biking, and other passive, non-destructive means. Increasing access to high value fishing spots, or filling in a gap for a land or water trail elevates the project's conservation value.

Energy Development

Opportunities exist to develop energy resources on existing public lands and to consider how energy development is or should be addressed by current and future acquisition and easement programs. Energy development includes both renewable energy production from wind and solar sources, and also mineral extraction which includes coal mining and natural gas production. Advances in gas production from tight shale formations, known as high volume hydraulic fracturing, coupled with deep horizontal drilling techniques, has now made this type of energy production a very real possibility in Maryland and is a subject of intense interest. The natural gas within Marcellus shale formation, which underlies Garrett County and a portion of Allegany County, has been the focus of intense hydraulic fracturing extraction techniques in Pennsylvania.

Currently, by issue of Executive Order 01.01.2011.11, Maryland's [Marcellus Shale Safe Drilling Advisory Committee](#)⁴⁴ has been charged with conducting a series of studies that evaluate the gas production potential in Maryland, a suite of best practices that should guide shale gas development in Maryland, and a final report that will include an evaluation of potential economic, public health and environmental impacts. As of the date of this report, no shale gas production or exploration wells have been permitted in Maryland and no decision has been made to move forward with shale gas production.

Existing Public Land Policy

In general, the Department encourages small-scale non-commercial energy development where appropriate on state lands under its jurisdiction. Any such projects must be designed to help the Department meet on-site energy needs, provide clear economic and environmental benefits, and move toward sustainability. Renewable and clean energy development, such as solar, wind, or geothermal projects is encouraged. The Department has an explicit policy that prohibits the development of large scale commercial wind power generation facilities which it has determined is incompatible with the uses of and contrary to purposes for which Departmental acquired lands and waters are held and managed in the public trust. This policy, issued in 2008, was informed by a series of public hearings to address whether industrial wind energy development is a suitable use of Maryland's public lands. The areas most amenable for wind energy development are the far western Garrett and Allegany counties. Concerns over wildlife impacts to birds and bats, increased forest fragmentation and scenic viewshed impacts were considered in the final policy determination.

Another factor to consider in the assessment of energy development on State lands is the ownership of mineral rights. A landowner may have legitimate surface rights, meaning they have full control over how the property on the land surface can be used, but they may not own the mineral rights. In cases where the mineral rights are severed from the property rights, the mineral rights owner can enter the property and extract the minerals that they own. This can apply to coal, natural gas, gravel, and other mineral resources. With the increasing interest in Marcellus shale gas development, the Department is researching where it does, and does not own mineral rights. For example, preliminary results show the Department does not own 65 percent (65%) of the mineral rights for Savage River State Forest. In many instances, mineral rights from a property many have been severed a very long time ago, even as early as the mid-1800s. This information may not have been carried forward in successive deeds as properties were bought and sold. The Maryland Dormant Mineral Interests Act, enacted in 2010, provides a procedure for property owners to clear up any discrepancies that relate to the ownership of the minerals under the surface of their property. The term "dormant" means that the mineral interest was not accessed or inquired about over a 20 year period. The Act allows a property owner to file an action to terminate a dormant mineral interest. The Department will be pursuing this option as it completes its mineral rights research.

⁴⁴ <http://www.mde.state.md.us/programs/Land/mining/marcellU.S./Pages/index.aspx>

Public Opinion

Respondents to the LPRP open link web survey were asked if they were supportive of allowing renewable resources such as wind farms and solar field, and non-renewable resources such as coal and gas, to be developed on public land even if it limited public access.

Respondents to the open link survey were more disapproving of allowing renewable energy resource development on public lands (36%) than respondents to the random sample survey (26%). Fifty percent (50%) of open link respondents were favorable toward allowing renewable energy development on public lands providing access to these lands would not be closed entirely, but only twelve percent (12%) of random survey respondents were favorable toward this option. The majority of respondents in both surveys were not in favor of allowing non-renewable energy resources on public lands – sixty percent (60%) of random survey respondents and sixty-nine percent (69%) of open link web respondents.

In the random survey, Maryland residents expressed their opinions on the development of renewable and non-renewable energy resources on public lands:

- 58% responded favorably to allowing renewable energy resource development on public lands.
- 60% are not in favor of allowing non-renewable energy resource development on public lands.

Marcellus Shale Gas Development Consideration for Acquisitions and Easements

Stateside Program Open Space evaluates each property it is considering for acquisition or easement on a case-by-case basis related to mineral rights and the potential for explorative and/or extractive drilling for natural gas. In some instances, mineral rights may be severed, but the risk for drilling is very low or the impact to surface resources will likely be minimal. For example, the Department decided to move forward on a property in Garrett County where the United States Bureau of Land Management (BLM) owned mineral rights. The property supports several rare and listed species and is a high ecological conservation priority for the State based on its GreenPrint values. If BLM were to consider leasing the mineral rights, the agency would conduct a full environmental review for endangered species and require protection of surface resources in the lease. In addition, BLM has given the Department the right to request no surface disturbance if the mineral rights are ever leased.

Ecosystem Markets and Crediting Land Conservation

The word "ecosystem" comes from the word "ecological" – meaning the relationship between plants, animals, the physical world, and humans – in a given environment or system. Ecosystems include forests, streams, mountain ridges, river banks, and wetlands, and provide for free essential life supporting "services" to human beings. These ecosystem services provided by nature include keeping our air clean, purifying our waters, preventing pollution, and providing the raw materials to create jobs and a strong economy. We have consistently undervalued and overused our natural capital and face a point in time where the quality of our environment is diminished. We must either repair the damages and prevent further loss, or face the consequences.

Maryland established the Ecosystem Services Working Group (ESWG) to find innovative market-based approaches to restore and protect our treasured natural resources, as well as improve our economic and social opportunities. Following the market rules of supply and demand, those ecosystem services, or values that become more limited in supply will increase in value from a monetary perspective if they are in high demand. For example, the Maryland Forest Conservation Act program requires that a certain amount of forests lost to development must be replaced. This sets the stage for producing, buying, and selling forest credits through a forest restoration or conservation bank. This also provides another incentive for private landowners to conserve and restore their lands, keeping them in a natural state. The ESWG produced an assessment of existing and potential ecosystem service markets in Maryland and explored the policy options that would support greater opportunities for market-based solutions. The market options assessed by the ESWG include those related to forests, wetlands, streams, and waterways, carbon, nutrients, species, and habitats and the Critical Area Program. Please visit the [ESWG website](#)⁴⁵ for more information.

State land conservation programs have explored these options in various ways. Stateside Program Open Space leveraged the opportunities provided by the valuation of ecosystem services to creatively finance a conservation easement. The State was able to work with other partners to pay for additional services provided by the landowner. In the groundbreaking case study detailed below, partners provided additional funding to pay for the development of Brook Trout Habitat credits.

Case Study: Purchasing Brook Trout Habitat Credits

In this landmark case, the Board of Public Works accepted the first Additionality Overlay Easement donation from the Pinchot Institute for Conservation, in concert with Trout Unlimited, for conservation of Brook Trout Habitat on the Brown 120 +/- acre parcel located in Garrett County. The purpose of this specialized easement is to achieve permanent easement restrictions that represent further ecological public interest value, which is not captured in the standard fair market appraisal valuation for POS conservation easements.

This donated easement is specifically written to provide for specialized protections for brook trout habitat, and further restricts the use of the property addressing the sensitivity of wild brook trout to their aquatic habitat by greatly reducing the impacts of pollution and disturbance on this property. These specialized protections establish the basis for quantifying brook trout habitat credits. Specifically, the overlay easement:

- Enlarges the swath of forest buffering by an extra 100 feet in width on both sides of all streams (including the Savage River). This extra swath of forest along the streams works to keep the brook trout waters cool and clean by providing shade, preventing soil erosion and run-off of nutrients and sediment, and protects the critical pH levels needed for brook trout
- Reduces disturbance of the streams and their buffers by prohibiting cutting of timber within the 200 foot buffer and by limiting any stream crossings to one carefully designated crossing to access the one allowed cabin on the property
- Reduces development potential to a cabin of no greater than 2,000 square feet, which greatly restricts impervious surface which in turn reduces run-off, pollution and disturbance
- Prohibits water rights transfer

⁴⁵ <http://dnr.maryland.gov/es/>

The brook trout habitat credits generated from this project were retired. This ensures that the credits will not be used to offset development impacts elsewhere and that the project clearly results in a net ecological enhancement.

The Department is also pioneering the development of ecosystem markets on existing public land holdings that have restoration potential. Maryland's Ecosystem Enhancement Program (ME2) was created as a way to improve the effectiveness of the State's efforts towards Bay Restoration, by maximizing the limited resources available. It is essentially an inter-agency market for mitigation projects in the Maryland State Government. ME2 is managed by the Habitat Restoration and Conservation division of the Department of Natural Resources' Chesapeake and Coastal Service. In this program, appropriate restoration projects are completed on state-owned land with high ecological value and low per-unit costs. The credits generated by the restoration are transferred to agencies with high mitigation requirements and few opportunities within their jurisdictions. This mechanism allows the State to take advantage of cost-effective projects available, without being limited by jurisdictional boundaries.

The ME2 program is primarily focused on agricultural best management practices such as reforestation and stream buffer restoration. A pilot project has been completed with the Maryland Port Authority, consisting of 18.5 acres of stream buffer restoration within the Patapsco watershed. Additional projects are currently being implemented, and more opportunities have been identified for further analysis to be included in the program. Moving forward, the ME2 program would like to partner with more Maryland State agencies and expand the number of watersheds for available opportunities.

The Chesapeake Bay Commission (CBC) has been researching options for crediting land conservation as a strategy for meeting the Chesapeake Bay Total Maximum Daily Load (TMDL) requirement, or more commonly known as the prescribed pollution diet for the Bay. A land conservation TMDL credit could then be used to achieve the pollution reductions that are mandated by law. This market "demand" could then focus more funding and more action into land conservation efforts. While the act of conserving land does not, by itself, reduce nutrient and sediment pollution to the Bay, it does prevent the future pollution if that land were to be converted from a natural state to a developed state. Conservation projects funded by the Department require restoration buffers along all streams and will result in a quantifiable nutrient and sediment reduction. However, this is tracked separately as a best management restoration practice. The CBC, as well as many other partners, including the [Chesapeake Bay Program's Maintaining Healthy Watersheds Goal Implementation Team](#)⁴⁶, is delving into the policy and legal analyses that need to be evaluated should land conservation be eligible for a TMDL credit. In a report titled "[Crediting Conservation: Accounting for the Water Quality Value of Conserved Lands Under the Chesapeake Bay TMDL](#)"⁴⁷, the CBC reports the finding of a panel of experts that were engaged to determine if there were a credible and defensible means to link land conservation within the Bay TMDL framework. According to the report, "the Commission found no 'silver bullet' or major policy alteration that would dramatically elevate or shift the role of land conservation within the Bay TMDL structure." However, several policy changes were suggested that could potentially open up more options for land conservation as a TMDL credit in the future.

⁴⁶ http://www.chesapeakebay.net/groups/group/maintaining_healthy_watersheds_goal_implementation_team

⁴⁷ <http://www.chesbay.U.S./Publications/CreditingConservationReport.pdf>

Adapting to Climate Change

Maryland has the fourth longest tidal coastline in the continental United States and has experienced more than one foot of sea level rise over the last century. Since 1990, sea-level in the region has risen three to four times faster than the global average. Predictions issued by the Maryland Commission on Climate Change expect an additional 1.3 feet of sea-level rise by 2050 and 3.4 feet by 2100⁴⁸ with local land subsidence exacerbating the problem. The state is currently losing about 580 acres every year to shoreline erosion, and rising waters have submerged 13 mapped islands in the Chesapeake Bay.

Maryland is a progressive state in addressing climate change, and one of the first in the country to develop a Climate Adaptation Plan (2008). The Maryland Commission on Climate Change and Department of Natural Resources (DNR) staff led the planning effort. In 2010 DNR adopted its own policy, “Building Resilience to Climate Change.” The policy included a provision to guide investments in and management of land in order to better mitigate and adapt to climate change. As a result, DNR began integrating climate change considerations into its land conservation programs.

The earlier GreenPrint discussion detailed how sea level rise considerations were reflected in the Targeted Ecological Areas and also highlighted a new dataset that delineated wetland migration corridors, those areas where wetlands will move inland as sea-level rises. This dataset was developed using the EPA’s Sea Level Affecting Marshes Model (SLAMM) and parameters specific to Maryland. The model identified low, medium, and high priority Wetland Adaptation Areas (see **Figure 23**) and is integrated into the ecological scoring process that prioritizes properties for conservation.

Figure 23: Wetland Adaptation Areas



⁴⁸ U.S. Climate Change Science Program and Subcommittee on Global Change Research. 2009. *Coastal Sensitivity to Sea-Level Rise: A Focus on the Mid-Atlantic Region*. Synthesis and Assessment Product 4.1. J.G. Titus., lead author. U.S. Environmental Protection Agency. Washington D.C.

All fee-simple and conservation easement acquisitions are also vetted through a “Stewardship Review” process with resource assessment and management recommendations provided by an inter-disciplinary group of natural resource experts. DNR now incorporates a climate change impact review of each property into this process by identifying opportunities for wetland migration and not recommending future inundated properties for acquisition.

Climate Change Easement & Coastal Resilience Plan

DNR has a robust land conservation program consisting of both fee-simple and conservation easement acquisitions. Recently, DNR integrated climate change adaptation considerations into its purchased conservation easement program, thus bringing it in line with the priorities identified in the “Building Resilience to Climate Change” policy. Provisions were added to increase coastal ecosystem resilience and reduce the vulnerability to coastal hazards such as sea-level rise and storm surge. These provisions include development setbacks or “no-build” areas based on the 0-2 feet sea-level rise inundation zones, buffers to facilitate wetland migration, and more stringent requirements on shoreline stabilization, impervious surface limits, and nutrient management plans.

In addition, properties that contain five acres or more of delineated Climate Adaptation Areas qualify for development of a Coastal Resilience Plan. These plans identify a suite of on-the-ground land management measures that are available to the landowner at no cost. These land management activities may include wetland restoration projects, living shoreline creation, maintenance of storm surge buffers, control of invasive species, assisted wetland migration practices and removal of impervious surface and other barriers, documentation of threatened historic and cultural resources, and removal of hazards threatened by sea-level rise inundation such as septic systems and underground storage tanks.

F. Community Connections Land Conservation Initiative

Many of these emerging issues are being directly addressed through the Department’s new “Community Connections” land conservation criteria. Community Connections criteria provide direction, clarity, and objectivity to the identification of projects that have exemplary public benefits, but do not meet the high ecological standards of GreenPrint. There are instances, where the management and public benefits of a particular conservation project are exceptional, but the project does not meet the GreenPrint ecological criteria. The right land conservation project can build bridges between human well-being and natural areas giving people the opportunity to understand the value of land, experience its beauty, empower their communities, restore areas in need of healing, and become healthier in the process.

Community Connections provides a set of clear and transparent criteria to justify these types of projects and to guide land conservation partners toward projects that grow strong linkages between people and the land. This is specifically designed to evaluate the evidence of a property’s intrinsic value in the sense that, if acquired or eased, it benefits both nature and humankind. Projects are rated depending on how many ways they provide a benefit that is related to the six Community Connections objectives listed below:

- **Public Land Management:** Enhance and improve management of DNR public lands and facilities and promote landscape-scale rural resource conservation
- **Marylanders Outside:** Provide all Marylanders, giving focused attention to children and unserved groups, the opportunity for outdoor recreation and meaningful connections to nature.

- **Green Economy:** Support local economies that responsibly use limited natural resources and protect, restore, preserve, and enhance our environment.
- **Community Empowerment and Cultural Heritage:** Preserve historical and cultural resources including standing structures, archaeological sites, districts, landscapes, traditions, and arts in support of community objectives and foster cultural heritage partnerships.
- **Climate Change:** Support community resilience to climate change, reduce greenhouse gas emissions, and prepare communities for the likely consequences of climate change
- **Restoration Benefits:** Pursue opportunities to restore terrestrial and aquatic ecosystems and reduce Chesapeake Bay and Coastal Bay pollution

Case Study: Campbell Conservation Easement

The Campbell Conservation Easement is a partnership with DNR and the Anne Arundel County Department of Recreation and Parks and is the first Community Connections project to be approved by the Board of Public Works. The landowner played a major role in establishing the easement, providing substantial documentation in the planning and legal process, and through their willingness to make their land available for the public edification on the care of natural resources, sustainable farming techniques, recreation opportunities, and environmental education. Of the entire 200 acre Campbell property, 85 acres of forest land was protected and complements the adjacent 2,360-acre block of contiguous protected lands.

The easement will also protect an additional 90 acres of farm fields that are in the process of being converted to an organic livestock and vegetable operation, in tandem with the adjacent and recently protected 185 acre farm.

Agricultural practices at the Campbell Farm are considered to be biodynamic agricultural techniques, which will go beyond organic certification to meet Demeter Certified farm requirements. According to the [Biodynamic Farming and Gardening Association](#)⁴⁹, “Biodynamic farmers strive to create a diversified, balanced farm ecosystem that generates health and fertility as much as possible from within the farm itself. Many biodynamic practitioners work in creative partnerships with other farms and with schools, medical and wellness facilities, restaurants, hotels, homes for social therapy and other organizations.”

This holistic approach enables the farm to be a self-sustaining operation, using seed-saving techniques, soil amendments, and organic fertilizers produced on site. Future plans at the site include the conversion of 25 acres of existing cultivated fields to wetlands, meadows, and forest through the abandonment of agricultural activity and the establishment of native plant communities.

The operation will serve as an educational resource for the community by serving as a model for a sustainable organic farm operation that produces healthy food in an environmentally-sustainable fashion. Partnerships with the Maryland Department of Agriculture, Anne Arundel County local schools, and the Providence Center will allow for development of Community Supported Agricultural (CSA) at the farm, school trips, and programs for unserved communities. The farm plans on hosting seminars, workshops, and events for adults on organic farming and developing healthier lifestyles. It is anticipated that the operation will also lead to job creation and workforce transition, as well as provide apprenticeships in biodynamic farming.

⁴⁹ <https://www.biodynamics.com/biodynamics.html>

G. Partnerships

Land conservation is a multi-faceted effort and requires the collective efforts of partners across all scales and sectors of government, from land trusts and conservancy organizations to the efforts and interests of private landowners and the public. While the emphasis up to this point has been primarily focused on the State's four major land conservation programs, particularly those operated by DNR, this section discusses the important partnership relationships that DNR has established and contributes to the success of Maryland's land conservation efforts.

Working with Local Governments

In addition to direct involvement by local governments in the funding and management of acquisition and easement programs, local land use authority and planning policy are necessary elements for comprehensive and successful land conservation efforts. When the Department evaluates land for conservation funding, the potential effect of local land use is always considered. The proximity to existing areas of protected land and the degree to which local zoning provides resource protection are factors which weigh in favorably for funding approval. The following discussion provides some examples of how State and local governments are working together. In every example, a commitment on behalf of local government for large area rural resource conservation is key. Areas that are identified for resource conservation and are backed up by protective zoning densities (the State considers 1 unit per 20 or more acres to be most protective) represent areas ripe for state and local land conservation collaboration.

Local Land Preservation, Parks and Recreation Plans

Counties submitting local Land Preservation, Parks and Recreation Plans were asked to identify priority preservation and conservation areas for natural resources and to compare these areas to the Department's GreenPrint Targeted Ecological Areas as a basis for identifying collaborative conservation efforts. In addition, the plans should also identify the principle implementing ordinances and programs for achieving the county goals for conserving natural lands and resources. There were a variety of



approaches taken by the counties to address these criteria. Many counties referred specifically to resource conservation objectives articulated in their comprehensive plans. All counties generally provided discussion on various resource conservation area designations related to agricultural preservation and the Rural Legacy Program. Many of these areas show a high degree of overlap with the Department's GreenPrint conservation priorities. Some counties went a step further and incorporated specific natural resource based conservation planning areas. These plans demonstrate how proactive planning for natural resource conservation can be accomplished and considered simultaneously with planning for growth and development.

A fundamental element includes the use of natural resource assessment information to guide the identification of conservation priorities and a view towards a “systems” approach. Planning for a natural resource “system” recognizes that natural resource areas need to be 1) large enough to provide healthy and functioning habitats and important benefits to people, 2) connected to each other to allow the movement of plants and animals, and, in recreational settings, people and 3) be located in the right places for the right purposes. As discussed earlier in this chapter, the State’s Green Infrastructure Assessment, which identifies a hub and corridor network, is an excellent example of “systems” planning for natural resource conservation.

While the following examples illustrate these concepts, they are not exhaustive of the many excellent approaches adopted by those counties moving forward and placing priority on natural resource planning. Wicomico County developed its natural resource planning areas using comprehensive resource assessments provided by the Department, such as the Green Infrastructure and Blue Infrastructure Assessments. The county clearly recognizes the significant values these resources have through the provision of ecological goods and services which benefit human health, wildlife, biodiversity, clean air and water and natural resource based economies.

Prince George’s County makes excellent use of natural resource information and objectives in the development of the county-wide adopted Green Infrastructure master plan. The plan is a good model for other counties to demonstrate how natural resource conservation can be accomplished through a variety of approaches including planning, regulation, subdivision review, Transfer of Development Rights programs, acquisition/easement, and collaborative partnerships. Saint Mary’s County has a new focus for natural resource conservation by recognizing the important role conservation plays for the successful development and implementation of its Phase II Watershed Implementation Plan.

The county recognizes that the most cost effective means to meet the TMDL and to prevent future water quality degradation is by conserving the natural filters that reduce pollution, such as forests, floodplains, and wetlands, and by responsibly managing development. The Department applauds these efforts and the other innovative, proactive approaches adopted by many other counties in the State.

Large Landscape Federal Initiatives

National Park Service Landscape Conservation⁵⁰

In 2009, President Obama signed Executive Order 13508 declaring the Chesapeake Bay "a national treasure" and recognizing the nationally significant assets of the watershed in the form of "public lands, facilities, military installations, parks, forests, wildlife refuges, monuments, and museums." The order called for a strategy for protecting and restoring the Chesapeake, including advancing land conservation and public access. The National Park Service (NPS) Chesapeake Bay efforts help foster watershed-wide collaboration in carrying out this aspect of the strategy.

⁵⁰ <http://www.nps.gov/chba/parknews/landscape-conservation.htm>

Today, landscape conservation efforts in the Chesapeake watershed might best be summed up by these characteristics:

- Leadership by organizations and agencies at all levels in pursuing innovative approaches to land conservation and landscape recognition
- Attention to addressing the multiple values of the watershed's natural, cultural, historical, economic, and recreational wealth
- Willingness and commitment to collaborate across jurisdictions – both within specific landscapes and throughout the watershed as a whole
- Dedicated citizens, landowners, and stakeholders who continue to push for, and carry out, conservation

To establish an accurate baseline for tracking progress and supporting collaboration toward the President's Executive Order, the NPS Chesapeake Bay Office worked with NatureServe, Chesapeake watershed states, and U.S. Geological Survey (USGS), to develop "[LandScope Chesapeake](#)"⁵¹ to fill a need for a publicly accessible, watershed-wide land conservation priority system. Its purpose is to support collaboration among many partners in land conservation efforts throughout the Chesapeake region. By using [LandScope Chesapeake](#), partners can share a carefully curated collection of map data on federal, state, and local conservation priorities across the watershed. Maps are grouped based on their prevailing conservation value such as working lands and waters, recreational priorities, historical and cultural landscapes, and wildlife and habitat conservation.

U.S. Fish and Wildlife Service (USFWS) Landscape Conservation Cooperatives (LCCs)

The USFWS recognizes that protecting natural and cultural resources is essential to sustaining our health and quality of life. We, along with fish and wildlife, rely on clean water and the benefits of having healthy rivers, streams, wetlands, forests, grasslands, and coastal areas in order to thrive. Managing the landscapes that provide our natural and cultural resources has become increasingly challenging. With the signing of [Secretarial Order No. 3289](#), the Department of the Interior launched the Landscape Conservation Cooperatives (LCCs) to better integrate science and management to address climate change and other landscape scale issues. By building a network that is holistic, collaborative, adaptive, and grounded in science, LCCs are working to ensure the sustainability of our economy, land, water, wildlife, and cultural resources.

Currently, 22 LCCs have been established. Collectively, these LCCs form a network of resource managers and scientists who share a common need for scientific information and interest in conservation. Each LCC brings together federal, state, and local governments along with Tribes and First Nations, non-governmental organizations, universities, and interested public and private organizations. The partners work collaboratively to identify best practices, connect efforts, identify science gaps, and avoid duplication through conservation planning and design.

There are two LCCs that co-occur within Maryland's borders. The North Atlantic LCC joins the piedmont and coastal plain regions of the state to its northern New England neighbors and to Virginia in the south. The Appalachian LCC folds Maryland into a partnership with other Appalachia states. The activities sponsored by the LCCs are diverse and range from developing science-based information about the implications of climate change for the sustainability of natural and culture resources to monitoring and evaluating the effectiveness of LCC conservation strategies in meeting shared objectives. More information about the [LCC program](#) and the partnerships found within Maryland can be found on-line.⁵²

⁵¹ <http://www.landscape.org/chesapeake>

⁵² <http://lccnetwork.org/About>

Federal Historical Trails

Star-Spangled Banner National Historic Trail

The [Star-Spangled Banner National Historic Trail](#) is a 560-mile land and water route that tells the story of the War of 1812 in the Chesapeake Bay region. The trail's land and water components connect parks, historic sites, museums, and heritage routes in Maryland, Virginia, and the District of Columbia and commemorates the events leading up to the Battle for Baltimore, the aftermath of which inspired Francis Scott Key to write our National Anthem. The trail traces American and British troop movements, introduces visitors to communities affected by the war, and highlights the Chesapeake region's distinctive landscapes and waterways. DNR and the National Park Service are working together along the trail to install trail kiosks at state parks, to develop the new exhibits and trails at [North Point State Park](#) and State Battlefield, and on youth conservation corps projects to protect historic resources and maintain trails and water access points. The Maryland Office of Tourism Development is also working collaboratively with public and private partners to install kiosks and exhibits in partner-owned locations.



Captain John Smith Chesapeake National Historical Trail

“The [Captain John Smith Chesapeake National Historical Trail](#) commemorates the voyages of Captain John Smith and his crew as they explored the Chesapeake Bay between 1607 and 1609. The more than 2,000-mile trail was established by Congress in 2006 as part of the National Trails System and became America's first national water trail. Managed by the National Park Service, the trail traces Smith's routes and the key rivers linked to them, helping visitors imagine the world he encountered more than four hundred years ago. It also connects with 16 National Wildlife Refuges, 12 National Park areas, and three National Trails. It offers opportunities for tourism, environmental and cultural education, conservation, and recreation. The multi-dimensional nature of the [Captain John Smith Chesapeake National Historical Trail](#) makes it a model for a new system of National Blueways.

The America's Great Outdoors Initiative notes: “As a major partner with NPS, the State of Maryland is developing a comprehensive interpretive and trails plan for 4,600 acres of historical and ecologically significant lands (the recently acquired Maryland Province Properties). This land links the Captain John Smith Trail to the founding of Maryland, integrating cultural history with ecological protection and providing citizens access to unique natural areas. The plan will call for additional investment in land, restoration, historical preservation, recreation, and interpretation of the cultural and natural resources.”

Potomac Heritage National Scenic Trail

Authorized for development between the mouth of the Potomac River and the Allegheny Highlands, the Potomac Heritage National Scenic Trail network includes, to date, the Great Allegheny Passage and Chesapeake and Ohio Canal Towpath in western Maryland, and a bicycling route between Oxon Cove Park and Point Lookout State Park.



Maryland DNR, through a partnership with the National Park Service (NPS) and Potomac Heritage Trail Association, is conducting an assessment for a hiking route that could connect DNR-managed lands between Point Lookout and Marshall Hall, as well as many launch and landing sites along the Potomac River; similarly, Maryland DNR and the NPS are assisting Garrett Trails with development of the Eastern Continental Divide Loop Trail, a potential segment of the Trail network. In this way, the Trail network functions as a spine for making connections between and among local and regional trails, parks, historical sites, scenic byways, events, and programs.

Washington-Rochambeau Revolutionary Route National Historic Trail

The National Park Service, in partnership with the National Washington Rochambeau Revolutionary Route Association, Inc. (W3R®-US) and all of the states along the route, administers the Washington-Rochambeau Revolutionary Route National Historic Trail (NHT) and educates the public about this American and French alliance during the Revolutionary War. The American and French armies joined forces in New England and marched south to seize Yorktown, Virginia, from the British, leading to the end of the Revolutionary War and ultimately to America's independence. The NHT's land and water routes commemorating this victorious event run from Massachusetts to Virginia through nine states plus the District of Columbia. The Army entered Maryland from Delaware at Elkton and moved by land and water along the Chesapeake Bay to Yorktown. Maryland and the Chesapeake Bay were critical to the success of the campaign. More information on the Washington- Rochambeau NHT can be found at www.nps.gov/waro.



The story connects Elkton, Havre de Grace, Baltimore, Annapolis and many other communities and sites along the Bay and there are many opportunities for recreation, conservation, preservation, education and tourism partnerships while commemorating this momentous event. Population growth and associated development in the highly urban NHT corridor have erased almost all of the rural campsites, taverns, and buildings that once housed the Revolutionary War soldiers. Belvoir Scott's Plantation near Crownsville is one of the few remaining sites of French encampments in Maryland. Another encampment where a collaborative landscape conservation partnership is being explored is in what was known as Bushtown in Harford County Maryland.

Priority Preservation Areas

The Agricultural Stewardship Act of 2006 requires certified counties to designate Priority Preservation Areas (PPAs) and create a PPA element for their comprehensive plans. Counties with effective local agricultural land preservation programs that wish to be certified apply to both the Maryland Department of Planning (MDP) and the Maryland Agricultural Land Preservation Foundation (MALPF).

Certification allows counties to retain 75 percent of the locally generated agricultural land transfer tax revenue. Counties that are not certified keep 33 percent of the agricultural land transfer tax and remit 67 percent of the funds to the State, for use by MALPF. In order to be certified, the PPA must:

- Contain productive agricultural or forest soils, and be capable of supporting profitable agricultural and forestry enterprises
- Be governed by local policies that stabilize the agricultural and forest land base and provide time for easement acquisition before goals are undermined by development
- Be large enough to support normal agricultural and/or forestry activities
- Be accompanied by the county's acreage goal for land to be preserved through easements and zoning in the PPA equal to at least 80 percent of the remaining undeveloped acres of land in the area

In many instances, the rural resources within a county PPA often are also identified as GreenPrint Targeted Ecological Areas. These overlaps may be represented by large forested areas or agricultural lands that support terrestrial and aquatic habitats important for rare, threatened, and endangered plants and animals. More information on the [MALPF certification process](#) can be found online.⁵³ The Sustainable Growth and Agricultural Preservation Act of 2012 (the Septics Bill) significantly affects the certification program as described below.

The Sustainable Growth and Agricultural Preservation Act of 2012 (SB 236: The Septics Bill)

"The purpose of the legislation is to decrease future nutrient pollution to the Chesapeake Bay and other water resources and to reduce the amount of forest and agricultural land developed by large lot developments. It does this by limiting major residential subdivisions served by on-site septic systems."⁵⁴ Central to the implementation of Senate Bill 236 is the local designation and mapping of four "tiers" into which all land in the jurisdiction is to be placed (see **Figure 24**).

"[It] would be great to have more areas where you can have group farming, so citizens could grow their own produce and engage in a co-op."

Random Phone Survey Response

Over half of survey respondents support spending public funds to acquire land to prevent development. Only three percent feel that it is "not at all important."

2013 Maryland LPRP Survey Report

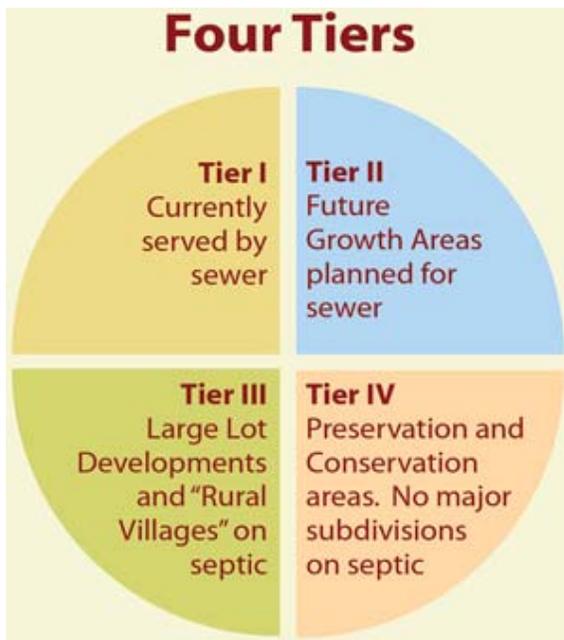
"Reaching our 100,000th tree planting goal through the Marylanders Plant Trees Program demonstrates that there are some challenges so large we can only do them together."

Governor Martin O'Malley

⁵³ <http://www.malpf.info/certification.html>

⁵⁴ *Report to the General Assembly on Implementation of Senate Bill 236, the Sustainable Growth and Agricultural Preservation Act of 2012*. Maryland Department of Planning, February 2013, page 1.

Figure 24: Four Tiers for Land Designation – The Septics Bill



As the law says (Land Use Article of the Annotated Code of Maryland, §1-508[a]), PPAs must be in Tier IV areas. Tier IV areas are areas that are not planned for sewage service and are:

- (i) Areas planned or zoned by a local jurisdiction for land; agricultural; or resource protection, preservation, or conservation
- (ii) Areas dominated by agricultural lands, forest lands, or other natural areas
- (iii) Rural legacy areas, priority preservation areas, or areas subject to covenants, restrictions, conditions, or conservation easements for the benefit of, or held by a state agency, as defined in § 9–206 of the environment article, or a local jurisdiction for the purpose of conserving natural resources or agricultural land

The law required all counties to submit their proposed Tier map by December 31st, 2012, which are then subject to review by the Maryland Department of Planning. However, not all counties met the deadlines, and some counties did not include part or all of their PPA in the Tier IV area. This is significant, because the Tier IV designation shows where major subdivisions on septic systems are prohibited and where the county is committed to land preservation. If all or part of a PPA lies in Tier III, then the county intends to make large lot development the primary land use. These important distinctions have a bearing on where the state will focus land conservation funding, particularly if the intent is for landscape scale rural resource conservation. More information can be found on [septic tier mapping guidelines and the bill's implementation status](#).⁵⁵

⁵⁵ <http://www.mdp.state.md.u.s./OurWork/SB236Implementation.shtml>

PlanMaryland

The Maryland Department of Planning has had the authority to create a state development plan since 1959. The first statewide plan, PlanMaryland, was completed and submitted to Governor O'Malley in 2011. PlanMaryland is intended to, "improve the way in which state agencies and local governments work together to accomplish common goals and objectives for growth, development, and preservation," specifically the 12 "visions" that the legislature established in the Smart, Green and Growing Planning legislation of 2009. These visions include focusing and supporting growth in existing population areas, encouraging community design that emphasizes mixed use and transit-oriented development, and preserving agricultural and natural resource land.

PlanMaryland establishes five Planning Area-Place categories for growth, revitalization, land preservation and resource conservation, and maintaining public services and quality of life. These categories are:

1. Targeted Growth and Revitalization Areas
2. Established Community Areas in Priority Funding Areas
3. Future Growth Areas
4. Large Lot Development Areas
5. Rural Resource Areas

Local governments are asked to map where these areas occur within the county and to work with the State to approve the final boundaries. Both State and local agencies will evaluate how their technical and financial resources will be directed to supporting growth in categories 1-3 and to supporting preservation in category 5. Rural resource conservation areas identified through Priority Preservation Area (PPA) certification and through Tier IV (Septics Bill) delineation should be consistent with the category 5 areas. The confluence of these areas represents specific opportunities for collaborative state and local land conservation efforts. More detail on [PlanMaryland](http://plan.maryland.gov/home.shtml) can be found online.⁵⁶

H. Community Empowerment and Cultural Heritage

The Community Empowerment and Cultural Heritage component of the Community Connections initiative is designed to recognize the historical and cultural sites, landscapes, resources, and traditions valued by local people and to support local heritage protection and enhancement goals. By taking these complementary goals into account, agencies can identify land conservation opportunities that benefit multiple stakeholders. State sponsored initiatives such as the Maryland Scenic Byways Program, Maryland Heritage Areas Program, Working Waterfront Commission, and the Maryland Traditions Program provide resource identification and planning frameworks that can be used to inform these unique opportunities. In addition, there are ongoing efforts at the federal, state, and local level to recognize Indigenous Cultural Landscapes and properties eligible for listing to the National Register of Historic Places and local landmark lists that should be evaluated as part of this objective.

⁵⁶ <http://plan.maryland.gov/home.shtml>

1. Maryland Scenic Byways Program

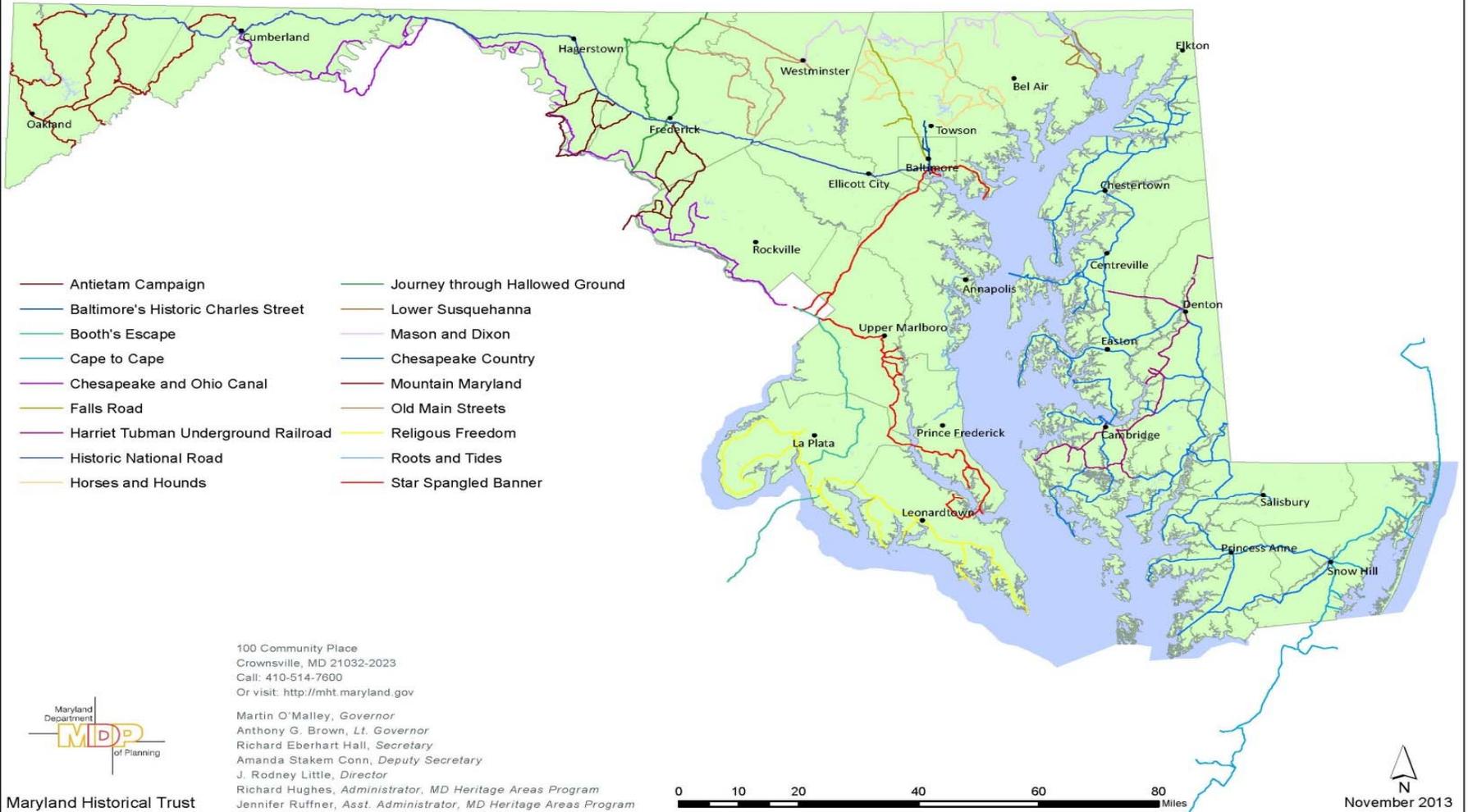
The Maryland Scenic Byways Program (MSBP) is a cooperative effort between the State Highway Administration and federal, state, and local agencies, working toward enhancing economic development strategies and promoting the conservation and preservation of cultural and natural resources along designated scenic byways. The conservation and preservation of these resources and recreational venues are critical to the program's success, as well as to the success of its communities and regions. The challenge is to integrate community development and growth with the protection of the natural, cultural, and scenic resources and recreational venues associated with scenic byways.



A primary strategy of the MSBP is to link preservation and conservation priorities for byways with those of other state and regional organizations. Maryland Scenic Byway sponsoring organizations partner with existing preservation and conservation organizations such as Maryland Environmental Trust that already have the organizational structure and experience to purchase or broker conservation or preservation easement agreements with willing landowners.

Current land conservation strategies include the development and implementation of scenic byway corridor management plans which identify resources that are in highest need of protection and the Maryland Department of Planning's efforts to incorporate scenic byways into the statewide conservation and preservation priorities, which will help to address this challenge. Maryland Environmental Trust's efforts to incorporate byway viewsheds into their conservation priorities contributes to scenic byways conservation and preservation. Maryland's growth management strategies offer the full range of tools to help scenic byways address growth issues, but local governments must utilize those tools. More information on the [Maryland Scenic Byways Program](http://www.roads.maryland.gov/Index.aspx?PageId=567) may be found online at <http://www.roads.maryland.gov/Index.aspx?PageId=567>.

MARYLAND SCENIC BYWAYS





2. Maryland Heritage Areas Program

The Maryland Heritage Areas Program partners with non-profits; local, state, and federal governments; individuals; and businesses to help conserve and interpret the best of Maryland's historical sites and towns, natural areas and enduring cultural traditions, and in doing so, fosters sustainable economic development through heritage tourism. All of Maryland's 23 Counties and Baltimore City contain at least a portion of one of the current 12 State-designated, but locally managed, Heritage Areas that comprise the statewide system of heritage areas. A high percentage of DNR Parks, State Forests, and other DNR-managed lands also fall within the boundaries of a Heritage Area, and DNR serves on the 19-member Maryland Heritage Areas Authority (MHAA) that oversees the program.

Each of Maryland's Certified Heritage Areas is defined by a distinct focus or theme that makes that place or region different from other areas in the state. These distinctive places exhibit tangible evidence of the area's heritage in historic buildings and districts, distinctive cultural traditions, singular natural landscapes, as well as other resources such as museums, parks, and traditional ways of life as revealed in food, music, and art. Each heritage area has a community-created management plan that defines the area's significant historical, natural, and cultural sites and the area's goals for protection, interpretation, and enhancement of these resources.

Heritage Area financial assistance programs including grants, loans, and tax credits can support projects and activities that create the types of new and enhanced products called for in Maryland's Land Preservation and Recreation Plan (LPRP). For example, projects eligible for assistance include trails development, interpretive and wayfinding signage, interpretive programming, visitor center and museum development and enhancement, property acquisition, and K-12 educational activities including heritage-related curriculum development and implementation. More information on the [Maryland Heritage Areas Program](http://mht.maryland.gov/heritageareas_program.html)⁵⁷ may be found online.

3. Working Waterfront Commission

Maryland's 16 coastal counties and Baltimore City contain 70 percent of Maryland's population and over 7,000 linear miles of shoreline. Maryland is reliant on healthy coastal waters and resources and a wide range of marine uses – marine transportation, tourism and recreation, fishing and shellfish industries, marine construction, and ship and boat-building – all of which drive the State's economy. These uses sometimes conflict with each other, and economic, ecological, demographic, and development pressures threaten the long-term viability of water dependent jobs and the heritage of working waterfront communities.

⁵⁷http://mht.maryland.gov/heritageareas_program.html

In 2007, the Maryland General Assembly established the Maryland Working Waterfront Commission comprised of State agency representatives, elected officials, resource-based industry development entities, and local watermen. The Commission was tasked to evaluate and make recommendations about how the State could preserve the commercial fishing industry's access to public trust waters. The 2008 Maryland Working Waterfront Commission report noted that like most working waterfronts around the United States, Maryland is seeing a decline in working waterfronts likely due to increased coastal population growth, declining profitability of the commercial fishing industry, rising real estate values, and other economic drivers and limited information exchange among stakeholders concerning issues.

In order to assist with the preservation of existing and historic working waterfronts in Maryland, DNR's Chesapeake and Coastal Service is building from the work of the Commission and working with partners to conduct an inventory of working waterfronts throughout the state. Future work will be undertaken to analyze the socio-economic impacts of working waterfronts and methodologies for preservation. A working waterfront program will be developed, and may include local planning/zoning assistance, tax-incentives, purchased development rights/easements, and coordination with other state and local economic development programs.

4. Maryland Traditions Program

Maryland Traditions is the folk life program of the Maryland State Arts Council (MSAC) and an infrastructure of trained folklorists that constitute the state's chief initiative to safeguard the cultural heritage of our residents and communities. Maryland Traditions carries out this mission by documenting living traditions throughout the state, building archives, and developing public programs to elevate awareness and appreciation of Maryland folk life. Maryland Traditions' programs include celebration of individual and community traditions through awards; partnerships with regional institutions such as museums and universities; scholarly publications and exhibitions.



MSAC's folk life program has maintained an archive of Maryland folk life since its inception in 1974. Traditions documented in the collections include traditional music (ex. Gospel, bluegrass, South Indian sacred music, Mennonite songs, West African griot songs, etc.), occupational folk life (boatbuilding, sign painting, wagon making, steel work, tobacco farming, crabbing, oystering, etc.), material culture (decoy carving, rag rug weaving, blacksmithing, silversmithing, quilting, musical instrument making, etc.), foodways (stuffed ham, Smith Island Cake, tortilla making, crabcakes, etc.), vernacular architecture (traditional barn types, etc.), and community events and products (jousting tournaments, revival meetings, carnivals, etc.).

Maryland Traditions recognizes mastery of traditional arts and celebrates outstanding stewardship of living traditions through Apprenticeship Awards and the ALTA (Achievement in Living Traditions & Arts) Awards. Recipients are vetted through extensive fieldwork, and Maryland Traditions maintains collections on the people, places, and traditions recognized through these programs. Recognition has been awarded to people, places, and traditions in every county in the state.

Finally, Maryland Traditions manages a network of partner organizations statewide. Each partner employs a folklorist on staff who conducts regional fieldwork and develops programs that respond to the needs of the regional community. Current partners include: Chesapeake Bay Maritime Museum, Ward Museum of Wildfowl Art, University of Maryland Baltimore County, Frostburg State University, Sandy Spring Museum, and the National Council for the Traditional Arts. These partner organizations, as well as the Maryland Traditions staff at the MSAC, can assist state agencies and local governments in considering cultural heritage resources as they explore land conservation and recreation opportunities.

5. Indigenous Cultural Landscapes ⁵⁸

According to the [National Park Service](#),⁵⁹ “Indigenous cultural landscapes are evocative of the natural and cultural resources supporting American Indian lifeways and settlement patterns in the early 17th century.” Native people have called Maryland home for millennia, dwelling within the different regions through a changing climate. In one sense, the Chesapeake region could be considered an indigenous landscape. However, the particular landscape histories of indigenous populations in particular places and times within Maryland are important for appreciating, preserving, managing, and experiencing the total range of American Indian cultural resources.

Illustrating a range of what these landscapes might entail includes considering those of Indian people at the end of the last ice age (around 12,000 years ago) when a wetter and colder climate shaped the region’s human-ecological relationship. Maryland’s western mountainous regions were tundra-covered and evergreens predominated at lower elevations. The shoreline was around nine meters lower than the present as the Chesapeake Bay emerged from the ancestral Susquehanna River valley.

The Chicone settlement of the Nanticoke Indians in Dorchester County during the 16th and 17th centuries provides a more recent example of an indigenous landscape known through historical accounts and through archaeology in addition to its importance communicated by descendant Indian communities. Chicone served as the political center of between 7-10 settlements along the Nanticoke and spanned both sides of the river. It consisted of over 9,000 acres on the eve of and well after European contact with likely 150-200 residents.^{60,61} The area included quality agricultural soils, fresh water, forests, a plethora of marshes and their animal and plant resources, waterways for travel, and terrestrial paths providing linkages with other settlements. There was a core cluster of longhouses of people closely related to the chief with gardens, storage areas, and hearths in addition to outlying houses and clusters of houses arrayed along the river and creeks. Their landscape came to include European encroachment as well. It is these landscapes of the early 17th century that are becoming an additional focus for land conservation efforts.

⁵⁸ The Department thanks Dr. Virginia Busby, Commissioner, Maryland Commission on Indian Affairs, for her contributions to this discussion.

⁵⁹ <http://www.nps.gov/chba/parknews/indigenous-cultural-landscapes.htm>

⁶⁰ Busby, Virginia R., 2010. Transformation and Persistence: The Nanticoke Indians and Chicone Indian Town in the Context of European Contact and Colonization. Unpublished dissertation, Department of Anthropology, University of Virginia, Charlottesville.

⁶¹ Rountree, H. C. and T. E. Davidson. 1997. Eastern Shore Indians of Virginia and Maryland. University of Virginia Press, Charlottesville.

The [Maryland Commission on Indian Affairs](#)⁶² has initiated a campaign to identify and preserve endangered landscapes across the state and enable appreciation of the holistic suite of resources important to all Marylanders. Community capacity building and broad-based partnering with preservation and conservation organizations and with non-traditional supporters of environmental stewardship are part of the campaign. The National Park Service is sponsoring research and a pilot mapping project to identify these culturally important landscape areas. The Department is relying upon the combined expertise of these two partners to assist in the identification and interpretation of key properties important for the preservation of indigenous cultural landscapes.

“Every people has a center of their world and their world fans out from that center. Fishing Bay could be considered our spiritual center, and the chief of chief’s village of Chicone was our political center. Our world fanned out to north of the Choptank, south of the Nanticoke, and east toward the Delaware Bay.

“This is our homeland, our center. It is part of us, and we are part of it. It all rests on Grandfather Turtle’s back. We have sacred places, places where we collected berries, hunted the plentiful deer and fowl. We have fishing places and oyster collecting places. We have central places where our chief of chiefs lived and we have places where people lived along the rivers and creeks. We have gathering places, feasting places, trading places. All of these have been here and we have been here. We remain here. These places are connected to each other and they are connected to us. We seek to protect them and honor them for all generations as the Creator taught us.”

Chief Sewell Winterhawk Fitzhugh, Nause Waiwash Band of Indians

“As Maryland’s indigenous Native people, all of our traditional lands should be of great importance, not just to us, but to all residents in what is now Maryland. The appreciation, preserving and experiencing the total range of our cultural resources in our homelands did not start with the invasion or encroachment of our lands by Europeans. In fact, we, as Native people, did not divide our lands into counties or states. They belonged to the ‘people,’ not individuals. We have always been the stewards and protectors of the land for the next generation.”

Mervin Savoy, Tribal Chairperson, Piscataway-Conoy Tribe of Maryland

6. State and Local Historic Property Designation Programs

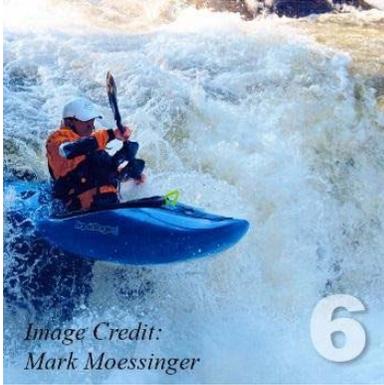
The National Register of Historic Places recognizes districts, buildings, structures, objects, and sites for their significance in American history, archeology, architecture, engineering, or culture, and identifies them as worthy of preservation. The National Register is a program of the U. S. Department of the Interior, National Park Service, and is administered at the State level by the Maryland Historical Trust. Listing in the National Register honors the property by recognizing its importance to its community, State, or to the Nation, and confers a measure of protection from harm by Federal or State activities. It does not, however, place any restrictions on the actions of private property owners.

Listing in the National Register is the effective threshold for eligibility for a variety of programs designed to assist in the preservation of significant properties, including [Federal and State tax credits](#) for certain types of rehabilitation work. Other financial incentives for preservation include [grants and loans](#). Information on properties listed on the National Register can be obtained by contacting the Maryland Historical Trust.

⁶² <http://www.americanindian.maryland.gov/index.html>

In contrast, local historical preservation programs in Maryland are most frequently implemented through Historic Area Zoning Overlay zones that municipalities and counties may enact as part of their planning and zoning authority. Individual buildings and districts may be designated as historical by counties and municipalities in order to preserve historical places and protect community character. While these properties may also be listed in or eligible for the National Register of Historic Places, local designations are made solely by the local government. Owners of properties that are locally designated must receive approval from their local Historic District/Preservation Commission before making alterations to the exterior of all buildings on their property (including garages, sheds, and outbuildings), and for new construction within designated districts. Information on locally designated historic sites, landmarks and districts can be obtained by contacting local governments directly.

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CHAPTER 6: STRATEGIES & ACTIONS

A. The Future Direction of Land Preservation & Recreation

Maryland DNR has been and will continue to be a champion of the preservation and conservation of public lands for natural resource protections and outdoor recreation use by Maryland citizens and visitors. During the upcoming five years of implementation of the ***Maryland Land Preservation & Recreation Plan***, it is important that DNR maintain and expand partnerships with relevant state agencies, federal, county, and municipal agencies, and within the non-profit, academic, and business sectors.

The Strategies and Actions listed below represent the collective efforts of the Technical Advisory Committee, DNR Trails Committee, Maryland state agency staff, stakeholders, non-profits, user groups, and survey respondents. A suggested timeline for implementation was contributed by GreenPlay, LLC.

Because of the high number of actions, it is recommended that a LPRP Implementation Team be created to steward the completion of the actions within the five year time frame, including the development of an annual report outlining the status of the actions to be posted on the DNR website.

B. Strategies and Actions Summary

Strategy #1: COORDINATE			
<i>Local, county, and state collaborative planning efforts for land preservation and recreation</i>			
Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Work with Counties to collect GIS data on outdoor recreation facilities and amenities, including trail heads, to provide a better understanding of the level of service provided.		✓	
Work with public and private partners to maintain accurate GIS-based mapping of trails in the state and make trail data available online and through third party applications and smart phone technology.	✓		
Utilize the public and private survey and inventory data to determine critical gaps and prioritize funding for new trails on DNR lands.	✓		
Work with local governments to coordinate their LPRP's and yearly POS trail priorities with state trail goals and objectives to close critical gaps in the state trail network.			✓
Work with public and private partners to examine the feasibility of developing utility corridors to close critical gaps in the state trail network.		✓	
Require that County Land Preservation, Parks and Recreation Plans (LPPRP) should include municipal trails and recreation resources.			✓
Collaborate with Maryland Municipal League, the Maryland Recreation and Parks Association and the Maryland Association of Counties to coordinate county and local parks, recreation, open space and trails plans.			✓

Strategy #1: COORDINATE

Local, county, and state collaborative planning efforts for land preservation and recreation

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Coordinate with the Maryland Association for Environmental and Outdoor Education (MAEOE), county school districts and parks and recreation agencies to encourage the use of DNR lands as outdoor classrooms, with a focus on collaboratively resolving transportation issues.		✓	
Coordinate state and local government resources to avoid duplication of effort and conserve limited resources while working closely with the Maryland Municipal League (MML) and the Maryland Association of Counties (MACO) to develop partnerships and establish better coordination in pooling resources to promote and develop trails.		✓	
Develop partnerships with related initiatives to explore collaborative advancement of mutual goals such as Maryland Partnership for Children in Nature and Paths to Parks Initiative.		✓	
Explore user-generated real information on DNR trail systems including mapping, trail conditions and general information readily available on organization websites and social networks.			✓
Include local committees and organizations for people with disabilities when consulting stakeholder groups.	✓		
Maryland Scenic Byways Program should work pro-actively with DNR, Maryland Department of Agriculture, and Maryland Department of Planning to ensure that conservation priorities associated with Maryland’s Scenic Byways are included as part of each agency’s statewide priorities.			✓

Strategy #1: COORDINATE

Local, county, and state collaborative planning efforts for land preservation and recreation

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
In collaboration with the staff of Maryland Historical Trust (MHT), develop a GIS data layer that identifies significant historic and cultural resources found on lands owned and managed by the Department.			✓
Seek opportunities to preserve and interpret cultural landscapes that support DNR's land preservation and outdoor recreation goals.	✓		

Strategy #2: PROMOTE

Economic, health, and environmental benefits of outdoor recreation and natural resource protection

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Coordinate with county school districts to develop curriculum-based programs that facilitate the use of DNR lands as outdoor classrooms to help schools meet State environmental literacy graduation requirements.			✓
Utilize the Maryland Partnership for Children in Nature as a catalyst for conversations with local school districts and other parks and recreation agencies to address barriers to schools using parks as informal environmental education sites, including transportation and fees.		✓	
Enrich learning opportunities for formal educators and students by increasing access to DNR naturalists, educators, and natural resource specialists and expanding the use of DNR lands as sites for informal environmental education.	✓		
Work with academic partners in Maryland to conduct Forest Economic Impact Study to show the importance of our state forests, concurrently with carrying capacity studies on overused lands as identified by DNR staff.	✓		
Continue to install nature play areas at parks, schools, and public spaces that encourage creative, unstructured play and nourish a connection to nature.	✓		
Identify and promote opportunities to connect schools and communities to natural areas using trails.		✓	
Develop a campaign to highlight the use of DNR lands for four season outdoor recreation use and align with a health promotion message.			✓

Strategy #2: PROMOTE

Economic, health, and environmental benefits of outdoor recreation and natural resource protection

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Enhance park equity analysis GIS data layer with DNR land and water resources to improve participation throughout Maryland's diverse social and cultural populations.		✓	
Utilize the Friends of Anne Arundel County Trails (FAACT) model for developing trail volunteer groups on DNR lands.		✓	
Trails should be developed to enhance and support the Maryland Heritage Areas Program, the Scenic Byways Program and the Canal Towns Partnership.		✓	
Incorporate art and cultural heritage on trails to enhance the users' experience and tell important natural resource and cultural heritage stories.			✓
Showcase Maryland's Native American cultural heritage using trails and interpretive signage to tell Native American stories, develop Indian Heritage Tourism and highlight significant Native American sites.		✓	
Develop thematic trails around important DNR resources such as the Patuxent watershed, farmlands and Native American heritage.		✓	
Provide on-line maps available showing ADA accessible trail systems to provide the full range of trail benefits to people with disabilities. Include information about levels of accessibility and locations of barriers in the mapping data, such as the width, surface characteristics and grade of the trails.		✓	
Add Quick Response Codes (QR Codes) and trail maps at trailheads and visitor centers to educate visitors about poison ivy, deer tick, boating safety, related outdoor skills, and trail information.		✓	

Strategy #2: PROMOTE

Economic, health, and environmental benefits of outdoor recreation and natural resource protection

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Document trail use with trail counters to provide valuable resource information to develop support for trails.		✓	
Conduct an economic impact study of trails and greenways.			✓
Incorporate multi-lingual signage, technology, and print publications throughout the DNR system.			✓
Offer cross-cultural programming, cultural festivals, and events.			✓
Continue to employ Spanish speaking staff in parks and nature centers.	✓		
Explore technology to provide website links to county parks; trail systems; water based recreation opportunities; natural, cultural, and historical resources; and camping for a seamless user information search experience.	✓		
Assist friends groups in developing partnerships with businesses to identify trails as an important economic generator (Trail Passport contest), and promoting active lifestyles, healthy eating, and community vitality.		✓	

Strategy #3: ACCESS

To water and land based recreation opportunities for all populations

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Consider opportunities for water recreation access at Patuxent River State Park, Franklin Point State Park, Severn Run Natural Environmental Area, Patapsco Valley State Park, and Frederick and Carroll counties with Chesapeake Bay Watershed Public Access Report priorities.			✓
Build, maintain, and renovate trails to create a sustainable system, adopting best practices for sustainable trail design developed by agencies and organizations such as the U.S. Forest Service, Student Conservation Association, and International Mountain Bicycling Association.	✓		
DNR should inventory its existing trail system to identify ADA accessible trails and determine trails that could be made accessible with the resources available and without significant modification or disturbance to valuable natural and cultural resources.			✓
Create accessible educational programs on accessible trail systems to provide the full range of trail benefits to people with disabilities.			✓
Consult with makers of navigational tools for blind pedestrians so that they can get the information they need to use the trail system.			✓
Improve signage on trails including: how to get back to the trailhead, who can and cannot use a trail, levels of accessibility and locations of barriers, trail etiquette, natural resource information, and stories.		✓	
Establish a convenient system of communication on trail conditions and restrictions for trail users.		✓	

Strategy #3: ACCESS

To water and land based recreation opportunities for all populations

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Examine Wildlife Management Areas for opportunities to provide wildlife-dependent recreational development such as low-amenity camping, fishing/canoeing access, birding, walking, biking and equestrian trails which are compatible with primary wildlife management purposes.			✓
Follow the recommendations of the 2013 Chesapeake Bay Watershed Public Access Plan based on budgetary constraints and state goals.			✓
Increase access to recreational water trails as appropriate.			✓
Seek funds to identify and evaluate historic and cultural resources located on DNR lands, prioritizing evaluation of those resources threatened by sea level rise (Inventory has been started, but is incomplete from previous plan due to lack of resources).		✓	

Strategy #4: CONNECT

DNR trails and public lands to the places people live, work, and play

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
Identify a dedicated funding source for trail design, construction, and maintenance.			✓
Link the trailheads for land and water trails.	✓		
Create connections between trails within Maryland state parks and forests as well as between state, city, county, and federal trail systems.	✓		
Explore opportunities to provide equestrian campsite locations at parks and forests with existing equestrian trails.		✓	
Public/private partnerships should focus on utilizing reclaimed mines, reclaimed sand, or gravel quarries and other similar land to develop Off Highway Vehicle (OHV) parks.	✓		
Work with MDOT and local governments to facilitate changes in statutes and regulations addressing landowner liability and permitting OHVs to traverse between closely located but not contiguous OHV recreation areas, including crossing or traveling parallel to public roads and, in limited areas, riding into local communities for the purpose of buying gas and/or food.			✓
With few exceptions, trails should be designed for multi-use and managed for cooperation among user groups to reduce conflicts.	✓		
Include linear outdoor recreation facilities as part of green infrastructure planning.	✓		
The State should acquire land adjacent to State parks and expand park boundaries to include additional natural and cultural resources and to address management issues.	✓		

Strategy #4: CONNECT

DNR trails and public lands to the places people live, work, and play

Actions	Immediate/ Ongoing	Short-Term (1-2 years)	Long-Term (3-5 years)
In cooperation with the ongoing program development of the Maryland Conservation Corps, Civic Justice Corps and Department of Education, develop working relationships with school systems to engage high school students in trail construction and maintenance projects on DNR lands as a means to fulfill community service requirements.		✓	
Explore working with County and local governments to engage youth in bicycle and pedestrian planning efforts using Safe Routes to Play and Safe Routes to School strategies.			✓

C. Implementation

Implementation of the Strategies and Actions in the ***Maryland Land Preservation and Recreation Plan*** will require dedicated attention and review by the leadership and staff of the Department of Natural Resources and its sister agencies.

The suggestions below are provided to insure the plan remains a valued resource for decision making and public engagement with DNR policies and priorities for the next five years.

1. Post the Strategies and Actions, as well as links to the various chapters of the plan, prominently on the DNR website and distribute the link electronically to DNR leadership, staff, Technical Advisory Committee, and other relevant stakeholders.
2. Designate a multi-division team of DNR staff to lead the implementation process.
3. Develop an annual report on the progress of implementation for public distribution.
4. Conduct in-house and outreach meetings with stakeholders to review the plan's progress.
5. Include references to the Strategies and Actions in future planning documents.

Appendix A: Status of Recommendations: 2009-2013
Maryland Land Preservation, Parks and Recreation Plan –
Volume II

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Status of Recommendations
2009-2013 Maryland Land Preservation, Parks and Recreation Plan – Volume II

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Programmatic Activities					
Education and Interpretation	Work with the Forest Service, MPS, and other appropriate units to develop, or complete, and publish educational materials describing each land unit's important natural and cultural features (geology, landscape types, flora and fauna both rare and common, historical structures, or archaeological sites), why they are important, and how they can be viewed by visitors.	Land Acquisition and Planning		Natural Areas have been identified and other significant habitats like Brook Trout streams.	
	Identify opportunities to connect schools and communities to natural areas using trails	DNR		Created a Trails Development Office.	
	Implement a program package with school systems to utilize high school volunteers for construction and maintenance projects as a means to fulfill community service requirements	DNR MCC CJC		Programs have expanded, but travel time is limiting factor.	
	Expand partnerships with local school systems, colleges, and universities to use DNR properties as laboratories for conservation education initiatives	DNR CIN			
Funding			Complete	Ongoing	Incomplete
	Develop and implement a market-based fee structure for non-DNR related uses of DNR lands	DNR			
	Adjust budget procedures as necessary to ensure that all revenue enhancements are allocated to operation and maintenance of forests, parks, and wildlife areas	DNR with finance and budget staff		Enhancements have been included in the budget for park and forest maintenance and the development of trails.	
	Develop and implement policy with respect to private development and/or operation of particular types of recreational facilities or services on DNR properties	LAP MPS		MPS has developed a strategic plan.	
	Develop a marketing approach for increasing park visitation in off-peak periods	MPS with state/local tourism officials			
	Review leases or other use arrangements and make adjustments as necessary to reflect market value of the property rights utilized while maintaining compatibility with wildlife habitat and recreation requirements	DNR			

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Technical Assistance and Other Partnerships					
	Provide technical assistance to local governments in developing local parks or greenways where DNR does not have an ownership presence	LAP and Program Open Space (POS)		Addressed through our local-side program.	
	Continue and expand partnership arrangements with the Maryland Environmental Trust, private land trusts, counties and municipalities, and other state agencies to: 1) expedite the acquisition of lands and easements, 2) leverage private, local, and other state funds for land conservation, 3) improve public outreach and communications with local communities, 4) maximize the benefits of combined use of POS state and local funds, and 5) minimize management burdens of additional protected land on DNR land management units, when private or local ownership of land can protect the State's interest	LAP with Maryland Environmental Trust, private land trusts, local jurisdictions, and other state agencies		Part of our land acquisition process.	
	Clarify ambiguity in providing local recreational opportunities beyond assisting financially in local government's land acquisition and recreational development through POS	DNR		Trying to clarify thru the collaboration with the counties during the LPRP planning process.	
	Identify and promote joint DNR-local construction and operation of recreational facilities serving a local need while helping to forward DNR purposes	DNR			
	Provide technical assistance to local jurisdictions to purchase and lease abandoned rail lines into local trails	DNR with local jurisdictions			
	Work with counties in Mid-Shore Region on potential rail-to-trail project, with Tuckahoe State Park as a destination	LAP, POS with Denton, Easton, Ridgely, Greensboro, Queenstown, and Stevensville			

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Research and Planning					
	Cooperate with the Maryland Office of Planning to conduct a new statewide survey of outdoor recreation participation and preferences	LAP MDP			
	Assist MPS to initiate regular and consistent monitoring of State Park visitors to be able to profile who uses facilities, where they come from and why, and what they do while they visit	MPS with DNR			
	Give high priority to field verifying mapped or other data on DNR units used as basis for 2009 plan, and made available to the public	DNR		Trail maps are being updated and shared downloadable files	
	Identify natural plant communities throughout the State which are rare or threatened and to identify highest quality examples in common communities, with priority on DNR properties	Natural Heritage Program with DNR		Natural Areas have been identified and inventories of new acquisitions continue.	
	Lead a study of opportunities to consolidate existing office and shop facilities (vehicle, woodworking, sign, etc.) to support operations statewide	Engineering and Construction Program			
	Survey, verify, and mark existing state land boundaries in order to avoid encroachments and optimize use of existing lands, as well as resolve existing intrusions onto DNR land	LAP and land management units (MPS, FS, and WHS)		Boundary recovery is part of the land management units annual work plan.	
Land Acquisition -Targeted & Ranking- Land Conservation			Complete	Ongoing	Incomplete
	Target land conservation based on ecological priorities and creates a more transparent process based on science. Develop an Ecological Screening system to select "Targeted Ecological Areas (TEA)"	DNR		A scoring system has been developed and all potential acquisitions are reviewed by an interdisciplinary team to identify resource values.	
	Continue to update databases, identify focus areas and prepare a flexible system of analysis to enable programmatic adjustments which reflect the most current project data	DNR			

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Statewide Principles and Values					
	Connect existing DNR land units to one another and to other protected lands where there is a functional or operational purpose for such connections	DNR		Potential acquisitions that are in-holding and/or adjoin existing land units are scored higher.	
	Direct land acquisition activities to stream valleys, mountain ridges, and other sensitive areas such as rare species habitats and high quality examples of natural communities	DNR		These areas are identified as part of the review process (Stewardship) for potential acquisitions.	
	Evaluate proposed major acquisitions of land for DNR ownership for Wildland designation	DNR			
	Complete interim use plans or management recommendations, including what should be done with existing structures, historic or otherwise, prior to acquisition for lands acquired outside of existing boundaries of parks or land units where there is no master plan	DNR		Part of the acquisition review process.	
	Expand existing conservation areas or focus efforts on large areas identified by the targeting protocol as the conservation strategy	DNR			
Historical Sites			Complete	Ongoing	Incomplete
	Develop cooperative working relationships with historic preservation groups throughout the state, in much the same way that they have with environmental organizations	DNR		DNR continues to collaborate with MHT Preservation Maryland & other non-profit preservation groups.	
	Develop a policy that discourages DNR ownership whenever possible	DNR		As part of the acquisition review process, unless a clear use of a historic structure can be identified, it is not acquired.	
	Develop additional opportunities to highlight African-American History and the experience of enslaved people, as well as work to protect the landscapes and open spaces around important African-American sites	DNR		The creation of Harriett Tubman State Park and the protection of the surrounding landscape is a good example.	

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Historical Sites (Continued)					
	Develop a stable funding source for the care and long-term maintenance of historic properties along with a long-term plan to address deferred maintenance	DNR			There is not a dedicated fund source.
	Continue to fund the Resident-Curatorship Program	DNR		Currently, the program is at capacity given the resources available.	
	Continue to work with the Maryland Historical Trust to enhance the DNR's caretaking of historic and archaeological resources on its properties	DNR and Maryland Historical Trust		Collaboration continues and MHT staff was involved in the planning process and are part of the acquisition review process.	
	Complete an updated inventory of existing historic structures, and evaluate eligibility on the National Register of Historic Places	DNR and Maryland Historical Trust			Although started, the financial resources have not been available to complete.
	Determine future uses and operation needs for properties where life tenancies and curatorships will expire	DNR		Each property is evaluated by an interdisciplinary team at the time of its "return."	

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Conservation Practices					
	Provide technical assistance for land use and habitat manipulation decisions on all DNR lands	Specialists in DNR's Wildlife Heritage, Fisheries & Forestry Divisions			
	Incorporate a landscape view to protect and enhance species diversity, density, and richness through an ecosystem-based approach to land management decisions and individual land unit plans	DNR		A system has been developed to identify ecological & cultural landscapes and to consider them in management decisions. DNR's decision to certify forest management as sustainable by two independent third party programs is a good example.	
	Set an example in habitat protection through effective implementation of existing regulations and the application of the state-of-the-art conservation and green building techniques	DNR		DNR is "leading by example" through our tree planting, wetland, and stream restoration efforts.	
Regional Opportunities			Complete	Ongoing	Incomplete
	Inventory State Parks to identify habitat restoration opportunities	DNR			
	Restore and manage the serpentine barrens of Soldiers Delight NEA in a manner that will protect the unusual serpentine ecosystem	DNR		The Natural Heritage Program is currently restoring the serpentine ecosystem by removing encroaching trees.	
	Use Hart-Miller Island to demonstrate habitat creation on dredged material	DNR			

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Recreation on DNR Lands Units -General Statewide Objectives					
	Promote hunting and other wildlife recreation opportunities on all DNR lands	DNR		Each new acquisition is evaluated for any hunting opportunities.	
	Evaluate the long term sustainability of resources and usage and take measures to ensure that future generations will enjoy the same opportunities	DNR		Good examples are the Department's focus on sustainable forest management and the development of sustainable trails.	
	Expand low-intensity, resource-based recreational development at existing State park units as the first priority, with capability for increased development, completing master plan updates or site plans as necessary				
	Create and enhance a statewide trail system on land and in water that connects communities, parks, waterways, and schools, as well as develop and implement a comprehensive program that connects children and families, particularly those that are unserved, to natural areas	DNR		The Department has created a Statewide Trails Development Office. This office is working with DNR Staff, other state agencies and local governments to create a Statewide Trail System that is "second to none."	
	Examine Wildlife Management Areas for opportunities to provide recreation development such as low-amenity camping, fishing/canoeing access and walking trails which are compatible with primary wildlife management purposes	DNR		This is being accomplished as plans are completed for the individual WMA's.	

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Water-Based Recreation	Identify potential fishing and boating access sites in the state, based on recreation demand, methods for operation and funding, and environmentally suitable areas	DNR and local governments		This is conducted by our Boating Administration, Fisheries and the Water Trails Program.	
	Master Plans for both Point Lookout and Smallwood State Parks in the Southern Region will recommend recreational enhancements that complement existing infrastructure and will focus on improved use of local natural resources including beaches, navigable water and/or fisheries	DNR			
	Enhance Myrtle Grove Lake and Saint Mary's River fishing lake	DNR			
	Study Martinak, Janes Island State Parks and Sassafras River NRMA for Bay bathing beaches in the Eastern Region	DNR			
	Give preference to providing assistance to local governments to establish bathing beaches and pond swimming areas to meet local needs for swimming opportunity	DNR and local jurisdictions		Once again, this is part of DNR's collaboration during the development of the County Recreation Plans.	
	Evaluate public access at Isle of Wight, Fairmount and Nanticoke River WMAs; Martinak State Park; Wye Island NRMA; and Smithville Lake, Wye Mills and Unicorn Lake FMAs in the Eastern Region where land units cannot be reached by small craft from county ramps	DNR			

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Hunting, Shooting and Wildlife-Related Recreation					
-Statewide					
	The Wildlife and Heritage Service will continue to write and implement WMA plans which will guide the service in all aspects of management including balancing the needs of diverse user groups over the next 5 years	Wildlife and Heritage Service		WHS has completed seven WMA 15-year plans & is currently developing plans for 3 additional WMA's.	
	The Wildlife and Heritage Service will review and update regulations governing the use of all WMA's over the next 5 years	Wildlife and Heritage Service			
	The Wildlife and Heritage Service will, in consultation with the Maryland State Parks Service, will continue to review and update standardization of criteria and regulation for managed hunts in all DNR lands during the next 5 years	Wildlife and Heritage Service with State Parks		This is done on a yearly basis with both the Park Service and the Forest Service.	
-Regional					
	Explore expanded hunting opportunities within the State Park System, particularly at units most easily accessible to the State's urban population	DNR with State Parks		WHS continually works with our land managers to identify new hunting opportunities.	
	Continue to monitor target shooting operations at existing shooting ranges to allow for the continued support of this activity in the local community and to provide adequate opportunity for target shooting in support of hunter safety programs and hunting generally	DNR			

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Heritage Tourism	Move forward as programmed to support expanded interpretation activities at Fort Frederick State Park	DNR and State Parks		Numerous reenactment programs are held on an annual basis.	
	Work with the Maryland Historical Trust local Heritage Area partners, and other preservation and natural resources conservation groups to develop on central repository for heritage tourism information, including information on visiting site of historic and environmental interest	DNR with Maryland Historical Trust local Heritage Area partner		DNR is a member of the Maryland Heritage Area Authority and also participates as a member of the technical advisory committee.	
	A park service associate with the requisite education and experience should be designated as the resident historic site interpreter in each park	DNR			Incomplete due to the lack of staff.
	Appropriate signage in each park that interprets important historic places, events, or people	DNR		An interpretative exhibit is being developed at North Point State Park to educate visitors about the Battle of Baltimore, which occurred during the War of 1812.	
	A website that is comprehensive and easy to navigate should list historical sites owned by DNR and incorporate that list into a statewide site of heritage tourism areas	DNR			Incomplete, we do not have an inventory of all the sites.
	Continue to participate and assist in the efforts to create and develop the National Historical Trails (Star-Spangled Banner and Captain John Smith), and the Harriet Tubman State Park	DNR			
Resource-Based Day Use Recreation			Complete	Ongoing	Incomplete
	Explore the potential for further expansion of resource-based day use recreation at a number of land units				

Area of Focus	2009-2013 Recommendations	Responsible Agency	Status		
			Complete	Ongoing	Incomplete
Overnight Accommodation					
	Evaluate the potential expansion of primitive or unimproved camping	DNR			
	Evaluate improved camping opportunities throughout the Regions	DNR			
	Pursue the potential for expansion in the near future as part of efforts in support of Civil Justice Corps	DNR		This program has grown every year.	
	Undertake a feasibility/marketing study to determine possible sites for the construction of additional cabins	DNR			
Trails			Complete	Ongoing	Incomplete
-Statewide					
	Develop a statewide policy with respect to multiple use of trails, standard signage, and appropriate protocols for design, maintenance, and other management concerns within the next 5 years			Being developed by the Trails office in collaboration with the DNR land managers.	
-Regional					
	Continue to place the highest priority on working with the National Park Service in the Western Region to extend the Western Maryland rail-trail and linking the Catoctin Trail to the Appalachian Trail, and expanding the northern portion of the Green Ridge State Forest trail into Pennsylvania	DNR and NPS			
	Develop a sustainable trail plan in the Central Region for the Patapsco Valley to deal with overuse and to develop connection to the BWI trail and other local trails, with consideration to the development of a multi-use trail system	DNR		Trails are being developed & constructed using sustainable design techniques as resources allow.	
	Development of a trail system to link areas of public ownership in the Seneca Creek Valley in a cooperative effort with Montgomery County	DNR and Montgomery County		DNR is working with mountain biking groups (IMBA & MORE) to create trail links.	
	Consider the acquisition of active rail lines with POS for future trail use, potentially using the CSX line that runs through Patapsco Valley State Park as a pilot project	DNR			
	Place a high priority on trails as a connection between communities, schools, employment centers, and natural areas	DNR		DNR's goal is to create a MD Trails network that connects people where they live, work, and play.	

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Appendix B: Technical Advisory Committee Notes



Recreation Component of the Land Preservation and Recreation Plan
Roger "Pip" Moyer Community Recreation Center, 273 Hilltop Lane, Annapolis 21403
November 28, 2012

Technical Advisory Committee #1 Meeting Notes

1. What mechanisms do you suggest we use to solicit input from the public?

1. MD should bench mark other state plans (example - Virginia); replace the word needs with demand
2. NRPA's (National Recreation and Parks Association) Proragis (Parks and Recreation Operating Ratio and GIS) PRORAGIS is a national database that allows park and recreation agencies to benchmark with others. NRPA is collecting data through PRORAGIS for the purpose of measuring the economic benefit of the ecological aspect of parks.
3. Technology such as Facebook, Twitter, QR codes, etc., should be utilized to the fullest extent
4. Community centers, libraries, and community colleges could host a meeting for survey participation for those folks who do not have electronic access
5. PlanMD used prizes for survey participation, great idea. DNR should offer prizes for incentive – gets folks out in nature
6. Option to mail or online participation (ask a question "how much do you use recreation facilities in other places; what do you like and what do you dislike)
7. PlanMD survey media setup check what was successful or not; contact John Coleman
8. MHT (Maryland Historical Trust) is doing a statewide electronic survey that is planned for spring; coordinate mutually interests' questions; include MDOT (MD Department of Transportation) update on bike plan – coordinate similar survey materials. Concern is survey fatigue.
9. We need to get out of our silos, make sure this incorporates all recreational needs (local, state, fed). Public often doesn't distinguish who owns a park. Survey will focus on DNR lands and regional significant areas as well as state leased areas for local recreation
10. Resource based recreation – state; active recreation – local; define
11. Make delivery as a system – "lands system" is important to local, state, national stakeholders i.e. trails
12. Could utilize a mapping tool for the survey to help people focus on the facilities they use; include pins for "park locations needed". – (NPS can share their tools)
13. Public input – offer prizes to stimulate outdoor participation
14. Use Park equity analysis to target special outreach
15. Questions could address local food movement – community gardens; id green spaces; where do you think we need parks, what parks are being under utilized
16. Cross promote survey through agencies, libraries, posters, parks visitor/welcome centers, casinos
17. Demographic data is important, example 40-65 year old demographic is voting and economic contributors

18. Students at community colleges; continuing Ed classes would volunteer to setup a computer lab to promote survey – offer coffee... (Ages 40-65 responded more to survey in Virginia)
19. Socio-economic groups be surveyed; surveys should be in Spanish, maybe use the ethnic commission and English for Speakers Of Languages classes in schools to target minority populations.
20. Strategic plans for parks and recreation were reviewed by– leadership, non profit, general public meetings and specific user groups
21. Poster – have a logo that can be scanned by phone to do survey later
22. Identify other compatible use – other things to do outdoors
23. Keep survey short no more than 4 pages...
24. Query focus groups?
25. Clearly define purpose of survey – public outreach – open space and recreation demand
26. Define 2009 goals that have been met – identify what goals have not been met – continue forward and define success
27. Use demographics survey to target populations
28. Use multiple languages and for those that cannot read work with community organizations and advocacy groups
29. Advocacy groups to address Latino and others
30. Demand for facilities for non geographic/geographic areas; what do you like?
31. Random questions for different groups – survey have sequence numbers
32. Identify benefits – hiking, biking, kayaking; schools and retirement facilities are good places to distribute surveys
33. Utilize REI and other outdoor recreation businesses, Dept of Aging, health improvement coalitions, disability groups - DHMH – has contacts regarding ageing and school age for local health improvement organizations, CIN (Children In Nature) partnerships, human health
34. Forest Service did a study with land trusts using census survey; info and partnerships available
35. School systems can assist
36. Outdoor education conferences
37. People with disabilities be included in the survey
38. Greater Baltimore Children and Nature contact
39. Baltimore County & City are conducting surveys on forest patches
40. Healthy business registry
41. Be careful public input not skewed by loudest voices

2. What land conservation/recreation topics should be covered in the plan?

1. Incorporate environmental literacy requirements; environmental education and interpretation
2. Emphasize CIN initiatives; intergenerational programming include teachers and caregivers
3. County outdoor school programs – day trips – how to engage children, parents, caregivers
4. Fisheries has “travelling classroom program” which is successful – participants learn life cycle, environment issues, backyard fishing program, fishing challenge
5. Identify barriers to access (i.e. school administration, transportation)
6. Fracking
7. Water access – trails; Disabled access
8. MDP/DNR conservation – page 2-37 volume I – stability analysis/land at risk; (threat of development update)
9. Context Americas Great Outdoors federal level – great outdoors; farming why important and what is next, MD/National initiatives
10. Make connection between land conservation & access to recreation

11. Land protection vs. economics – appreciation of protected lands
12. Land conservation through easements does not allow public access – it's not just about number of acres protected; use of easements, public access needed
13. Some hunting is an allowable use on some farms that have easements
14. Fishing access easements in New York (liability is limited in MD if the property owner does not charge a fee to use the property for access)
15. Climate change impacts to recreational/cultural resources
16. Educational component – need for public service announcements to communicate to the public conservation ethics – ecological systems information
17. Services, land, facilities are part of the plan – plan will be general and cover major initiatives
18. How to change attitudes of being outdoors is a good thing (CIN) – appendix will include details of work accomplished
19. Raise the issues – document and reinforce
20. Heritage Areas – strengthen natural resources component – reference; Show trends & emphasis for next 5 years with realistic plans (not just wish-list) and an annual review of implementation. Perhaps link to Smart Growth subcabinet.
21. County parks and recreation component – trends – counties can help address local issues of children to parks; CIN issues, childhood obesity – plan to reference
22. Contextual section, frame why this is important, include recent federal initiatives
23. where have we come in five years; where are we going in five years; document points to address – funding available (CIN, health, gangs) is it a working living document or reality
24. How broad is the scope (#10?) – Use MHT, Economic Surveys, health and obesity trends – use focus groups, park equity analysis, and climate change
25. Policy level recommendations – 2009 LPPRP – what other states recommend; work backwards from table of contents – Colorado had different tasks, PA won SCORP Award

3. How would you suggest we divide Maryland into sub-regions?

1. Tourism uses the following regions:
 Western: Washington, Allegany, and Garrett Counties
 Capital Region: Prince George's, Montgomery, Frederick Counties
 Central Region: Anne Arundel, Howard, Carroll, Baltimore and Harford Counties, Baltimore City
 Eastern Region: Cecil, Kent, Queen Anne's, Caroline, Talbot, Dorchester, Wicomico, Worcester and Somerset Counties
 Southern Region: Calvert, Charles and St. Mary's Counties
2. Survey by population density: urban, suburban, rural
3. Separate lower and upper eastern shore

4. Other

1. LPPRP "identifying needs" – do not use as an example into the LPRP; the needs analysis is not accurate; method of multiplication for identifying facilities is unbalanced; not a good example
2. Let counties develop their own system to identify recreation needs
3. Heritage Areas have to report their work plan, tasks and have an annual review to smart growth cabinet
4. Land protection – public access – reporting – how to tract implementation (is # of acres the answer)



Recreation Component of the Land Preservation and Recreation Plan
Roger "Pip" Moyer Community Recreation Center, 273 Hilltop Lane, Annapolis 21403
February 4, 2013, 1 – 3 pm

Technical Advisory Committee #2
Meeting Notes

1. Welcome and Introductions

John Wilson from the Land Acquisition and Planning Division of the Maryland Department of Natural Resources welcomed the Technical Advisory Council members and introduced Anne Miller the project manager from GreenPlay for the Recreation Component of the State Land Preservation and Outdoor Recreation Plan project.

2. Project Overview

Anne Miller introduced the consultant team that included Cindy Heath from GreenPlay and Dave Peterson from Design Concepts, who will be responsible for the inventory update and mapping. RRC Associates (not present) will conduct the statistically-valid phone survey and the open link online survey. Anne provided a brief overview of the project scope and schedule that includes: Phase 1 – information gathering (February-April), Phase 2 – findings/visioning (May-June), and Phase 3 – plan development (July-November).

3. Project Vision and Critical Success Factors Discussion

TAC members were invited to introduce themselves and share their thoughts about the project vision and critical success factors. A summary of the comments follows.

- **Paul Dial**, P & R Director Frederick County – have a document that can support a common vision and be consistent between state goals & county plans. Politics can create conflicts and a common vision is desirable; use data to guide decision making on facilities and programs
- **Kate Sylvester**, MDOT, updating State Transportation & Bike/Ped Plan; trails inventory needs work; make connections between plans
- **Stephanie Oberle**, M-NCPPC, Governor's Partnership for Children in Nature (CIN); integrate goals of CIN to encourage connectivity
- **Marilyn Smith**, Coordinator of Chronic Disease Program, MDH, integrate public health and include health data (will provide)
- **Tom Donlin**, MRPA, would like to see results of survey validate the work of jurisdictions in preparing local plans; reinforce trends in programming and facility provision; determine need, what are the standards? Supports growing trend for children in nature; trails component information
- **Charlie Gougeon**, MD Fisheries; integration of state and county resources; has a GIS access map to ID fishing access points; survey – who is exposed to fishing and what are their needs

- **John Purdue**, MD DNR Forest Service; 200,000 acres managed for multiple use; timber management, forest products, recreation; pressure from users including Off-Road Vehicles, access has been shut down because of overuse; mountain bikers; internal pressures for access – state parks want to use forests for visitor access; not much data on how people access land; most lands attached to state parks
- **Matt Jagunic**, NPS; would like to reach audiences historically not included; NPS has public access goal to increase to 300 public access points to Chesapeake Bay; has a grant program to develop access projects; wants to develop partnerships; Bay Access Plan just released
- **Jared Parks**, Eastern Shore Land Conservancy, education, public access focus; would like plan to support easy and fair access for all; landscape, natural resources, agriculture acquisition, a need for DNR to lead by example
- **Alfred Sunara**, MD Dept. of Planning; demographic projections; identify future needs as population and diversity increases
- **Jane Trenham**, MD Dept. of Planning, census data collection
- **Daniel Rosen**, MD Dept. of Planning, reviews all local LPRP's, wants plan to adhere to Smart Growth vision; use parks as amenities in growth areas; for farms and forests to be used for passive recreation; DNR is doing a good job of reaching out to unserved areas and people without cars
- **John Papagni**, HUD, provide opportunities in existing unserved areas
- **Elizabeth Hughes**, Maryland Historical Trust, Dept. of Planning; include discussion of cultural landscapes as part of DNR; currently updating State Historic Preservation Plan; hopes DNR survey will inform their plan; owns one 560 acre property on the water; how survey results will influence programming so public will recognize archeological & natural resources
- **Marci Ross**, MD Office of Tourism & Dev./ Tourism Dev. Unit; recreation is a pillar of their work
- **Sue Simmons**, Caroline County Recreation & Parks Dept.; what is the elevator speech? Will convene focus group ; wants the local voice to be meaningful

4. Key Outdoor Recreation Issues, Values, Vision

Values & Vision

- Connecting People To Nature
- Water Recreation
- Connecting Local, County & State Plans
- Trails Connectivity

Issues

- Decreased funding to DNR; What are the opportunities to restore funding?
- Community Parks and Playgrounds Program is at half funding
- Stormwater issues and recreation access goals in conflict
- Transportation funding for trails cut; set up for projects that have multi-purpose impact, multi-use
- Consider human ecology; how do we create livable, walkable communities including trails and other routes?
- County plans themes – how to improve service in new growth areas; improvements to existing properties

- Understand how diverse cultures use and appreciate nature; how do you respectfully encourage appropriate use; ex: harvesting mushrooms & fish; resource based etiquette before environmental literacy
- Communication with new immigrants on regulations
- Important to have inventory of resources coordinated

Trends

- Planting parks with edible landscapes and community gardens
- Inconsistency in best management practices among state lands compared with education practices for private land owners; buffers, cover crops; would like to see DNR showcase best practices (e.g., cover crop compliance in agricultural lands) – reinforce this in Land Preservation section
- Hispanic community users are increasing

5. Regional Stakeholder Meetings (4 – Central, Western, Southern, and Eastern)

TAC members were asked to help publicize the upcoming March 5-6 regional stakeholder sessions. They were also encouraged to help promote the open online survey (in March). Additional outreach efforts were encouraged, especially efforts by TAC members to reach out to unserved communities.

Schedule

- 1st meeting, Feb. 5, 6-8 pm, 6600 Kenilworth Ave, Riverdale, 20737
- Remaining meetings – March 5-6
 - 2nd meeting, Western Region, March 5, (*note: changed time and location*), 4-6 pm at Allegany College, 12401 Willowbrook Rd., Cumberland, MD
 - 3rd meeting, Eastern Region, Wednesday, March 6, 10- 12 pm, Talbot County Community Recreation Center, 10028 Ocean Gateway, Easton 21601
 - 4th meeting, Central Region, Wednesday, March 6, 6-8 pm, Howard County Robinson Nature Center, 6692 Cedar Lane, Columbia 21044

Communication & Outreach Strategy Discussion

- DNR Trails Committee
- Visitor & constituent newsletters
- Email posters to libraries
- DOT Bike/Pedestrian Master Plan Stakeholder Meetings – late Feb thru April; will share info
- Education System – share information with MD PTA
- Communications Division – distribute flyer via email with all info including survey info
- Use Social Media – Facebook pages, Twitter – most agencies have them

6. Survey

Following are discussion comments from the draft phone survey questionnaire.

- Responses will be muddled because respondents don't know who owns parks
- Questions with many choices requesting ranking will be difficult to answer
- #8, #5, simplify – too complex
- Shorten survey overall; have longer online survey
- "Have you visited a state park in the past year? If yes, what did you do? If not, why not?"

- “Do you want more access to outdoor recreation?”
- Hook people at the beginning of the survey – “Would you like to have an influence on how outdoor recreation facilities are planned?”
- Design questions to be conversational
- Keep phone survey short, then invite people to go online and fill out longer survey (provide incentive)
- Explore possibility of Morgan State intern doing onsite interviews in parks
- Make sure survey is available in Spanish
- Broaden questions to ask what gaps there are in activities and whether demand is met, rather than ask about specific state parks
- Consider using SSC interns to conduct surveys on site (CJC, MCC)
- Consider oversampling in communities with a high concentration of minority populations

7. Facility Inventory Update

- Approach – Focused on DNR lands and other regionally significant public open space/park lands (federal and county)
- Discussion
 - County includes state lands as part of their threshold of acres per population
 - Use trailfinder.org, landscape.org (inventory of lands and uses) from the NPA
 - Are programs being inventoried as well as DNR lands and facilities? No.

8. Summary & Next Steps

- Finalize survey questionnaire
- Regional stakeholder meetings, March 5-6 (see meeting times and locations under section V. above)
- Findings/visioning session, Tues. June 18 for TAC meeting
- Other comments – consider using human interest stories or case studies for inclusion as side bars in plans



Recreation Component of the Land Preservation and Recreation Plan
Roger "Pip" Moyer Community Recreation Center, 273 Hilltop Lane, Annapolis 21403
June 18, 2013

Technical Advisory Committee #3
Meeting Notes

1. Welcome and Introductions

John Wilson from the Land Acquisition and Planning Division of the Maryland Department of Natural Resources welcomed the Technical Advisory Committee members and introduced Cindy Heath, Project Manager for GreenPlay for the Recreation Component of the State Land Preservation and Outdoor Recreation Plan project.

2. Project Overview

Cindy Heath introduced the consultant team that included Kristin Caborn from GreenPlay and Carter Marshall from Design Concepts. The team presented the Findings Powerpoint and facilitated a Visioning Session following focused on key findings.

3. Findings and Visioning Discussion

- **GIS coordination with local governments**
 - Long range goal for every county and municipality to provide GIS mapping trails, natural resources and picnic amenities
 - DNR could provide a list of identified data layers to counties and municipalities – natural resources, trails, water access, picnic areas

- **Alignment between local jurisdictions and DNR**
 - Outfitters – could provide information that's not widely available about little known destinations
 - Corporate partners- REI (grants for employees to work on specific projects related to orienteering, outdoor projects, GIS)

- **Partners**
 - Identify non-profits that share a common vision
 - Higher education institutions can accomplish specific projects
 - Appalachian Environmental Lab
 - GIS lab at Washington College
 - Salisbury University
 - Urban Resources Initiative
 - Outward Bound Baltimore
 - Appalachian Trail conference - Potomac Trail Club (across border)

- Baltimore Ecosystem Study
 - Baltimore has been selected as a pilot community for Urban Waters Initiative
 - America’s Great Outdoors Report
 - Adventure Sports Institute in Garrett County - National Whitewater Hall of Fame
 - Maryland Recreation & Park Association
 - Maryland Association of Counties
 - Baltimore Metropolitan Planning Authority
 - Regional planning organizations
 - Maryland Association for Outdoor and Environmental Education
 - 1000 Friends of Maryland
- **Messaging and Branding**
 - YouTube – produce short ‘how to’ video clips (access information, educational ie, how to load a canoe)
 - Social media on trails - encourage users to Tweet, Facebook, and upload to DNR website or blog
 - QR code readers on signage, brochures (what does poison ivy look like), could link to DNR website
 - Consider a focus on health and wellness
 - What’s the message the department wants to get across? What’s available in state parks, local education, where are the deficits?
 - Coordinate with environmental educators in each county, encourage use of DNR lands as outdoor classrooms
 - PSAs (reference to 15 second infomercials during Orioles games such as how to fertilize lawn - partnered with CBS)
 - Consider a DNR app, sponsors to develop. Internal barriers at DNR to developing apps - too many platforms to support, changes too frequently
 - DNR is creating PDF trail maps that are downloadable from the website
 - Consider mobile phone version of DNR website
 - Create links from local sites to DNR website (schools, cafes, local government community centers)
 - Docs in the park (info to doctor’s offices, easily conveyable to patients who need to be prescribed nature)
 - County fairs, state fairs DNR booth
- **Water Recreation Access**
 - Barriers to participation:
 - ◆ Ownership - More county access than state access
 - ◆ Time
 - ◆ Information on sites is not out there; have enough but people don’t know where they are or where the physical “holes” are, where to acquire new sites
 - ◆ NPS bay access, MD acquired 300 new sites
 - Provide information on what type of access is provided: flat water paddlers, fishing, crabbing, swimming, etc.
 - Consider a joint publication (local government, DNR, private entities)
 - Consider soft launch areas, kiosk for money collection, with day use sticker
 - Reassess the gaps after DNR and county facility data is combined, then collaboratively identify priorities

- **Trail Connectivity, Connecting People to Nature Across the Age Span**
 - DOT has a new bicycle plan coming out in 2013
 - Reluctance to use trails because of safety issues (natural predator or crime)
 - ◆ Trail partners, walking partners
 - ◆ Power of storytelling, testimonials about experiences
 - ◆ Use emergency locator numbering, integrating technology for safety
 - ◆ Incorporate emergency personnel into planning
 - ◆ “Friends of” groups to help with vigilance
 - Better access from front door. Starts at local planning level. Plan connections early during development, then look at state level planning for connections to points of interest, schools, etc.
 - Sidewalks are an important part of the connection, starting at the neighborhood level.
- Connect not just physically to the Chesapeake Bay, but identify it as part of “their state”.
- Schools, user groups? Get teachers to use parks as outdoor classrooms (identify who’s in charge of environmental education in each county)
- Need fishing access link on DNR website, coordinate with county access opportunities
- Other plans:
 - Heritage area plans - will be covered in land conservation
 - Forest plans- camping associated
 - Children and nature plan - will be covered in land conservation

4. Conclusions and Next Steps

John Wilson thanked the group for their participation, and encouraged everyone to promote the online survey to their constituents in advance of the June 30 closing date.

Attendees:

Rob Feldt	MD DNR - Forestry
Charlie Gougeon	MD DNR - Fisheries
Pat Goucher	MD DNR – Parks
Dan Rosen	MD DNR – Parks
Paul Dial	Frederick County Recreation and Parks
Jackie Carrera	Non-Profit, Parks and People
Jared Parks	Non-Profit, Eastern Shore Land Conservancy
Maureen Dougherty	Academic Rep, Frostburg State University
John Wilson	MD DNR – Land Acquisition, Project Manager
Sandi Trent	MD DNR - Administrator



Recreation Component of the Land Preservation and Recreation Plan
Roger "Pip" Moyer Community Recreation Center, 273 Hilltop Lane, Annapolis 21403
October 1, 2013

Technical Advisory Committee #4
Meeting Notes

1. Welcome and Introductions

John Wilson from the Land Acquisition and Planning Division of the Maryland Department of Natural Resources welcomed the Technical Advisory Committee members, and representatives of the Maryland Association of Counties and Maryland Recreation and Park Association, and introduced Cindy Heath, Project Manager for GreenPlay for the Recreation Component of the State Land Preservation and Outdoor Recreation Plan project.

2. Draft Plan Presentation

Cindy Heath introduced the consultant team that included Kristin Caborn from GreenPlay and Carter Marshall from Design Concepts. The team presented the Draft Plan Powerpoint and facilitated a feedback discussion following focused on key findings.

3. Draft Plan Questions & Discussion

Why is Dorchester County showing such a low participation in natural area visitation?

- County data was not included in planning process
- Work with Counties will present a more accurate reflection of what's happening in MD
- Plan to make a "GreenPrint" type map for the entire state that overlays all of the amenities
- This will be a recommendation of the plan, need to work towards all GIS data for cities/counties

Discussion notes

- Highlight tie between walking and visiting historic sites, map not created because of focus on outdoor recreation facilities, and lack of GIS data for historic sites
- Executive Summary, add an "E" connection between outdoor recreation and heritage tourism, i.e., Harriet Tubman byway and parks along "necklace" that offer interpretive opportunities
- Connecting people and places section, tell the story of how the sense of place is created along the way
- Missing capacity of facility to handle people (carrying capacity). Not generally a part of a broad-based SCORP planning process, add to recommendation
- Demographics included, but no "analysis" of action associated with it. High level of detail that is an "action item" in the recommendations to determine gaps that will be helpful with integration of county-level GIS information

- Connecting people to places- can you elevate that section in the draft, add cultural info. More examples (starting on page 65). Park equity analysis tool in chapter 5 might provide opportunity for enhancement
- Intro/Executive summary themes:
 - Complementary nature of land preservation and recreation
 - State land acquisition priorities depend on local land use decisions
- Chapter 5 also linked to cultural (historic landscapes, ie, civil war battlegrounds)
- Action #2, Promote: No actions refer to economic impact; no explanation of diversity or what to do to connect with diverse populations; (e.g. kids in nature, school influence, etc)
- Term “access” as confusing ADA reference and level of service reference (vs. proximity)
- Font size of document too small (especially maps)
- A lot of physical dimension of park system, missing quality dimension (deferred maintenance, etc). Mention having a quality system is something that’s valued, especially when discussing federal funding. Also addressed in survey.
- Stewardship model, teach people about it, get them to care about it, resulting in them doing something about it. “Call to action”
 - Strategy: look at programming and training (IEEIA?). Want people to be more than passive participants
- Mapping would be significantly different after local info is integrated, “call to action” for local parks and rec department to help make this happen. Need disclaimers that are obvious to the reader that local data will be worked on with DNR to update
- Interesting to see how much income is generated from outside of MD and/or from a different region of the state (hunting, fishing), i.e., Blackwater’s impact on Dorchester County
 - Economic development/impact - overnight stay vs. day trippers
 - Purposes and priorities when spending money to serve local residents vs. out of state
- Good foundation for local level to get plans together and help locals focus on where to fill in the gaps
 - State and local level work together moving forward to fill deficiencies
 - Tool for collaboration
 - Next first step: local levels look at gap analysis to see where LOS is high
- Need statewide LOS analysis that takes state and local data together
 - 5 mile catchment may not be applicable to local level detail

4. Conclusions and Next Steps

John Wilson thanked the group for their participation, and encouraged everyone to deliver any remaining comments to the GreenPlay, LLC team by October 15.

Attendees Representing Maryland Association of Counties:

John Byrd, Raul Delerme, Brenda Mercado, Jeff Degitz, Ken Alban, John Nissel, Stacey Clough, Paul Magness, Preston Peper, Chuck Montrie, Chip Price, Mary Bradford, Brooke Farquhar, Mark Wallis

Attendees Representing Technical Advisory Committee:

Mary Owens, MPS; Jack Perdue, Forestry; Charlie Gougeon, Fisheries; Karina Stonesifer, WHS; Pat Goucher, MDP; Dan Rosen, MDP; Elizabeth Hughes, MHT; Kevin Baynes, DHCD; Stephanie Oberle, Education, CIN; Erica Smith, Dept. of Health; Marci Ross, Tourism; Terry Maxwell, DOT Tom Donlin, MRPA; Paul Dial, MACO; Susan Simmons, MACO; Joe McNeal, MML Rep; Jackie Carrera, Parks and People Non-profit; Jared Parks, Non Profit conservation group; Jim Rapp, Recreational Industry (Delmarva Low Impact Tourism Experience); Maureen Dougherty, Academic Rep; Jonathan Doherty, NPS; John Papagni, DHCD; Matt Jagunic, RLA, LEED AP BD+C; Gary Burnett, MPS; Matt Tingstrom, MDOT

Project Team: John Wilson, DNR; Sandi Trent, DNR

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Appendix C: Regional Stakeholder Meeting Notes



Land Preservation and Recreation Plan Southern Maryland Stakeholder Meeting February 5, 2013, 6 – 8 pm

Meeting Notes

1. Welcome & Project Overview

John Wilson, Associate Director of the Land Acquisition and Planning Division of the Maryland Department of Natural Resources welcomed the group. He described the purpose of the Land Preservation and Recreation Plan – to identify open space and outdoor recreation trends, needs, and issues for Maryland and provide a strategic plan to sustain recreation opportunities. Anne Miller, Project Manager from GreenPlay, LLC provided an overview of the project scope and schedule. Cindy Health from GreenPlay facilitated discussion of a series of questions. Following is a summary of input from the **20 participants** at the meeting.

2. Discussion / Input – Large Group

General

- Water Access – a need more waterfront access
 - Public Beach access
 - Public Boat Ramp access
- Other users groups that want access to public lands
 - ATV's, mountain bikes, snowmobiles
 - User based recreation
- ADA access
 - Hiking trails available to disabled
 - Insufficient quality access to views or features
- Trails – need a comprehensive trail guide; include trail features and difficulty ratings
- State could sponsor different parks for different activities at different times
 - Spearhead events
 - Adventure sports

- Equestrian – safety of surfaces for horses and handicap users on bridges
- Need a balance of outdoor recreation activities (other than organized sports – there are too many soccer fields), like equestrian uses
- Work on partnerships with user groups to develop facilities
- Off Road Vehicles – ORV (motocross, etc.)
 - Go out of state to ride
 - It's not green to drive out of state to ride

- Economic benefits of keeping users in state
- Off road users – Indiana has 2 parks paid for by groups
- Economic benefits
- Stewardship among users
- Need access in Maryland
- Provides access to users that can't walk, provides access to new areas
- ORV access – doesn't have to be open all the time, could be limited times
- Youth access is extremely important
 - Available areas for youth to do activities outside of sports
 - Expose youth to the outdoors
 - How to get kids to unplug and go outside
 - Find healthy activities for kids
- Provide a variety of recreation opportunities in Maryland so people don't have to go to other states (Casino example)
- Small game hunting in addition to southern areas
- How do we get access without a car?
- Open areas for passive use and multiple users
- Non conflicting uses

Strengths of System

- Green Ridge worked really well –consolidated aspect of facility worked well
 - Camping
 - ORV access
- Set boundaries seem to work
- From beach to mountains – play up the all types of recreation opportunities
- Incredible financing opportunities
- Trail maintenance is a strength
- Camping and hiking
- Well situated parks with open space
- Excellent job of educating users
- Free passive use opportunities

Improvements

- Publicity – toot your horn
- Put land to use – acquired land should be open to the public
- Label lands as state parks and provide public access
- DNR should keep up with technology and marketing
- Have to pay to go into parking lot
- Don't overbuild facilities
- Identify all the state lands so I know where they are
 - Internet
 - On a map
 - State should look beyond DNR for recreation opportunities
- List of what is available and where things are – include ratings (easy/difficult trail, etc.)
- Improve mapping
- Take leadership for outdoor recreation
- Make lands accessible for use

- Relax barriers to use (e.g., environmental regulations)

3. Break Out Discussions Notes

Equestrian/Multi-Use Trails

Define the Problem

- Marked better, identification
 - Who, where
 - What's available and where
- Mapping
 - Clearing house for GPS
 - Shared online among friends
- Equity
 - Southern areas served by trails
 - Riding trails but capturing all facets of equestrian users
- Facilities- large scale- regional facilities
 - Permanent stables

Barriers

- Available lands or facilities
- Cost
 - User fees
 - Partnership with groups to develop
 - Sweat equity/Volunteer groups
 - Sustain over time (total ownership cost)
- Patrol / liaison
 - How do we get our voice heard
- Models facilities after like Kentucky Horse Park
- Not capturing demographics of users

Solutions

- Regional facilities
- Figure out users/empower users
- Clearinghouse for mapping trails

Hunting

Define the Problem

- Limited public shooting ranges, target shooting – a place to practice to become proficient – cannot get new users; shooting or bow-hunting; there is a range in Myrtle Grove in Charles County; Green Ridge has a public shooting range; need range safety officers – many would be willing to volunteer
- Sunday – limited hunting allowed
- Wildlife management concerns

Barriers

- State of Maryland is not pro-gun (e.g., legislation is being proposed to limit gun use)
- Stigmatism and fear of firearms
- Not issuing any more indoor shooting ranges – concerns about filtration of air

Solutions

- Public education – seminars with DNR officers to discuss wildlife management, safety, heritage; hunter safety classes
- Add more shooting ranges – public range that is self-supporting, rent to private and public groups (Gilberts Guns – private facility, is rented by government agencies for training police)
- Hap Baker – outdoor shooting range run by Carroll County at the dump

Water Access

Define the Problem

- Inadequate public water access
 - Example – 14,000 registered boats for two ramps at one site
 - Over 100 publically-owned properties that could be developed

Barriers

- Immediate neighbors resist public access

Solutions

- Boaters, fisherman, etc. paying through fees to maintain existing properties; these fees should be utilized to develop additional ramps
- Change land acquisition financing plans to require robust public access
- Access does not need to be developed and patrolled to the highest standard (i.e., gravel road/parking and ramp is adequate)

Off Road Vehicles (ORV)

Define the Problem

- Lack of access to facilities
- No place to ride
- Lack of status in facilities planning process
- Everybody hates motorcycle riders – noisy, environmental degradation
- NIMBY attitude of landowners adjacent to ORV use areas

Barriers

- Government red tape
- Tree huggers
- Lack of equity in land use
- Land closures to ORV – formerly 14 motocross tracks; regulations and land development forced closures (NIMBY); environmental issues; dust; zoning
- Land use pressures and land closures, as well as distance difficulties are having a negative effect on family recreation and the various motocross sports

Solutions

- Model Parks
 - [Croome ATV/Motorcycle Parks](#) (FL) – world renowned park; camp ground, state forest
 - [Breezewood Proving Grounds](#) (PA)
 - [Tower City](#) – Lebanon, PA
 - [Hatfield McCoy](#) (WV) – state run; private land
 - [Rock Run](#) – Patton, PA
 - [Budds Creek](#) – Mechanicsville, MD (St Mary’s County)
- Reclaimed mines
- Camping facilities not necessary but RV access okay; self-sufficient camping works
- User preferences – motocross = day use; camping on weekends
- Combine the user group clubs – separate the use (Hancock); American Motorcycle Association supports the initiative
- Understand economic impact – Fox Racing reference; \$5.4 million – Alleghany County economic impact loss from closing ORV trails at Green Ridge
- Have clubs adopt riding areas and do maintenance; rotate usage of trails to reduce impact
- Higher level of coordination within DNR ORV Stakeholders Workgroup – users want to understand use of lands (reference made to Hood’s Mill)
- Use money from registrations to give access to ORV users (reference made to 1976 law)

4. Summary & Next Steps

John Wilson from DNR thanked participants for their input. The three additional regional stakeholder sessions were announced for March 5-6. Details will be posted on the DNR website - <http://news.maryland.gov/dnr/2013/02/06/marylanders-asked-to-provide-recreation-information/>.



**Land Preservation and Recreation Plan
Western Maryland Stakeholder Meeting
March 5, 2013, 4 – 6 pm**

Meeting Notes

5. Welcome & Project Overview

John Wilson, Associate Director of the Land Acquisition and Planning Division of the Maryland Department of Natural Resources welcomed the group. He described the purpose of the Land Preservation and Recreation Plan – to identify open space and outdoor recreation trends, needs, and issues for Maryland and provide a strategic plan to sustain recreation opportunities. Anne Miller, Project Manager from GreenPlay, LLC provided an overview of the project scope and schedule. Cindy Health from GreenPlay facilitated discussion of a series of questions. Following is a summary of input from the **54 participants** at the meeting.

6. Discussion / Input – Large Group

General

- Education on different users
- Elderly are least likely to use state parks – mobility issues
- Look and feel – un-crowded, beautiful landscapes
- Don't want overdeveloped areas – too wide of trails, natural but accessible
- Cultural and historical resources (i.e., stone circle)
- Historical interpretation
- Off-Road Vehicles (ORV) – go to West Virginia, learn about history of the area, follow policy of “tread lightly”, provide economic benefits to the area
 - People with disabilities can have access to natural areas
 - Need closer riding opportunities in Western Maryland
- Unmet demand for residential and day camps in Western Maryland
- Needs to be more youth riding/ATV areas – give youth a legal place to ride
- More events for youth, seniors
- Hunting, fishing, walking as a youth – kids are watching TV, playing electronic games
- Offer family-friendly hikes
- Need to give kids an incentive, teach them to come out
- Geocaching could help engage youth
- Willing to pay to ORV, but want it applied to this use; have to pay in PA (out of state) and Hatfield McCoy, would like to be able to stay in Maryland; trails are there, but cannot legally ride on them; people are buying \$10,000 machines
- Would pay more to use the state forests – love them quiet
- State regulations are barriers
- Seems like the County officials don't care about the local resident needs for ORV
- Snowmobiles are allowed on frozen lake like Deep Creek but ORV's are not an allowed use

- State could work with County to partner (like public/private partnership in Rock Run, PA); Yamaha and other makers are helping fund ATV parks
- Horseback riding – multi-use trails that are compatible for different uses, e.g., need pull off areas for horses, need to be longer than one-mile

Strengths of System / What’s Working

- Have a wealth of public lands – not every place has these assets
- Diverse lands and recreational uses
- Trail system (e.g., Swallow Falls trails)
- Helpful staff – “greeted with open arms”
- Small state but have wonderful forests and habitat for birds

Improvements

- Great Eastern trail – parallel to Appalachian trail – better promotion needed
- Will Mountain State Park – serve special populations, need better road access
- Public education – proper use of forest lands, etc.
- More equestrian trail riding access
- Need more support for public/private local partnerships and more leadership

7. Break Out Discussion Notes

ORV

Define the Problem

- Limited access

Barriers

- Liability concerns of private land owners
- Perception that State is opposed to ORV
- Restrictive regulations
- Double standards – permit to cut wood, but cannot take ATV to collect
- ATV – want some access from the trail to town to get services (i.e., food, gas)

Solutions

- Build sustainable trails
- Develop user group coalitions to work with land owners
- Use timber sale sites for access
- Use reclaimed mine sites
- Restructure State regulations
- Volunteer trail patrols – self policing
- Educate public on the economic impacts

Trails

Define the Problem

- Not adequate trails, not enough, not clearly marked, use conflicts

Barriers

- Trails not marked clearly – unclear of allowed uses
- Not enough personnel and funds for maintenance
- Not a place for ORV use so they are on trails that result in use conflicts

Solutions

- Need designated ORV trails
- Better signage
- More education and rangers
- Soliciting partnerships for volunteers, funding
- Include adequate parking for trailers at any designated ORV trail

Education & Interpretation

Define the Problem

- Will Mountain State Park – cannot access it easily, need to open up gate; need some interpretation and education about the resources; need to promote the park and views
- Green Ridge – need to promote research and preservation of stone rings and interpret for the public

Barriers

- Lack of access and information

Solutions

- Need to promote valuable unique cultural resources – example given of the rings of rock (American Unearthed program)
- More staff and tours, written materials, research

Input from Individuals

Water Recreation:

- Written comments submitted regarding Savage River dam white water releases before the end of the spawn, want to keep water in longer
- Open up fishing for all types of fishing (not just fly fishing)

Hunting:

Define the Problem

- Deer, turkey and bear – 3 main game species
- Deer population has dropped – down 17% from previous year, 15% year before; more predators – coyotes and bear
- No problem with turkey population
- Could be conflicts if there are multiple uses during hunting season – hunters and ATV's, etc.

Barriers

- Hunters are aging – need vehicle access

Solutions

- Curb doe kill
- Want more access to Wildlife Management areas – now have gates on roads

8. Summary & Next Steps

John Wilson from DNR made closing remarks and thanked participants for their input that would help inform the planning for the Maryland Land Preservation and Recreation Plan.



**Land Preservation and Recreation Plan
Eastern Maryland Stakeholder Meeting**
March 6, 2013, 10 am – 12 pm

Meeting Notes

9. Welcome & Project Overview

John Wilson, Associate Director of the Land Acquisition and Planning Division of the Maryland Department of Natural Resources welcomed the group. He described the purpose of the Land Preservation and Recreation Plan – to identify open space and outdoor recreation trends, needs, and issues for Maryland and provide a strategic plan to sustain recreation opportunities. Anne Miller, Project Manager from GreenPlay, LLC provided an overview of the project scope and schedule. Cindy Health from GreenPlay facilitated discussion of a series of questions. Following is a summary of input from the **16 participants** at the meeting.

10. Discussion / Input – Large Group

General

- Looking for ways to promote sport of ATV and dirt biking – especially for youth recreational riding
- Hunting and equestrian use conflicts – looking at trying to modify the hunting season to allow more use year-round
- Partnerships for equal access to outdoor recreational opportunities – Maryland Ornithological Society, Mountain-bikers, equestrians
- Equestrian trails as important – multi-use, sustainable trails (represent close to 80,000 people)
- Hatfield-McCoy does allow multi-use, horses
- ORV
 - Getting youth out on ORV trails – concern that Pocomoke trail was closed;
 - Would be willing to pay (e.g., Hatfield-McCoy)
 - Local for-profit ATV park was closed (apparently zoning issues); sales of dirt bikes have gone down, no place to ride
 - ATV's being driven out of state
 - Need more riding areas
 - People go for the weekend, need camping nearby; losing money in the state
 - Family activity – also do other activities while outdoors (walking on a trail, etc.), travel out of state now, can do some riding on private land locally; would like places to ride in Maryland
- Appreciate opportunity to comment – website, meetings, etc.
- Mountain bicycling
 - Looking at adding more single-track trails; IMBA is helping build trails
 - Multi-use conflicts do occur

- Would like foot bridge at Pocomoke River State Park and Forest from Shad Landing (Chandler track) and camping area to connect to Hudson tract– needs to upgrade the amphitheater and camping area; slow moving pace of improvements and some resistance of Counties
- Algonquin trail is a key opportunity to make trail connections in the area
- Access issues for youth and seniors to outdoor recreation; some youth do not have bikes
- Engaging youth and families through special events and races has been successful; also providing youth volunteer opportunities for trail building
- Fear of Lymes disease is a barrier for people going into the woods
- Access to water is very important – most of waterfront is in private ownership, need to maximize public land and multi-uses; need to get more people to enjoy and appreciate water resources
- Can co-exist together on trails
- Parks are underutilized by some groups – seniors, lower income groups – need more publicity of opportunities
- Access issues – is hard to get to some of the places, how do we improve transportation?
- Need to manage multiple uses – bird watching, cross country skiing, hunting, ATV, etc.; old rail beds are opportunities for trails
- Youth birding education through the schools; engage youth in outdoor recreation and environmental education
- Broaden use of Program Open Space (POS) beyond athletic fields
- Public education on shared trail use is important
- Connections – what connections can we make with DNR resources in a rural community? Do we do this with trail connections or between organizations? Public lands are integral parts of these communities. Need to leverage resources. People need to value these resources and make human connections to these lands. Programmatic and physical connections/improvements are needed.
- Rails to trails
- Tuckahoe State Park – trail improvements
- Youth service learning hours and opportunities for personal development
- Don't think redirecting POS funds from acquisitions to maintenance is a good idea
- User conflicts – Sept. to May stay out of public lands for birding, etc. due to hunting season; Utah – have system set up for equestrian users and bikers – odd and even days for different uses; would like groups to share access; need to balance uses; hunting – six days a week – limits other uses
- Monetary value of open space and outdoor recreation

11. Managing Multiple Uses – Discussion Notes

Define the Problem

- Compatibility of multi-use trails
- Trail cutting

Barriers

- Managing the “bad apple” – renegade users that don’t follow trail etiquette/rules
- Bureaucratic issues – policy framework needed for cooperative planning between local and state planning, e.g., transportation planning
- Not every property can have every use – rare and endangered plants, etc.; need to understand the best uses based on the property characteristics and what are appropriate uses
- Political and legislative barriers – legislative process is not citizen-friendly
- Public perception of trail conditions – need sustainable trail design
- Transportation design not inclusive of all modes

Solutions

- Public education – trail safety guide published by equestrian group, IMBA, etc.; trailhead signage, brochures, volunteer patrols; cross-training between the different trail user groups; multi-use trail guide and possible certification or training classes; publicity – “give a hoot, don’t pollute”
- Unified user approach to legislative policy process
- Complete Street design approaches – multi-modal transportation planning; pedestrian safety; policies at local, regional and state levels
- Sustainable trail design and maintenance (IMBA is teaching)
- “Adopt-a-trail” programs – post contact information for people to call in trail maintenance concerns
- Consolidate yield signs from all user groups

12. Summary & Next Steps

John Wilson from DNR made closing remarks and thanked participants for their input that would help inform the planning for the Maryland Land Preservation and Recreation Plan.



Land Preservation and Recreation Plan - Central Maryland Stakeholder Meeting

June 19, 2013, 6 pm – 8 pm

Meeting Notes

Welcome & Project Overview

John Wilson, Associate Director of the Land Acquisition and Planning Division of the Maryland Department of Natural Resources welcomed the group. He described the purpose of the Land Preservation and Recreation Plan – to identify open space and outdoor recreation trends, needs, and issues for Maryland and provide a strategic plan to sustain recreation opportunities. Cindy Heath, Project Manager from GreenPlay, LLC provided an overview of the project scope and schedule. Kristin Caborn from GreenPlay facilitated discussion of a series of questions. Following is a summary of input from the **34 participants** of the meeting.

Discussion / Input – Large Group

How can our outdoor recreation areas become the best places for everyone to experience the natural beauty of Maryland?

- Southern MD Dirt Riders (dirt bikes): Insure that user groups have access to open space, trails
- Manage resources for all
- More trails (connecting trails, trails within parks)
- Definition of a trail – opportunity to enter the forest, meander through the woods, allowing for hiking, bicycling, other uses, natural surface
- Rehabilitating trails
- Shared use
- “Bulldoze paved trails,” restore natural habitat, restrict to users who appreciate natural beauty
- Include trails along meadows, natural areas

How can different uses of outdoor recreation areas be managed to assure equal access and enjoyment (e.g., hiking or hunting, bird watching or off-road vehicle use?)

- Gathering like user groups on the same trails
- Consider rotational/seasonal use by different user groups
- Reutilize logging trails for ORV activities
- ORV use incompatible with mission point of preserving natural state of DNR lands
- Multi-use parks for different uses
- Develop special use area for ORV activities separate from natural resources and neighborhoods

- Managed hunting areas help preserve natural resources; consider this model for other uses (ORVs)
- Self-policing and rules enforced by club membership
- Increase enforcement of users abusing the resources

How can people who don't often use our outdoor recreation areas be encouraged to take advantage of them?

- Utilize technology to encourage new users (Facebook, apps, AOL groups sharing information)
- Continue to provide a wide breadth of activities
- Instill tolerance for different users
- DNR start grass roots efforts - ORV work days, scout rider trail days
- Increase advertising of parks, including emphasis on safety (how safe parks are)
- Promote parks in schools
- Signage, television, faith groups
- Facilitate user group activities in specific parks, highlighting the park's special features
- Improve map labels

What groups of people seem to you to be least likely to use outdoor recreation areas including state parks? Why?

- People who fear environmental risks
- People with disabilities, those with mobility issues, youth, low income

Think of a park or recreation area that you have especially enjoyed. What was it about that place that should be copied in other parks and outdoor recreation areas?

- Schooley Mill Park - a model for multi-use, adequate facilities for equestrian users and most others (Howard County park), trails connect to adjacent neighborhoods (except motocross)
- Building at every park (Howard County) for classes & interpretation
- Bud's Creek - appropriate for motorized use, well established, safe, regulated, enough space for motocross use
- Little Bennett - maps a good model, difficult to find on Google (MNCPPC), horse trailer parking; signage a bit unclear
- Simplify DNR website for easier access activities

What do you think are the most important parts of outdoor recreation areas to preserve?

- Increase hunting where possible to support natural resource preservation
- Quiet recreation areas; regulate noise
- Wildlife habitat
- Trails, water quality
- Land acquisition
- Preserve Program Open Space in perpetuity
- Understory in natural areas

How can outdoor recreation areas be designed to serve specific groups such as people with disabilities, youth, seniors, and low-income families?

- Increase funding allocation for special use areas
- Site parks in proximity to where people live; utilize abandoned lots & convert to parks
- Disc golf is a gateway activity to the outdoors; expand disc golf facilities
- Design trails to facilitate long distance travel to access remote areas
- Trams
- Programs – design to include all users

How should we encourage Maryland’s youth to explore the outdoors?

- Use rangers on site at parks to develop interpretive programs for school groups
- Utilize close proximity County & State Parks for environmental/outdoor education
- Tie state funding to outdoor education curriculum
- Sponsor contests for getting outdoors with incentive rewards
- Promote geo-caching; reach out to special groups (scouts) to promote parks
- Curriculum neglects natural history
- Explore strategies for affordable transportation and program fees
- Integrate housing developments with natural areas to enhance accessibility
- Youth clean-up activities coordinated by friends and faith organizations
- Educate parents

What kinds of services or facilities would you be willing to pay (more) for, and what would you not pay (more) for?

- Would not pay more for - construction of more bathrooms; consider user groups paying for facilities, access to trails
- Would pay more for - ‘rest facilities’ most economical (composting, other designs); pavilion rental for a family reunion; habitat restoration from invasive species; trail maintenance; rounds of disc golf (volunteer for trash pick-up); horse trails; isolation in a ‘true’ wilderness; permits to ride motorized vehicles; maintenance

What are your thoughts about compatible outdoor recreation on state public lands? Are there any outdoor recreation uses that are *not* compatible with the DNR mission and other uses? Why?

- Segregate incompatible uses – hunting, ORV use, developed recreation noise from hiking, birding, quiet recreation; consider that hunting is not necessarily incompatible with quiet recreation activities

What are the strengths of Maryland’s outdoor recreation resources? What works?

- Varied terrain – mountains to oceans
- Preservation of open space
- Number of outdoor spaces and their accessibility to urban and rural areas
- All four seasons
- 1-5 parks in each County except Wicomico

- Near adequate funding
- Passionate user groups
- Volunteer support groups
- Land acquisition – means to acquire land
- DNR staff efforts for land acquisition despite fiscal constraints

What improvements could be made to enhance outdoor recreation experiences? For youth? Unserved? Special populations?

- Preservation of funds for open space – becomes a resource for other programs (political issue)

Key Issues Break Out Group Summaries

- **Youth access to the outdoors**

Problem: “screen time” and getting them to the outdoors

Barriers: parent permission, not tied to curriculum, teacher awareness (uncomfortable with curriculum)

Solutions:

- Education – parents, educators, leaders
- Funding - foundations
- Volunteer development – advocacy groups

- **User conflicts – quiet and motorized (2 groups)**

Problem: Incompatible uses

Barriers: space, funding, regulation that identifies allowed uses, hunting and safety.

Solutions:

- Use areas that are already noisy
- DNR facilitate public private land acquisition
- Utilize lands that are already degraded
- Consider using impacted lands (disturbed, degraded)
- Make specific lands available for exclusive use by ORV
- Design trails for multi-use
- Identify hunting seasons and make users aware of seasonal hunting uses

- **Connectivity of lands & trails**

Problem: Create spine connecting parks

Barriers: lack of coordination between development, recreation, and transportation planning, different priorities for stakeholders, interaction between providers of trails (state and county), infill opportunities for land connections for low income areas, pro-active partnerships between agencies, utility right-of-ways currently prevent use for trails, and mapping of all trails to recognize assets and opportunities.

Solutions:

- Connect people to parks
- Begin dialogue with County Park/Planning Departments for collaboration on connectivity
- Explore utility easements for trail development
- Evaluate social trails across private lands to determine additional opportunities
- Coordinate among local, county, state – quarterly meetings with Steve Carr

13. Summary & Next Steps

John Wilson from DNR made closing remarks and thanked participants for their input that would help inform the planning for the Maryland Land Preservation and Recreation Plan.

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Appendix D: DNR Trails Committee: Supplemental Recommendations



DNR TRAILS COMMITTEE – SUPPLEMENTAL RECOMMENDATIONS

General Statewide Objectives

Develop and implement a comprehensive program that connects children and families, particularly those who are unserved, to natural areas. **These connections are invariably located on state, county, or municipal roadways, making their improvement as a bikeway the responsibility of the administering entity. A key ingredient in achieving the mission will be to utilize the existing network of sidewalks throughout the state to provide critical connections.**

Work with the Maryland Department of Transportation, the Maryland State Highway Administration, the Maryland Office of Tourism, the Maryland Office of Planning, and other sister state agencies, along with federal and local governments and private trail advocacy groups to achieve DNR's trails mission of *connecting our public lands to the places where people live, work, shop & play.*

Close the gaps between our DNR lands. A few examples include: BWI Trail to Patapsco State Park and from Patapsco to Ellicott City; Torrey C. Brown Trail to Baltimore City; Gunpowder Valleys trails to the Torrey C. Brown Trail and MA & PA Rail Trail; Appalachian Trail to Catoctin Mountain Park.

Participate and assist in the efforts to create and develop National Historic Trails.

Trail Design

Parking lots should have clear signage and enlarged to accommodate allowed uses. Ecological signs pointing out interesting habitats and natural features should be placed where appropriate.

County LPRP's

The potential connector trails to towns and private camp sites held by organizations like the Girl and Boy Scouts, YM/YWCA, Smithsonian Land, National Greenway Trails, Patuxent Watershed, and other public and private park and open-space should be a part of County and DNR LPRP Trail mapping system.

Research and Planning

Monitor trails on DNR lands to better understand recreational demands and impacts to natural resources.

Native Americans

Sometimes, the public will briefly access a state park from the water and be met by a ranger who wants them to pay an entrance fee. Pennsylvania has produced an excellent map showing how roads and trails follow old Native American trails. There should be an "End of the Trail" story program to educate the public about the Native Americans who once inhabited that area.

Americans With Disabilities (ADA)

Identify which trails, and the connections between trails, are crucial to the network and need to be built and maintained to accessible standards. Consult with makers of navigational tools for blind pedestrians so that they can get the information they need to use the trail system.

Rails-to-Trails

While DNR has purchased and leased abandoned rail lines and worked to develop some of them into regional trails, others are more local in character and offer an opportunity for the Department to provide technical and financial assistance to local project sponsors.

Develop an operations and maintenance plan for each rail trail on DNR lands.

Children in Nature

Implement a program package with school systems to utilize high school volunteers for construction and maintenance trail projects on DNR properties as a means for students to fulfill community service requirements, in cooperation with ongoing program development of the Maryland Conservation Corps, Justice Corps and Maryland Department of Planning.

Equestrian

An easy communications loop needs to be established where all users can give feedback on trail conditions (fallen tree blocking trail) and management can notify equestrians of changes to the trail (too wet to ride). Friends-of-the-Park groups should be formed and equestrians who frequent the park should be encouraged to join.

DNR should be a cooperative partner with local governments, heritage areas, and the Maryland Horse industry as it maps and develops a statewide horse history heritage trail for visitors accessible by car or bike or foot.

Off Road Vehicles (ORV)

The State should facilitate the establishment of dedicated Off-Highway Vehicle (ORV) recreation areas. These areas should be a combination of State-owned property (regardless of managing unit) and public/private partnerships. ORV Parks on State-owned property should not be limited to DNR managed land, but embrace all State lands suitable for user-oriented recreation.

Where State land adjoins land owned or managed by other Governmental units (both State and County) or that adjoins private land where the landowner wishes to enter into a public/private partnership, the State should pursue conjoined use where a large ORV park can be established utilizing contiguous properties.

Hikers

An example of connecting different trail systems is the proposed Appalachian Trail – Catoctin Mountain Park connector in Frederick and Washington counties.

Acquiring more land for State parks provides greater recreational opportunities for park visitors now and in the future.

Build, maintain, and renovate trails to create a sustainable system on DNR land that provides a quality and diverse user experience and promotes environmental stewardship. Local park management should encourage positive interaction and partnerships among different trail users, such as hikers, bikers, and equestrians, both on and off the trail. This can be accomplished in a variety of ways, such as sponsoring joint trail-building or maintenance projects and forming trail advisory councils. Issues regarding multi-use trails are best addressed at the local level by trail users familiar with a particular trail system. Cooperation among trail users helps to reduce conflicts on multi-use trails.

Friends of Groups

Linking art and science is a good way to enhance the trail users' experience and tell important natural and cultural resource stories.

Utilize volunteer groups to initiate a wide range of activities to promote the trails: concerts, the themed walks and rides, and Living Legacy benches.

Trails are an important economic generator and friends of groups should be assisted in developing partnerships with businesses, promoting health and good eating, like the Trail Passport contest with local businesses.

Mountain Bikes

Trail systems on DNR land should be constructed, re built and maintained in a sustainable manner.

DNR and land managers should actively reach out to invested user groups to build "friends -type" organizations that will have input into the design and construction of trails. These invested user groups should be counted on towards contributing resources to ongoing health of the trail systems

Land managers should actively engage with groups who bring young folks onto trail systems. As younger users learn to care for trails and the natural environment in which they exist, we ensure future stewardship of our trail systems.

Trails Groups & Bike Business

We should designate trail priority areas based on proximity to towns, like connecting Oakland to Swallow Falls State Park.

Develop an on-road signage program in order to close the gaps and make key connections between public lands and the places where people live, work, shop & play.

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Appendix E: Simple Guidelines to Create a “Friends of Trails Organization”

INTRODUCTION

A Friends Group is a non-profit organization whose purpose is to assist the local, state, or federal government with promoting, protecting, and enhancing the trails. This is also a great way to organize volunteers and get the public involved.

STEPS TO CONSIDER

1. Assemble a group of people interested in trails. This group should have some organizational skills, time, energy and enthusiasm, a positive attitude toward the government agency, and the ability to work with many personalities.
2. Discuss ideas at several meetings with someone taking notes.
3. Elect a president, vice president, secretary, and treasurer.
4. Discuss and select a mission, set goals, and purpose.
5. Write the By-laws including committee chairmanships.
6. Enlist the help of an attorney, hopefully gratis, maybe even on the board.
7. Apply for 501(c)(3) status.
8. Set up a web site.
9. MOST IMPORTANT TO HAVE A REPRESENTATIVE FROM THE GOVERNMENT AGENCY AT ALL MEETINGS

SUGGESTIONS FOR THE BY-LAWS

Meetings to be monthly for Board of Directors, yearly for general membership with a key note speaker. Set up ways for public to become members and also to donate funds and volunteer time, example lasting gift program.

TO OPERATE

Require all board members to have a specific directorship and to report activities of the previous month and also to log in volunteer hours (helpful when you apply for grants).

Meetings begin and end on time.

Meet with an agenda and keep to it.

Use Roberts Rules as a guide. Be sure motions are made and approved before actions are carried out

Work with your government agency as a FRIEND.....Remember Civility.

WAYS TO RAISE FUNDS

1. Memberships
2. Lasting Gifts....benches, picnic tables, engraved bricks, trees, drinking fountains
3. Grants
4. Special project donations

A VERY REWARDING AND ENJOYABLE WAY TO GIVE OF YOUR VOLUNTEER TIME. A FAVORITE QUOTE.....”It is not how much you gather, but how much you scatter that tells what kind of life you lived.”

HAPPY TRAILS

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Appendix F: Inventory and Level of Service Analysis

Methodology

Inventory data for amenities was gathered from Maryland DNR web pages and NPS websites. This data was then provided to points of contact within the DNR for verification. These included DNR staff affiliated with state parks, state forests, wildlife management areas, fisheries, as well as other types of assets. Any gaps in the data were addressed at this time, with a worksheet to be populated and edited by DNR staff to the best of their knowledge.

A table of all locations and amenities is included in **Appendix G: Inventory Tables**.

Once complete, this data was entered into GIS as attribute data based on inventory location provided by Maryland DNR. In this way, each location in the inventory had an associated list of all amenities available on site. This made it possible to isolate particular types of amenities for analysis. For example, one such amenity examined was picnicking. Each inventory location with picnicking available was included in a customized analysis of picnicking in the State of Maryland. Such custom analyses were also run for natural areas, water access, hunting, fishing, and trails.

This study, though it does indicate level of service and service gaps based on analysis, is not able to address capacities of facilities, activities, or resources. A particular part of the state may have proximity to several instances of an amenity, for example picnicking, at various inventory locations. Yet if capacity for use of these picnic areas is limited whereas they are unable to support the volume of users the level of service for these amenities is compromised. Such capacity considerations are beyond the scope of this project and should be noted as limitations to the analyses discussed herein.

It should be strongly noted that this level of service analysis focuses exclusively on Maryland DNR and National Park Service sites. Many types of amenities included in this analysis are also provided by other entities such as counties, municipalities, districts, and private organizations. A complete picture of level of service for the state is not possible unless data for these alternative providers is included in analysis.

Final inventory tables and GIS shapefiles for both inventory and analysis will be provided as final project deliverables.

Proximity Analysis

Visitation of historical sites tied with walking as the most common activities in which survey respondents participate (75% of all respondents indicated participation in both). It was decided that an analysis on such cultural resources would be better conducted by other state agencies. Thus cultural resources were excluded from all level of service analysis for this study.

Survey results indicate that nearly 75 percent of respondents drive up to one hour to reach a recreation destination. For the purposes of this plan, this distance was equated with a 30-mile drive. Early analyses in this study used such a 30-mile radius to determine proximity to recreation. However, it was determined that the results of these analyses, though they provide good context, were not as revealing as the other proximity distance of 5 miles. Findings discussed in this plan therefore refer to a 5-mile catchment area for all proximity analyses.

Findings Preparation

As the statistically-valid survey provided data with reference to drive times to reach outdoor recreation destinations, the consultant team attempted to determine corresponding catchment distances for use in analysis. To do so drive times were mapped for each region of the State of Maryland using ESRI Business Analyst Online. For example, a location polygon for Gunpowder Falls State Park was uploaded to this online service. A map was then generated that displayed how far in any direction a driver could reach in one hour time based on road networks and speed limits. These maps were printed to scale, and various drive distances measured randomly in several locations. These distances were averaged to produce an average distance for a one hour drive for that region. An overall state average distance was determined by averaging these distances for each region, and then rounded up or down. In this manner an hour drive was determined to be equivalent to a 30-mile drive and a fifteen minute drive as equivalent to a 5-mile drive. These two catchment distances were then used for proximity analysis. (Note: The statistically valid survey only referred to drive times of under thirty minutes, over thirty minutes, or over one hour. A fifteen minute drive time was determined by the consultant team to reflect a travel time more indicative of a casual visit. This shorter drive time was then “translated” to the 5-mile catchment ultimately used for all final analyses.)

GIS data for unserved areas as identified in the 2010 MDOT Strategic Trail Implementation Plan was generously provided by Robert Patten of the Toole Design Group, the consulting office that authored the study.

Appendix G: Inventory Tables

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PROPERTY NAME	OTHER NAME	MANAGED BY	Beach	Biking Trails	Boat Ramp	Boat Rentals	Cabins	Camper Cabins	Camping	Camping-Primitive	Camping-Youth	Canoeing-Flatwater	Dump Station	Equestrian Trails	Exhibit or Interpretive Center	Fishing	Food	Hiking	Historic Site or Museum	Hunting	Lodging	Mountain Biking Trails	Park Store	Pet Loop	Picnic Tables	Playground	Restrooms	RV Sites	Shelters	Shelter (Picnic)	Shooting Range	Snowmobiles	Snowshoeing or X-Country Skiing	Swimming	Visitor Center	Wheelchair Accessible	COMMENTS		
Antietam National Battlefield				X					X					X		X		X	X						X		X						X	X	Camping is for groups only and requires a permit, Boating or Tubing in the Antietam Creek is permitted				
Appalachian National Scenic Trail									X									X																					
Assateague Island National Seashore			X	X	X				X	X		X				X		X																X	X	Nature Center, off-road vehicle paths (on beach), surfing, shellfishing, adjacent to Virginia State Park			
Baltimore-Washington Parkway									X										X						X												NASA visitor center, Greenbelt Museum, National Wildlife Center, Scenic Drive		
Catoctin Mountain Park									X							X		X			X											X				Wildlife Viewing, Scenic Driving			
Chesapeake and Ohio Canal National Historical Park				X	X	X			X			X	X			X		X									X					X					Backpacking, historic homes, climbing, ice skating, nature walks, mule driven boats		
Clara Barton National Historic Site																			X																				
Fort Foote Park																X		X							X														
Fort McHenry National Monument and Historic Shrine																																		X			Daily Flag Change Events		
Fort Washington Park															X	X		X	X				X	X	X	X								X			Wildlife Viewing, Group picnics require permits, summer monthly artillery demos		
George Washington Memorial Parkway				X								X						X	X						X	X											Kayaking, Wildlife Viewing		
Glen Echo Park																									X	X											Dentzel Carousel		
Greenbelt Park				X					X			X															X	X											
Hampton National Historic Site																			X																X				
Harmony Hall																																						Wildlife Viewing	
Monocacy National Battlefield																																		X			Walking Tours		
Oxon Cove Park and Oxon Hill Farm				X											X			X							X												Group Reservations required for programs, Self Guided Walking tours		
Piscataway Park					X										X	X		X				X			X		X								X			Bird Watching, National Colonial Farm	
Suitland Parkway																																							
Thomas Stone National Historic Site																									X									X				Tours of historic houses and buildings	

Appendix H: Survey Report

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Maryland Land Preservation and Recreation Plan Survey 2013 Final Report



July 2013

Prepared for:

*Maryland - Department of Natural
Resources*

Greenplay, LLC

Prepared by:

RRC Associates, Inc.

4940 Pearl East Circle, Ste 103

Boulder, CO 80301

303/449-6558



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INTRODUCTION / METHODOLOGY

The purpose of this study was to gather public feedback on the outdoor recreation demands in the State of Maryland. This feedback and subsequent analysis was designed to assist the Maryland Department of Natural Resources (DNR) in the creation of its 2014 Land Preservation and Recreation Plan.

The survey was conducted using two methods: 1) a random telephone survey and 2) an online open link survey for members of the public who did not receive a randomly selected telephone survey. Unless stated otherwise, the analysis herein focuses primarily on the surveys conducted via the random telephone survey.

A total of 2,800 Maryland residents were surveyed in the random telephone survey. To better reflect the population of Maryland, the sample for the telephone survey was distributed across the state based on county population and a 50/50 quota of males and females was also attained. The data from this survey was then weighted for age and race/ethnicity based on US Census data.

As responses to the open link version of the survey are “self-selected” and not a part of the randomly selected sample of residents, results from the open link questionnaire are kept separate from the phone version of the survey for the overall analysis. The majority of the discussion that follows focuses primarily on results from the randomly selected sample of residents; however, the final section of the report exclusively evaluates the results of the open link survey and includes graphs comparing the phone and open link survey results.

EXECUTIVE SUMMARY

In general, responses towards the job and mission of the DNR, as well as to the benefits of land conservation and preservation, are extremely favorable. Satisfaction ratings of the DNR are very strong and residents recognize and value the importance of having parks, trails, and outdoor recreation opportunities available to them. Most all of these findings were consistent across all four sub-regions within the state. Specific key findings from the random telephone survey are listed below:

- The majority of respondents indicate that a member of their household participates in outdoor recreation activities (82 percent). The most popular outdoor recreation activities are walking (75 percent), visiting historical sites (75 percent), picnicking (65 percent), and visiting natural areas (59 percent). Participation in outdoor special events (57 percent), visiting playgrounds (56 percent), and swimming outdoors (55 percent) are also frequent activities.

- Almost two-thirds of the respondents participate in outdoor recreation activities in state parks, forest, or wildlife areas. The majority of these respondents indicate that their visitation to state parks, forest, or wildlife areas over the past year has either remained the same or increased in frequency over the past five years. Overall these respondents indicate a net increase in the frequency of visitation.
- Over half of the respondents indicate that the availability of parks, trails, outdoor recreation facilities, and outdoor education programs is extremely important to their household.
- Only one-third of the respondents indicate that the parks, trails, outdoor recreation facilities, and outdoor recreation programs are “completely” meeting the needs of their household. Whereas, only 2 percent of responders indicate that the needs of their household are not currently being met “at all” by these facilities.
- The vast majority of respondents (over 90 percent) rate the following benefits of land conservation and outdoor recreation as having the most importance: “promoting healthy active lifestyles”, “protecting the environment”, and “improving quality of life”. The attribute of “providing an economic benefit to the State” is viewed as being the least important of the benefits; however, it still is rated as important by 71 percent of the respondents.
- Ratings of satisfaction with the DNR are exceptionally high overall. Respondents are most satisfied with the department’s ability to provide active outdoor recreation opportunities (73 percent satisfied). On the lower end of the spectrum, respondents are slightly less satisfied overall with the department’s ability to provide adequate educational opportunities (59 percent satisfied).
- The majority of residents (78 percent) would like to see the DNR pursue an emphasis that focuses on a balance between natural resource preservation/protection and providing outdoor recreation in natural settings (as opposed to one or the other directions solely).
- Two-thirds of respondents feel that the current fee structure of the DNR is acceptable for the value received. Fifty percent of the respondents believe that the department is currently underfunded, while another 32 percent believe the department is adequately funded (only 5 percent believe it is overfunded). Over half of the respondents place extreme importance on spending public funds to acquire land to prevent development.

RESPONDENT PROFILE

Household Characteristics

- Over half of the households in the random sample were households with children (57 percent), with another 24 percent as empty nesters (children grown and no longer at home). Eleven percent of respondents were single with no children and 8 percent were couples with no children.
- The average household size in the random sample was 3.1 persons.
- Household income was relatively evenly distributed. While 10 percent earned less than \$25,000 per year, 15 percent earned between \$25,000 and \$49,999 per year; 19 percent earned between \$50,000 and \$75,000 per year; 19 percent earned between \$75,000 and \$100,000; 20 percent earned between \$100,000 and \$150,000; 9 percent earned between \$150,000 and \$200,000; and 7 percent earned more than \$200,000 annually.
- Twelve percent of households reported having a need for ADA facilities or services for a household member.

Figure 1
Household Characteristics (Part I)

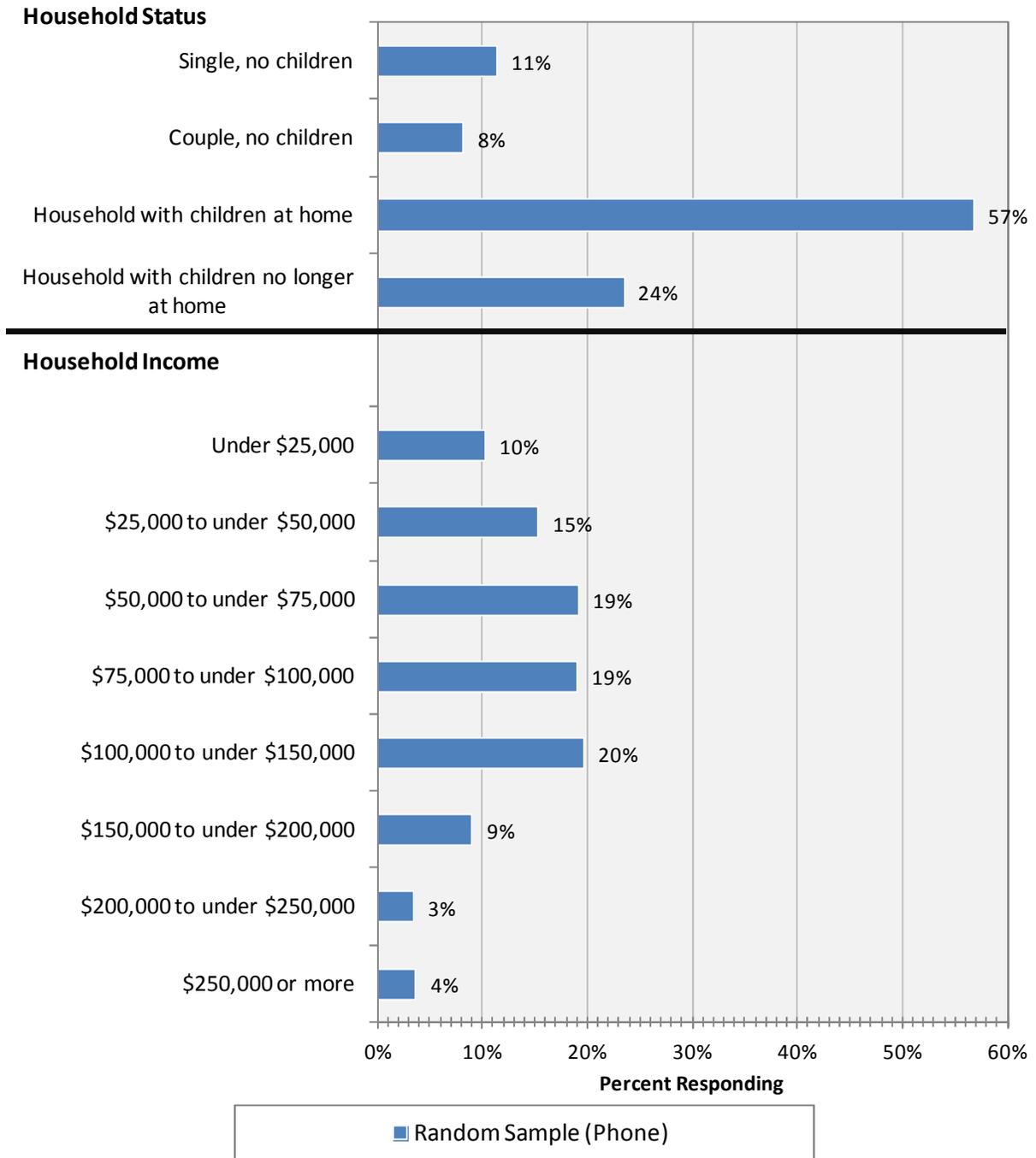
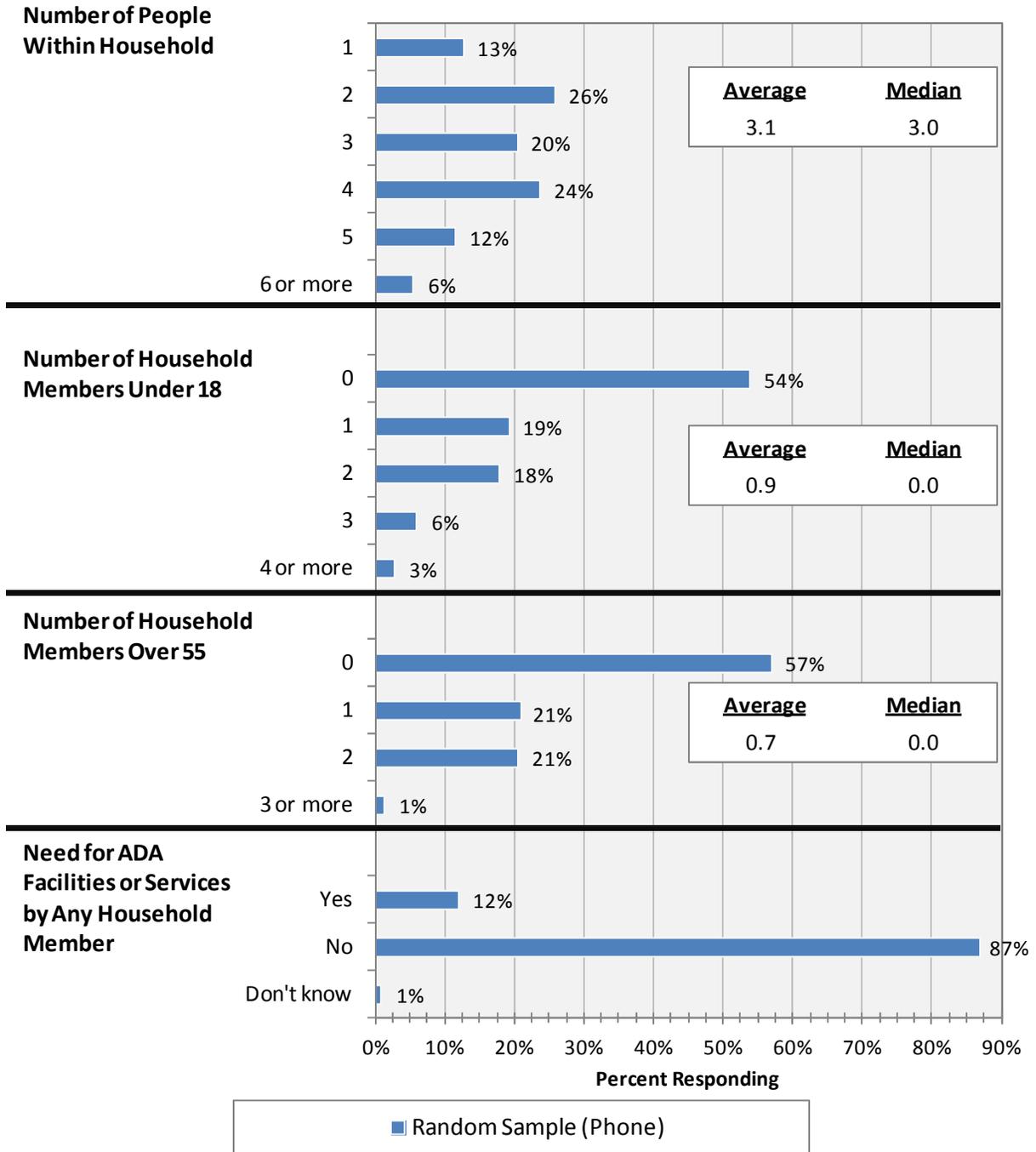


Figure 2
Household Characteristics (Part II)



Respondent Characteristics

- The average age of respondents was 46.6 years.
- The respondents were relatively diverse, with 59 percent white or Caucasian, 29 percent black or African American, and 8 percent Hispanic.
- On average, respondents have resided at their current residence for 12.3 years. Approximately 60 percent of respondents have resided at their current residence for 10 or fewer years.

Figure 3
Respondent Characteristics (Part I)

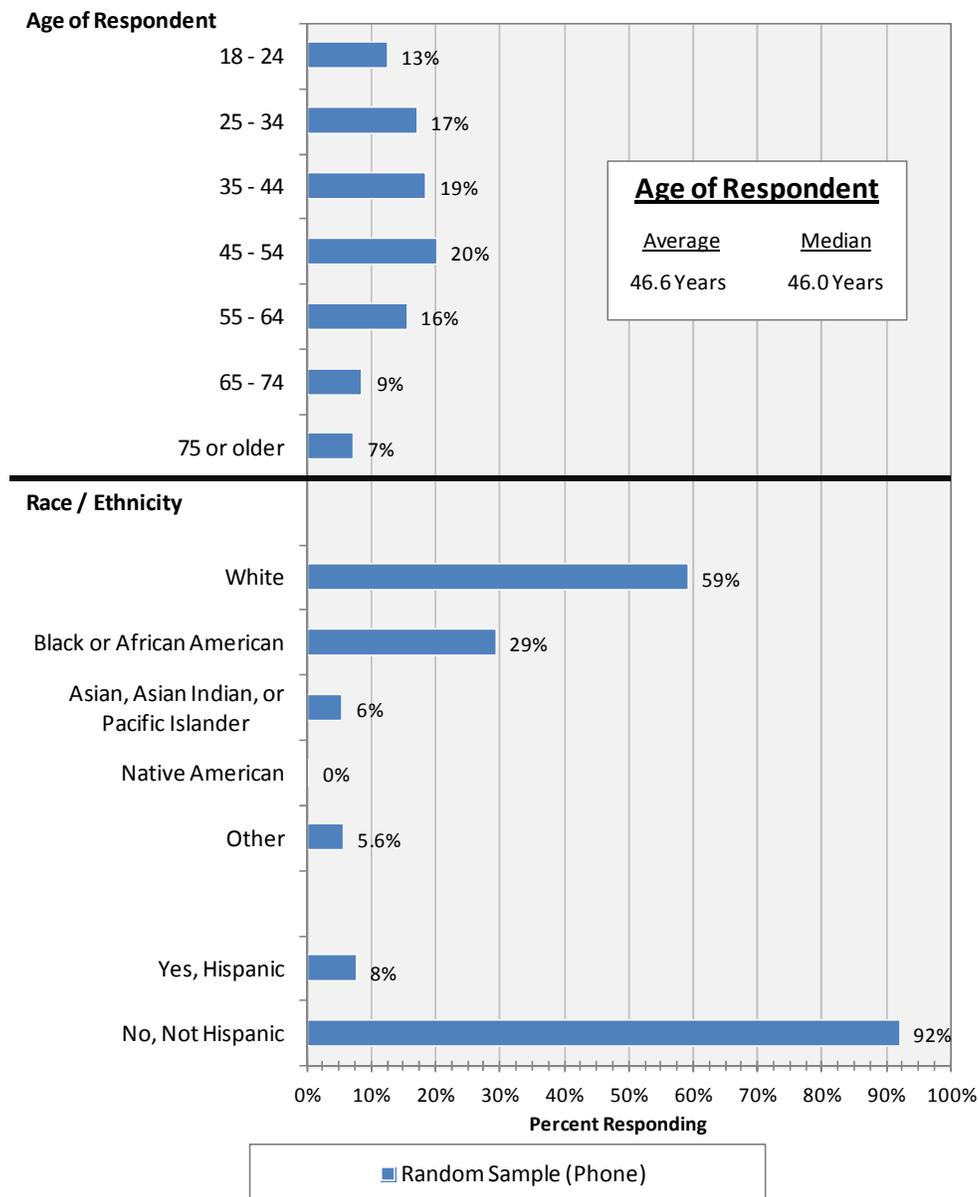
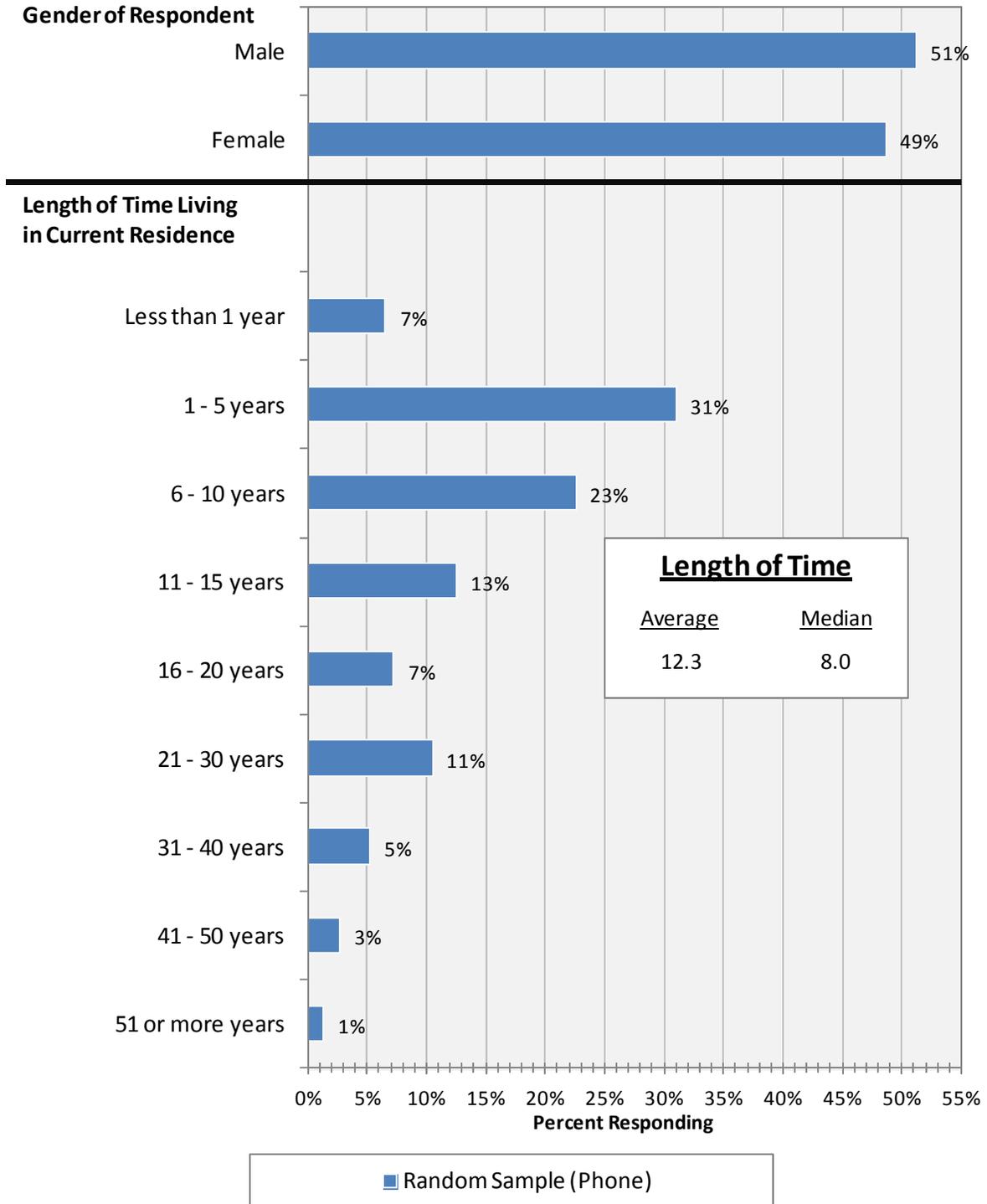


Figure 4
Respondent Characteristics (Part II)



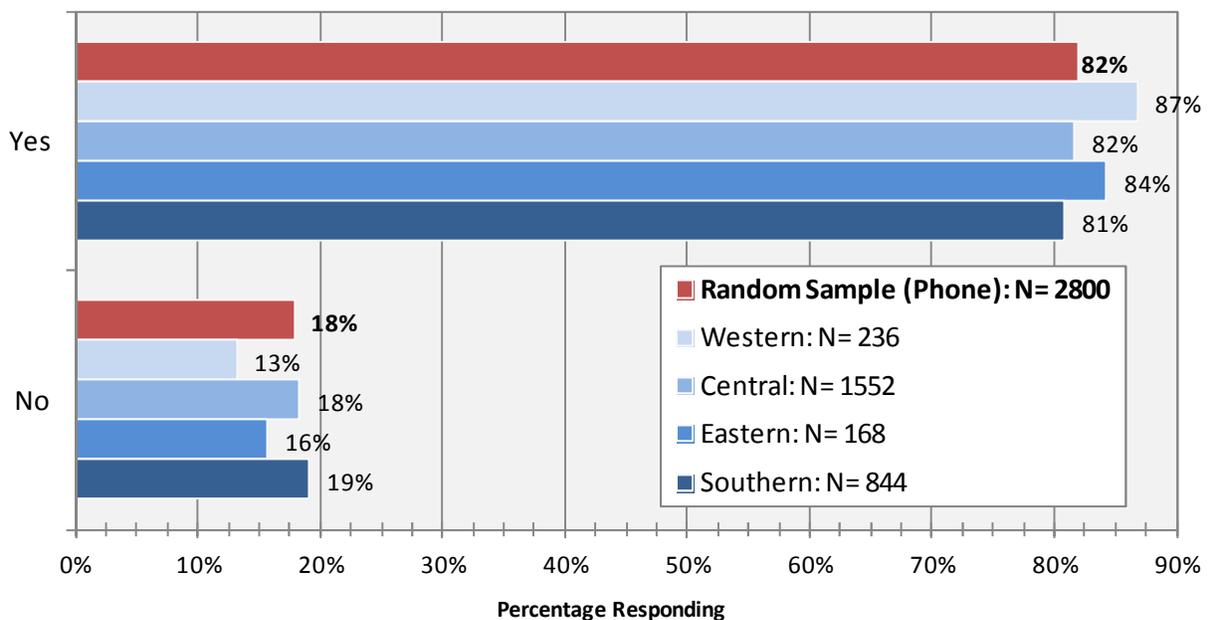
OUTDOOR RECREATION CHARACTERISTICS

Outdoor Recreation Participation

The majority of respondents indicate that they or someone in their household participate in outdoor recreation activities. Overall, 82 percent of respondents indicate that their household had an outdoor recreation activity participant.

The high outdoor recreation participant rate was maintained when examined by region. The Western Region had the highest level of participation, with 87 percent of respondents indicating that they have an outdoor recreation participant in the household. The Southern Region had the lowest participation rate of 81 percent of respondents.

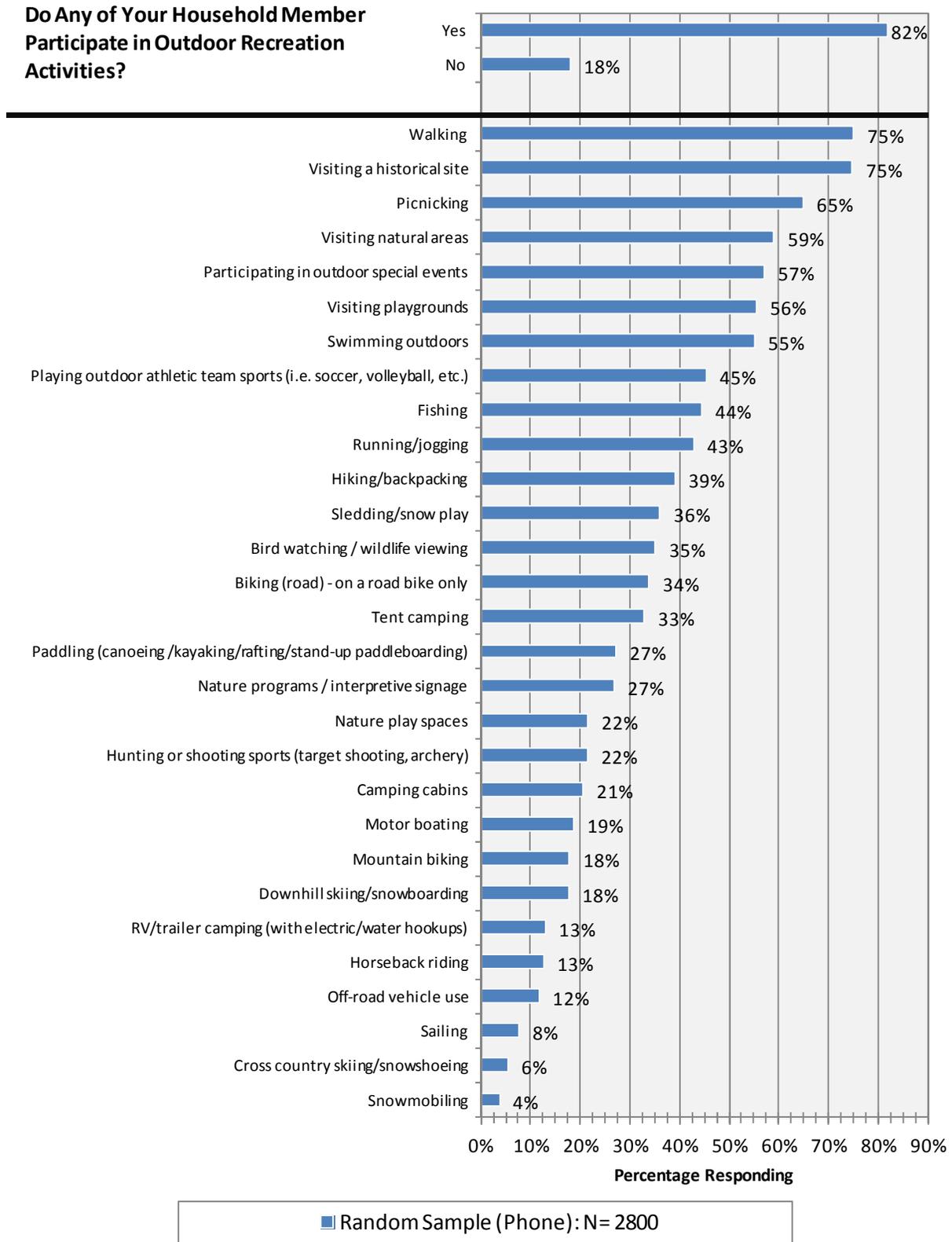
Figure 5
Households with at Least One Member Who Participates in Outdoor Recreation Activities – By Sub-Region



Outdoor Recreation Activities

Respondents participate in a myriad of outdoor recreation activities. The most popular activities overall are: walking (75 percent), visiting a historical site (75 percent), picnicking (65 percent), visiting natural areas (59 percent), participating in outdoor special events (57 percent), visiting playgrounds (56 percent), and swimming outdoors (55 percent). The next most popular set of outdoor recreation activities include: playing outdoor athletic team sports (45 percent), fishing (44 percent), running/jogging (43 percent), hiking/backpacking (39 percent), sledding/snow play (36 percent) and bird watching / wildlife viewing (35 percent).

Figure 6
Outdoor Recreation Activities Participation – Total Random Sample



The outdoor recreation activities selected varied by region. Not surprisingly, the activities that were most popular in each of the regions reflected their unique characteristics. For example, water sports are more popular in the Eastern Region than in the state overall. Respondents from the Eastern Region were more likely to participate in fishing (63 percent), paddle sports (37 percent), motor boating (38 percent), and sailing (15 percent) than respondents in the other three regions. Conversely, respondents in the Western Region are more likely to participate in hiking/backpacking (51 percent), fishing (55 percent), hunting (36 percent), tent camping (47 percent), or sledding/snow play (44 percent) than the average Marylander.

Figure 7
Outdoor Recreation Activities – Top Ten Activities Overall – By Sub-Region

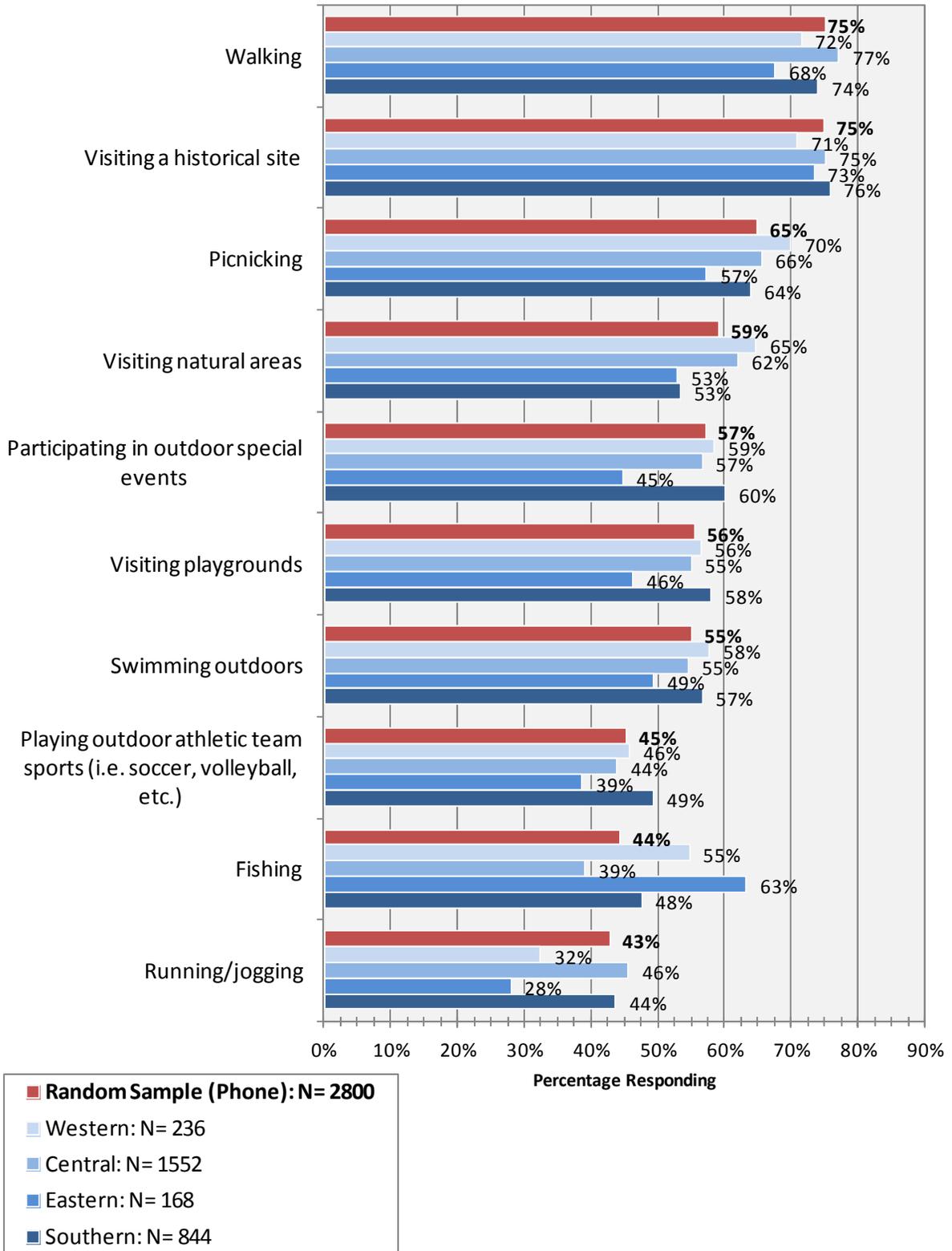


Figure 8
Outdoor Recreation Activities – Middle Ten Activities Overall – By Sub-Region

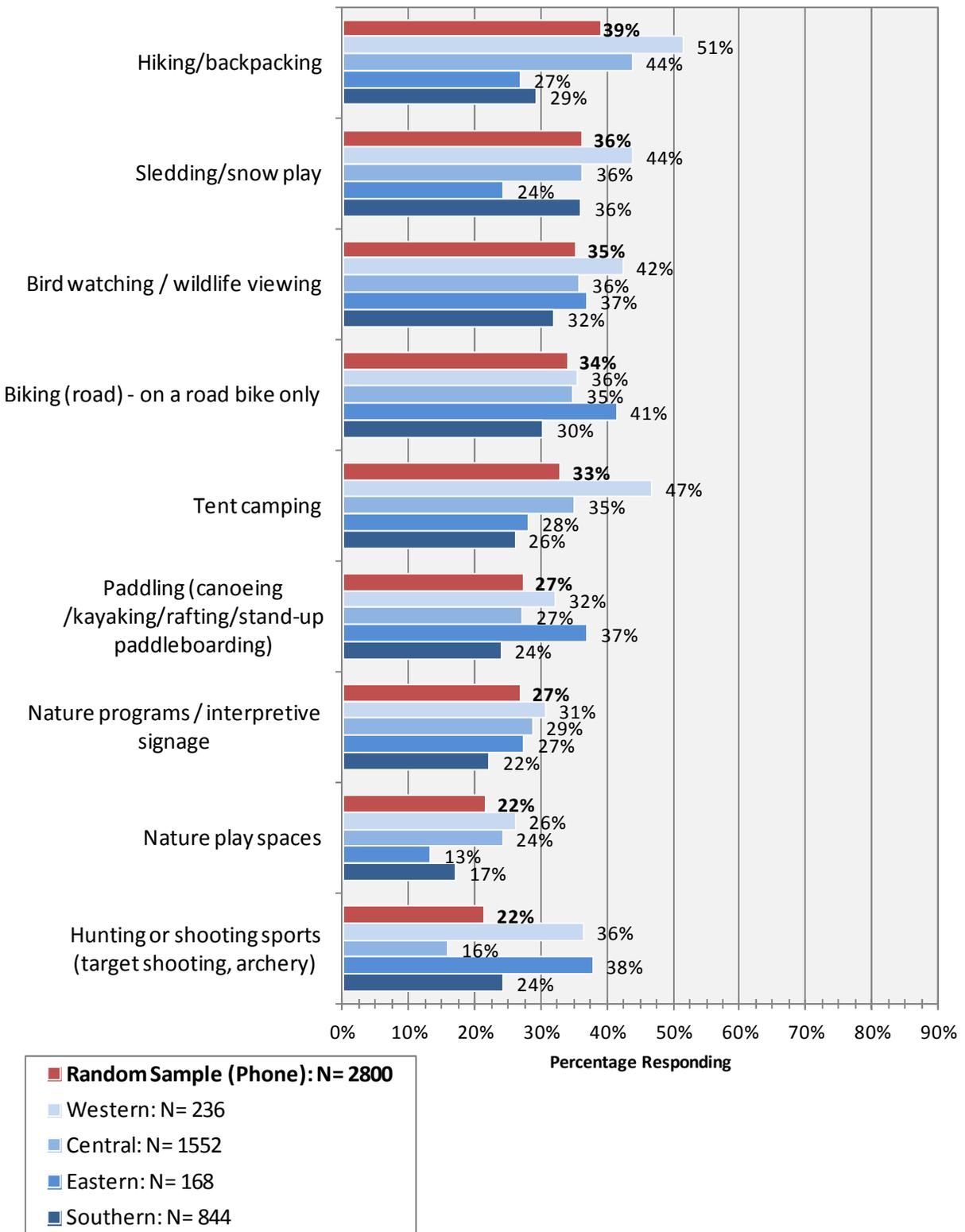
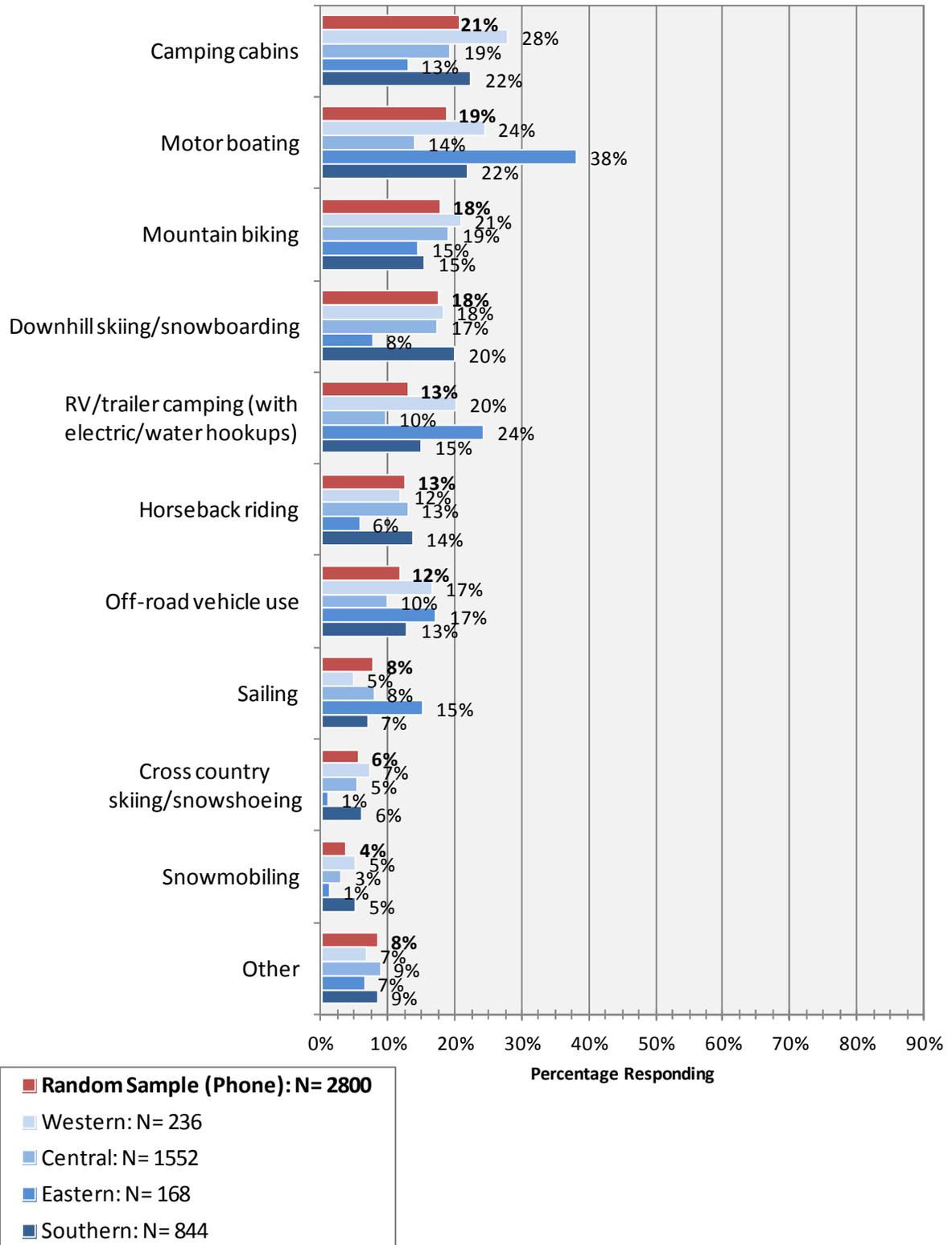


Figure 9
Outdoor Recreation Activities – Bottom Ten Activities Overall – By Sub-Region



Outdoor Recreation Frequency and Location of Participation

Overall the majority of respondents participate in outdoor recreation activities at their local parks (78 percent). State parks, forest or wildlife areas were the second most frequented location (65 percent) followed by trails (58 percent), National Parks/federal lands (47 percent), and private lands or facilities (42 percent). Respondents in the Western Region were most likely to have visited state parks, forests or wildlife areas (68 percent) than respondents in the other regions.

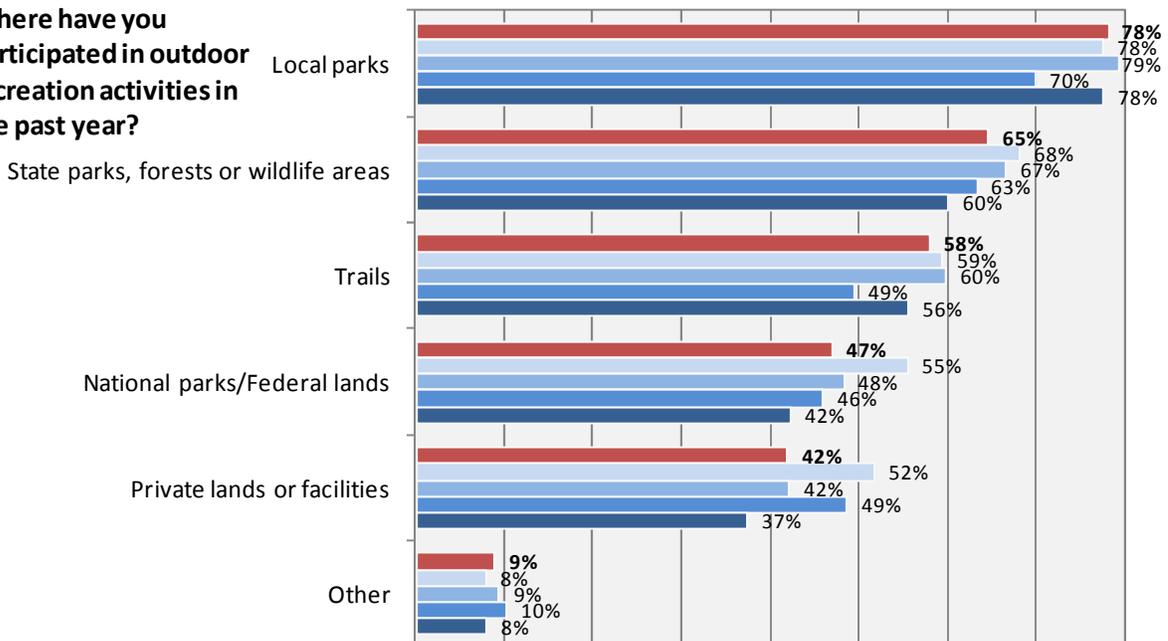
Of those respondents that visited state parks, forests or wildlife areas, the median respondent visited between 3 and 5 times in the last twelve months. The respondents from the Western Region are among the most frequent visitors of state parks, forests or wildlife areas, with 52 percent visiting more than 6 times in the past twelve months.

The majority of responders indicate that they visited state parks, forest, or wildlife areas with either the same frequency (57 percent) or increased frequency (27 percent) in the past year.

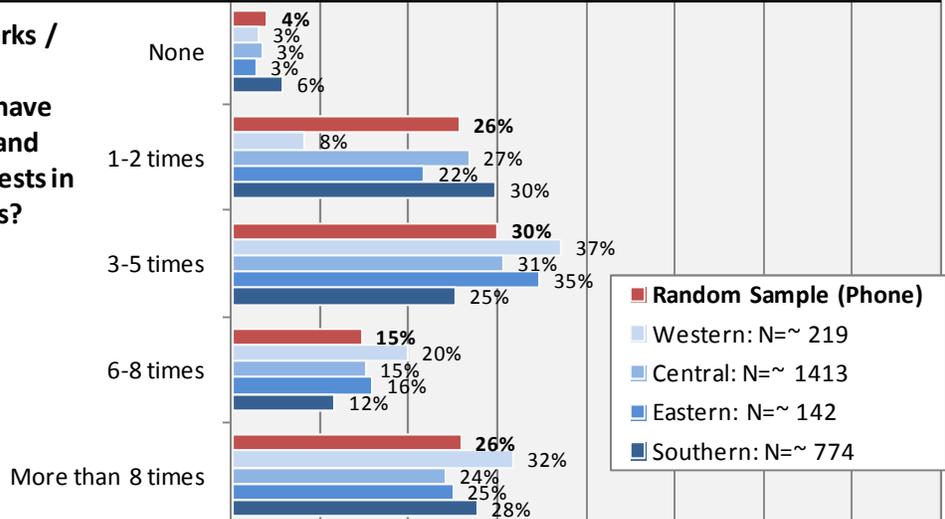
Figure 10

Type of Facility Participation Location / Frequency / Change in Frequency – By Sub-Region

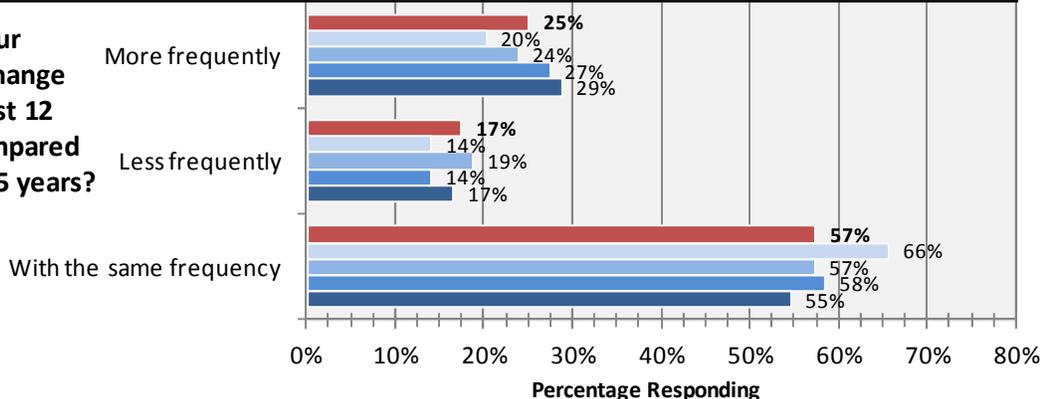
Where have you participated in outdoor recreation activities in the past year?



(If visited State Parks / Forests) How many times have you visited Maryland State Parks or Forests in the last 12 months?



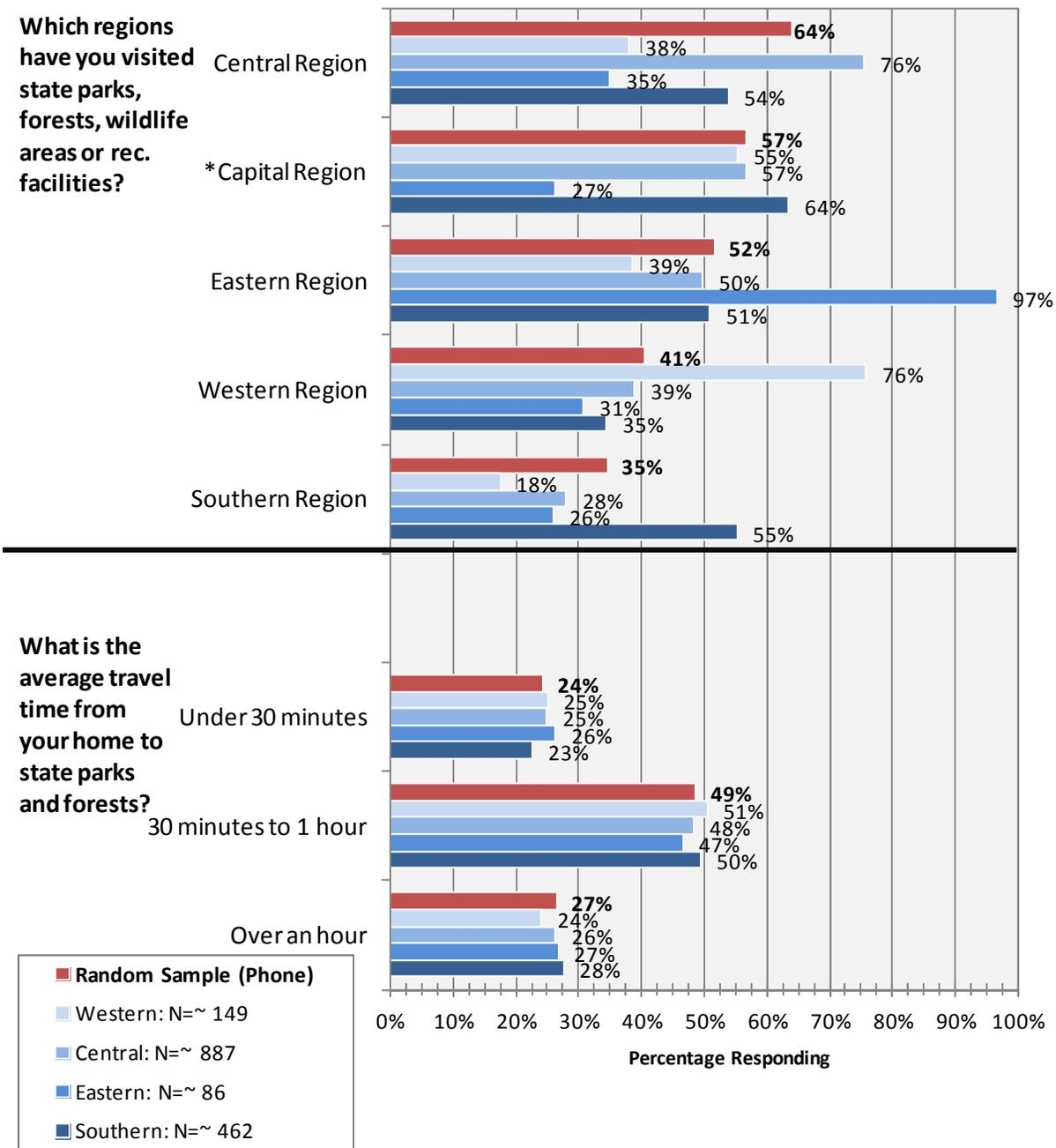
How did your visitation change over the past 12 months compared to the past 5 years?



Respondents tend to visit state parks, forests or wildlife areas in their home regions at a higher rate than facilities in other regions. Over half of all respondents indicate that they have visited a state park in the Central Region (64 percent), the Capital Region (57 percent), and the Eastern Region (52 percent). Respondents from the Eastern Region were most likely to have visited a state park in the Eastern Region (97 percent); respondents from the Western Region were most likely to have visited a state park in the Western Region (76 percent); respondents from the Central Region were most likely to have visited state parks in the Central Region (76 percent) and respondents from the Southern Region were most likely to have visited a state park in the Southern Region (55 percent). Respondents from the Southern Region were also most likely to have visited a state park in the Capital Region (64 percent). State parks, forests, or wildlife areas in the Capital Region were the second most popular facilities among respondents from the Western Region (55 percent) and the Central Region (57 percent).

On average, the majority of respondents indicate that they travel more than 30 minutes from their home to visit a state park or forest (76 percent). Only 24 percent of respondents indicate that they travel an average of less than 30 minutes.

Figure 11
Visitation Location / Travel Time to Location – By Sub-Region

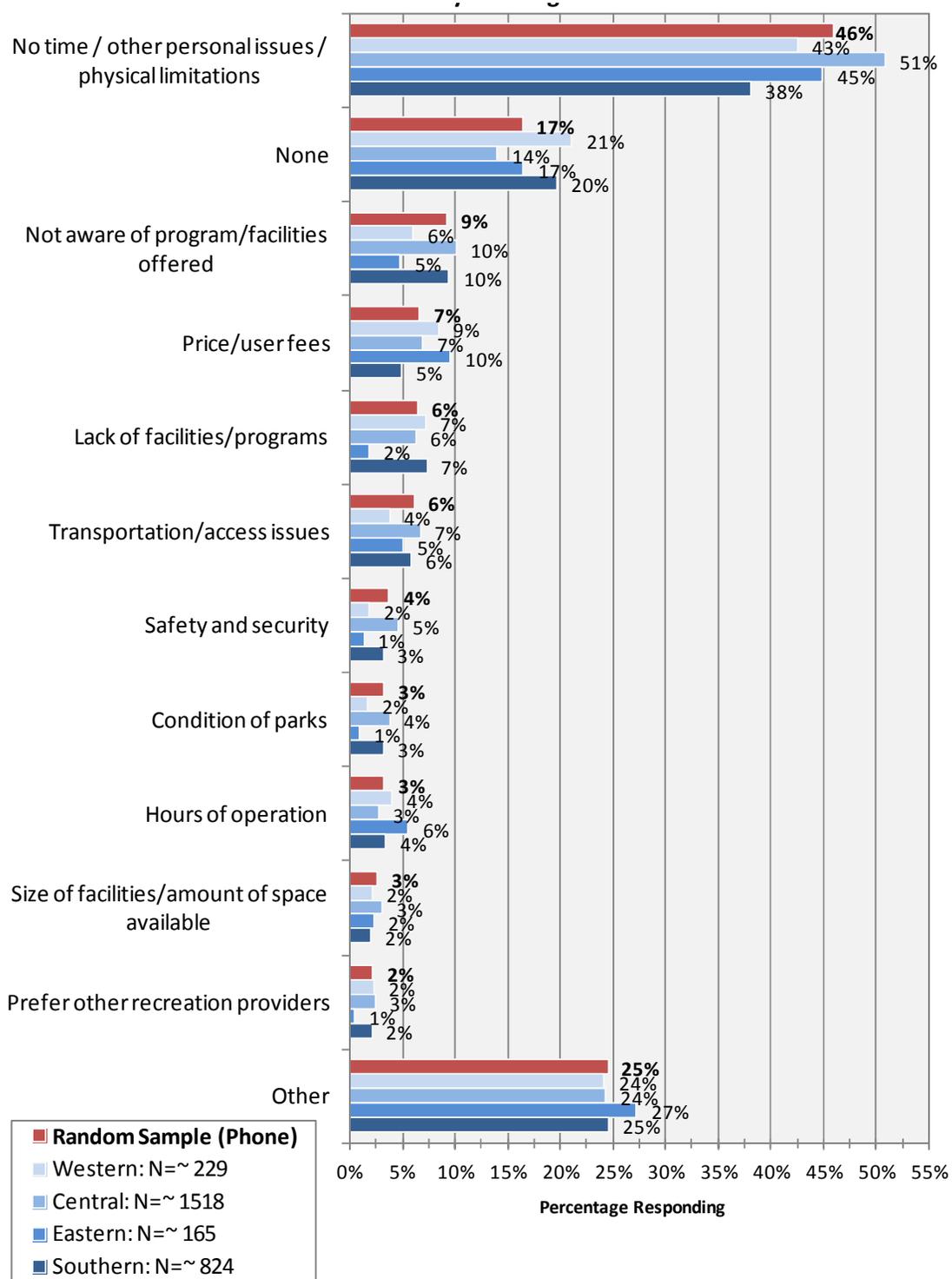


* Note that the four DNR sub-regions used for analysis and reporting throughout this document differ slightly from the five sub-regions used by Tourism and Planning, which includes a separate “Capital Region.” After the survey had been fielded, it was decided that the four DNR regions would be the primary geography used for comparisons since the DNR is already largely organized around these four sub-regions for many other purposes. Since the survey had already fielded, however, it was not possible to revise the question above to remove the Capital Region as a choice as to which regions respondents had visited. In any case, this question is a “multiple response” choice question, meaning respondents could have visited any or all of the five sub-regions in question. As such, the inclusion of a fifth region in this question does not affect any potential response patterns.

Barriers to Participating in Outdoor Recreation

The most frequently given reason for not participating more frequently in outdoor recreation was that respondents had “no time, other personal issues, or physical limitations” (46 percent). The next most common barriers were: “not aware of program/facilities offered” (9 percent), “price/user fees” (7 percent), “lack of facilities/programs” (6 percent), “transportation access issues” (6 percent), “safety and security”, “conditions or parks”, “hours of operation”, and “size of facilities/amount of space available” (3 percent). Only 17 percent of responders indicated that they did not have any barriers to participation.

Figure 12
Barriers to Participating in Outdoor Rec. More Frequently – By Sub-Region



IMPORTANCE AND NEEDS

Importance of Outdoor Recreation

Over half of all respondents indicated that the availability of parks, trails, outdoor recreation facilities and outdoor education programs is “extremely important” to their household (55 percent rating of 5 on a scale from 1-5). Another 25 percent gave a rating of “4” on the 1-5 scale (80 percent ratings of 4 or 5 altogether). Only 5 percent of all respondents feel that it is not important (ratings of 1 and 2 on a scale from 1-5). Overall average score on the 1-5 scale is 4.3.

Degree to Which Needs Are Being Met

Only one-third of respondents (33 percent) indicate that the parks, trails, outdoor recreation facilities, and outdoor recreation programs are “completely” meeting their or their household’s needs (rating of 5 on a scale from 1-5). Another 36 percent gave a rating of “4” on the 1-5 scale (69 percent ratings of 4 or 5 altogether). Five percent reported that their or their household needs are not being met.

Benefits of Land Conservation and Outdoor Recreation

The vast majority of respondents (over 90 percent) rate the following benefits of land conservation and outdoor recreation as having the most importance: “promoting healthy active lifestyles”, “protecting the environment”, and “improving quality of life”. The attribute of “providing an economic benefit to the State” is viewed as being the least important of the benefits; however, it still is rated as important by 71 percent of the respondents.

The average ratings for the attributes of the benefits of land conservation and outdoor recreation did not vary much when broken out by region. Respondents from the Central Region place a slightly higher importance on “protecting the environment” than the average (4.7 vs. 4.6), while respondents from the Western Region place a slightly higher importance on “connecting people with nature” than the overall average (4.5 vs. 4.4).

Figure 13
Importance and Level of Needs Being Met for Parks, Trails, Outdoor Recreation Facilities and Education Programs

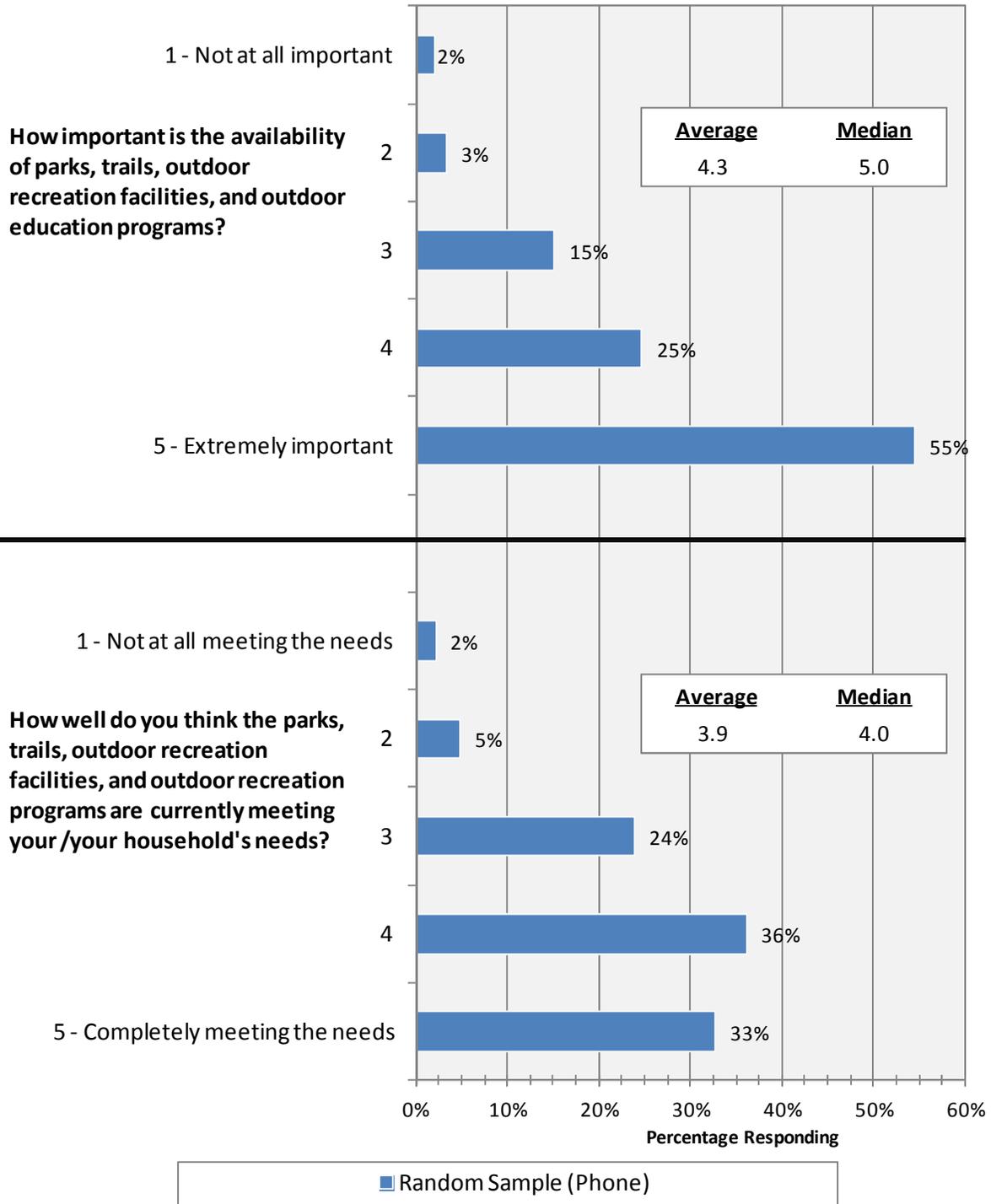


Figure 14
Importance of Land Conservation and Outdoor Recreation Benefits – By Sub-Region

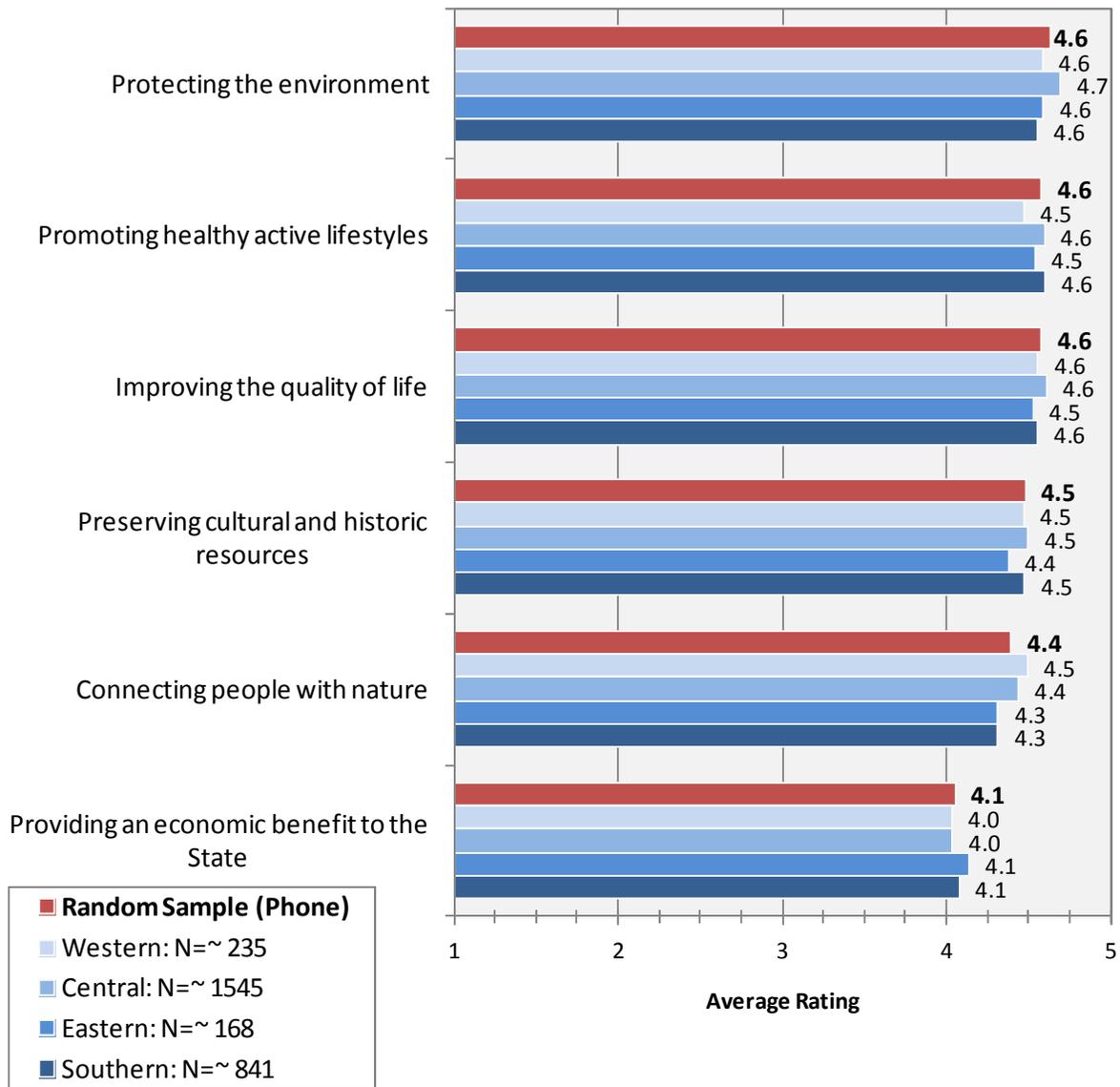
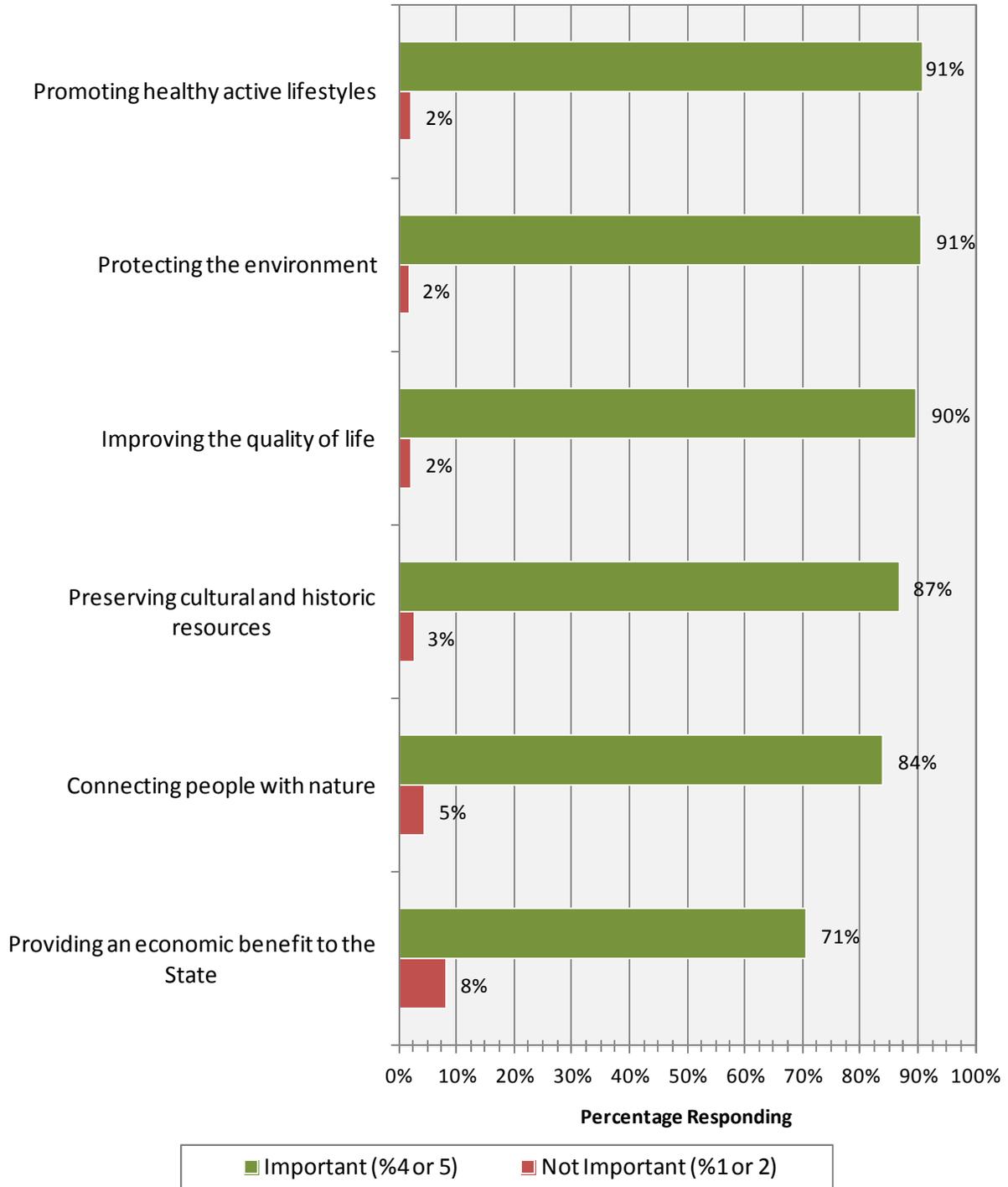


Figure 15
Importance of Land Conservation and Outdoor Recreation Benefits – Percent Important vs. Not Important



DNR SPECIFIC RATINGS & FINANCIAL CHOICES

Overall Satisfaction with the DNR

Ratings of satisfaction with the DNR are exceptionally high overall. Respondents are most satisfied with the department’s ability to provide active outdoor recreation opportunities (73 percent satisfied). On the lower end of the scale, respondents are satisfied less with the department’s ability to provide adequate educational opportunities (59 percent satisfied).

When examined by region, respondents from the Western Region are more satisfied with the DNR for all attributes than their counterparts in other regions. Respondents from the Eastern and Southern regions tend to have slightly lower ratings of the DNR for all attributes.

Figure 16
Level of Satisfaction with Attributes of DNR – Average Rating – By Sub-Region

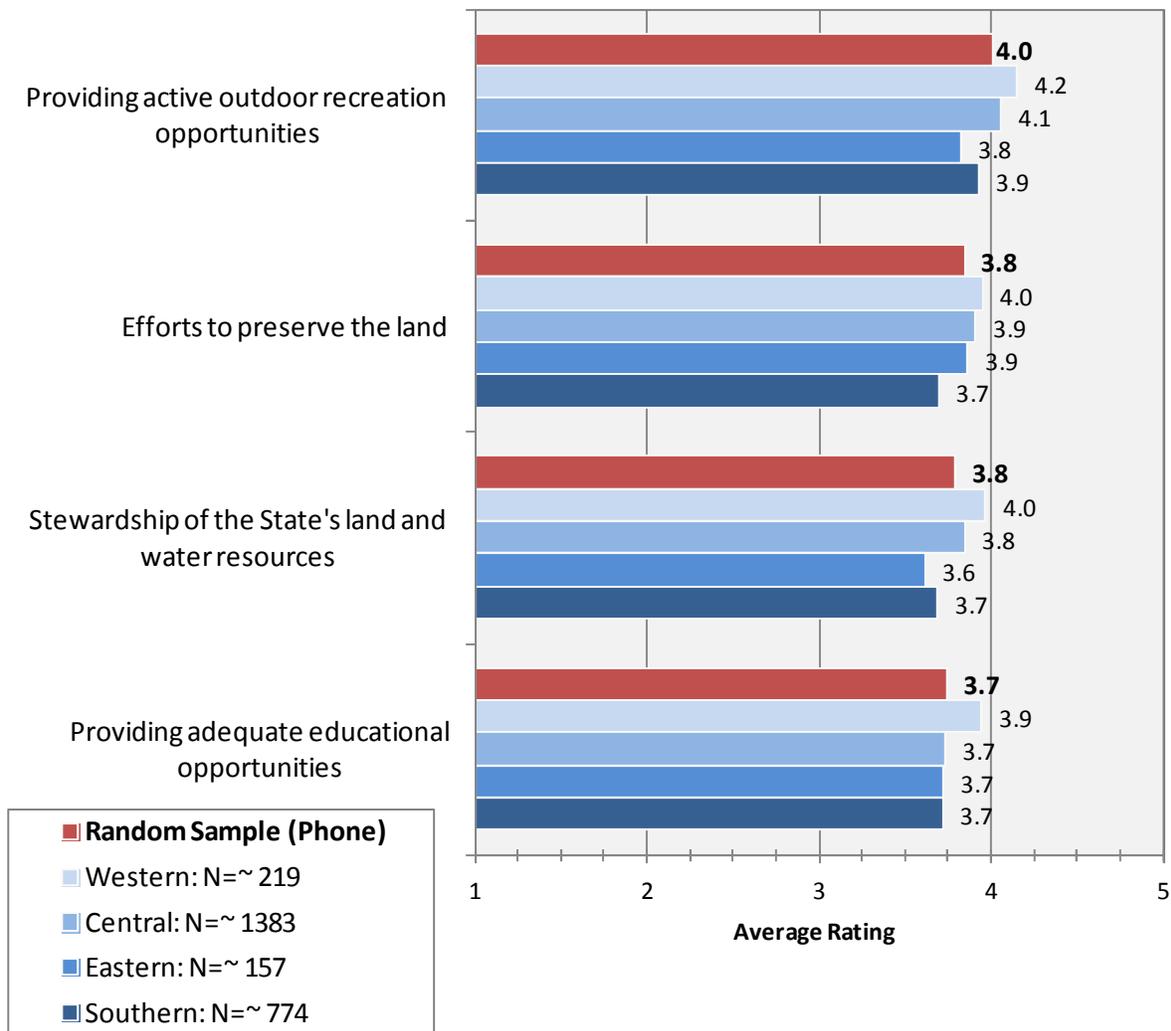
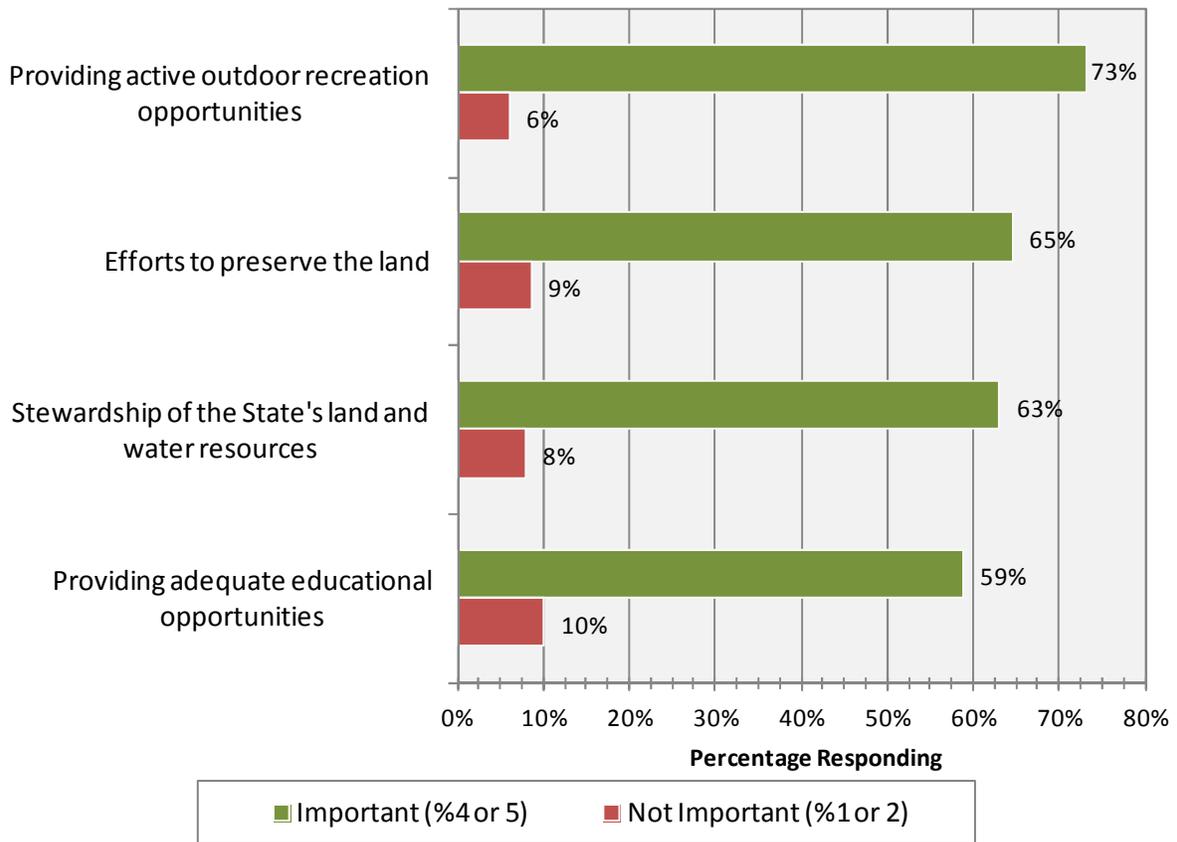


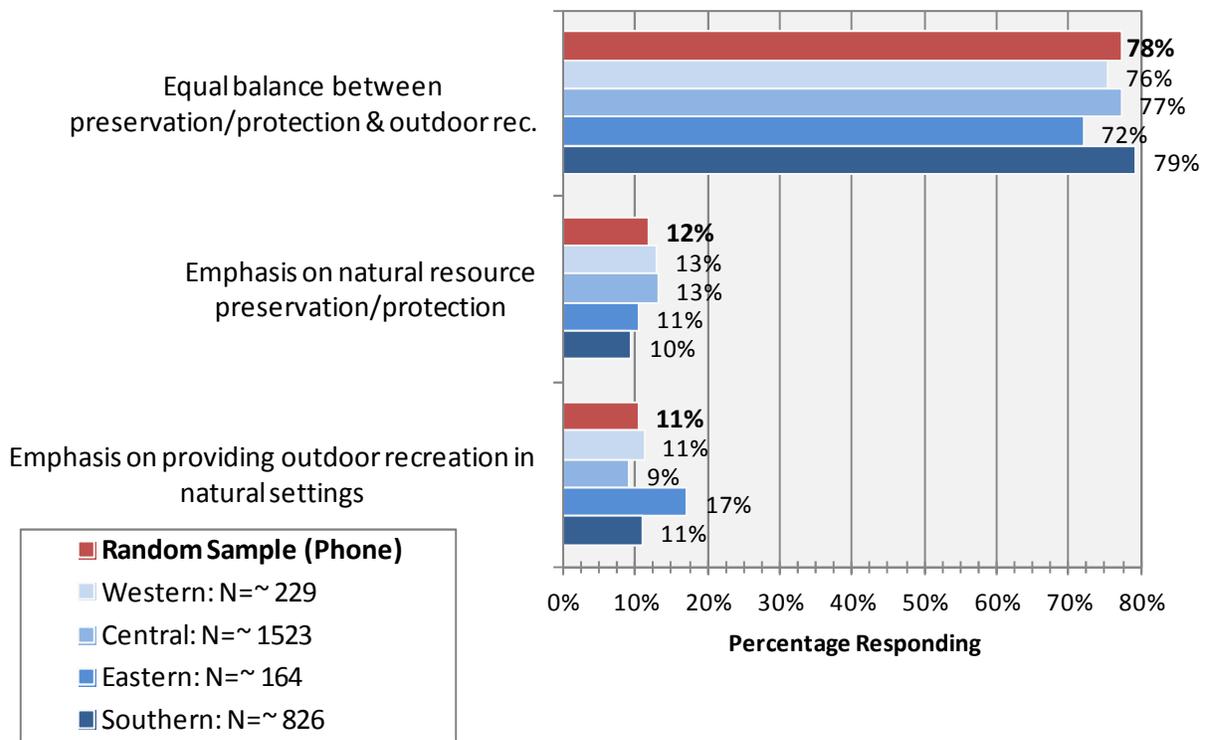
Figure 17
Level of Satisfaction with Attributes of DNR – Percent Satisfied vs. Not Satisfied



Emphasis of the DNR

The majority of respondents (78 percent) feel that the DNR should pursue an equal balance between natural resource preservation/protection and providing outdoor recreation in natural settings. The remaining respondents are equally split between the two directions (12 percent emphasis on preservation/protection and 11 percent on outdoor recreation). Although a clear majority still prefers a balanced approach, respondents from the Eastern Region place slightly higher emphasis on providing outdoor recreation than preservation/protection (17 percent and 11 percent respectively).

Figure 18
Emphasis DNR Should Pursue – By Sub-Region



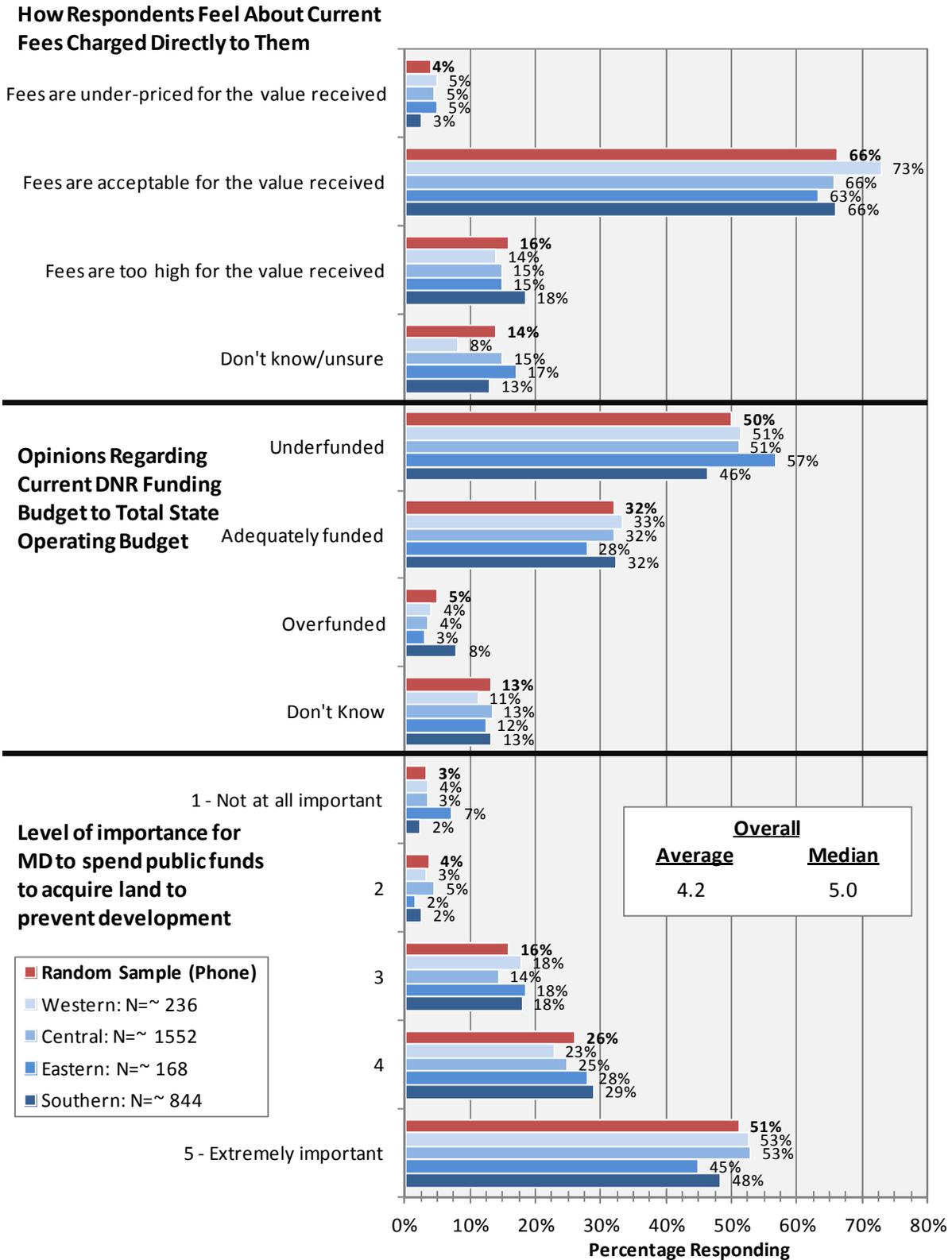
DNR Funding and Fees

Respondents were asked how they feel about the fees charged directly to them by the DNR. The majority feel that the fees are acceptable for the value received (66 percent), while 16 percent feel that the fees are too high for the value received and 4 percent feel that the fees are under-priced for the value received. Of the regions, respondents from the Western Region were most likely to feel that the fees are acceptable for the value received (73 percent), while responders from the Eastern Region were least likely (63 percent).

Half of the respondents felt that the DNR is underfunded in the state operation budget (50 percent). Responders from the Eastern Region are most likely to feel that the department is underfunded (57 percent). Thirty-two percent of the responders feel that the department is adequately funded, while only 5 percent of responders feel it is overfunded.

Over half of all responders indicate that it is “extremely important” that the State of Maryland spend public funds to acquire land to prevent development. Only 3 percent feel that it is “not at all important”.

Figure 19
Fees and Funding By Sub-Region



ENERGY RESOURCES ON PUBLIC LANDS

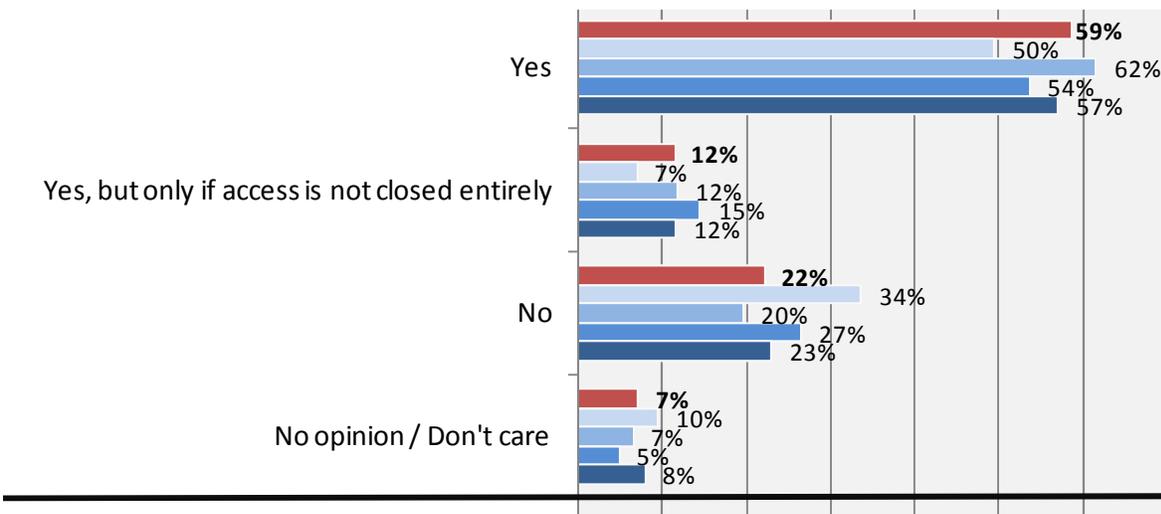
Respondents were asked to consider allowing both renewable and non-renewable energy resources on public lands. Renewable energy resources were defined as such things as wind farms and solar fields, while non-renewable resources were considered to be coal and natural gas.

Overall, respondents are more favorable towards allowing renewable energy resources on public lands even if access to some of the land is limited (71 percent favorable). Another twelve percent indicated that they are in favor of renewable energy resources as long as the access to the public lands was not closed entirely. Twenty-two percent of respondents are not in favor of allowing renewable resources on public lands. Respondents from the Western and Eastern Regions were not as likely to be in favor of allowing renewable resources on public lands as their counterparts in the Central and Southern Regions.

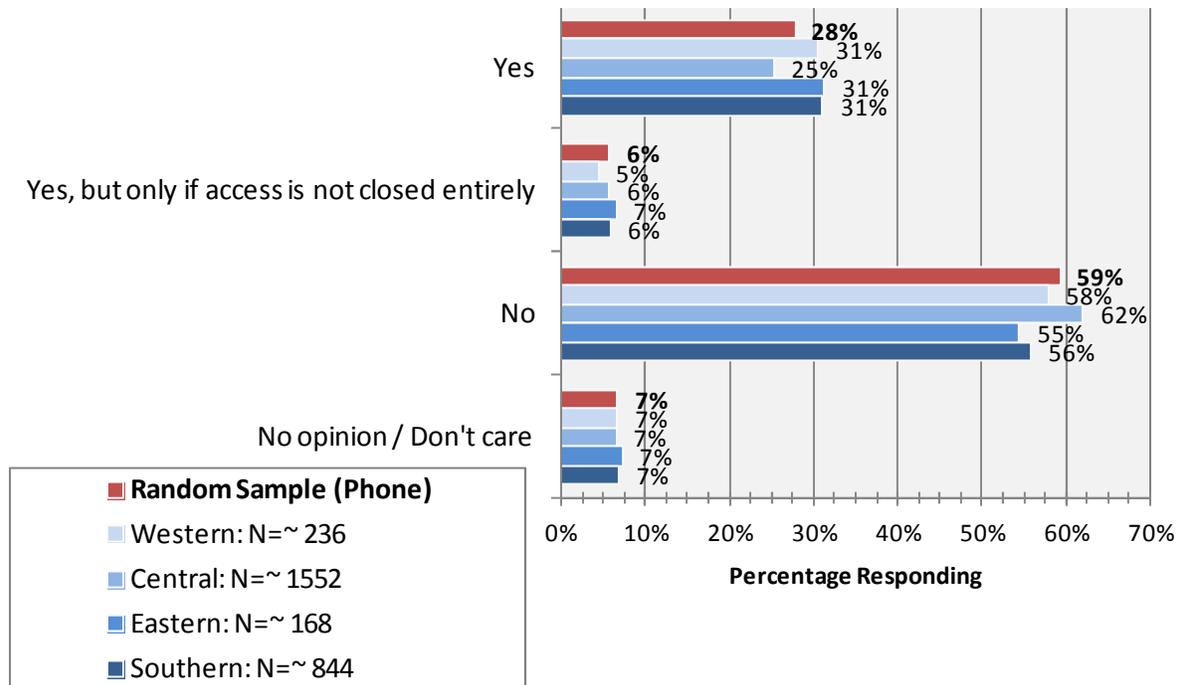
The majority of respondents are not in favor of allowing non-renewable resources on public lands (59 percent), although 34 percent are open to some level of activity. Respondents from the Central Region are more unfavorable with 62 percent than responders from the other regions.

Figure 20
Renewable and Non-Renewable Energy – By Sub-Region

Are respondents supportive of allowing renewable energy resources on public lands such as wind farms and solar fields, even if access to some parts are limited



Are respondents supportive of allowing non-renewable energy resources on public lands such as coal and natural gas, even if access to some parts are limited



OPEN ENDED COMMENTS

Respondents were asked if they had any had additional comments or suggestions regarding the land preservation and recreational opportunities provided by the DNR. Of those respondents that provided comments, no single dominant theme was apparent either overall or by region. Respondents offered broad and varied views on a myriad of issues. The full set of comments, which can be found in the appendix, should be viewed in order to understand the extent of issues covered and the specific topics and location of these issues.

In general, however, a few themes by region are discussed below regarding other benefits of land conservation and outdoor recreation and suggestions regarding land preservation and recreational opportunities provided by the DNR.

Are there any other benefits of land conservation and outdoor recreation you would like to mention?

Western Region

- Great for kids and the promotion of healthy, active lifestyles
"GOOD FAMILY TIME AWAY FROM THE TV, GOOD FOR KIDS TO GET OUT AND BE ACTIVE"
- Concerns over obstacles to conservation
"I THINK WE CUT TOO MUCH TIMBER. THE COUNTY COUNTS ON SIGHTSEEING & THEIR TAKING IT AWAY. PLUS I THINK WE'RE OVER POPULATED IN CERTAIN AREAS."
- Interest in protecting wildlife
"TAKING CARE OF OUR WATER SO THAT THE FISH CAN LIVE & NOT GET SICK FROM POLLUTED WATER"
- Clean air and water
"YOU CAN'T BEAT THE CLEAN AIR - NOT MANY PEOPLE IN THE COUNTRY HAVE ASTHMA- ITS FRESH AIR AND YOU DON'T HAVE TO COUGH AFTER YOU BREATHE IN THE AIR"

Central Region

- Beauty/aesthetically pleasing/peaceful
"EXERCISE, PEACEFULNESS, GETTING AWAY FROM WHAT CAN BE A HECTIC WORLD"
- Community/relationships
"I THINK THERE IS A PSYCHOLOGICAL BENEFIT OF JUST BEING OUTDOORS - YOU CAN JUST SIT AND IT'S AN EMOTIONAL BENEFIT THAT'S VERY HIGH - IT STRENGTHENS FAMILIES"
- Conservation of land, water and animal habitats
"PRESERVING FOR THE PEOPLE YET TO COME AND ALSO FOR THE WILDLIFE AND HEALTH BENEFITS OF THE PLANTS TO CLEAN THE AIR. IT'S A BENEFIT FOR MORE GREEN SPACES."
"WATER QUALITY, PRESERVATION OF NATURAL DIVERSITY, REDUCTION IN THINGS LIKE AIR POLLUTION, PARKS PROVIDE SOUND BUFFERING FOR NEIGHBORHOODS,

RECONNECTING PEOPLE WITH NATURE, PROVIDING SAFE PLACES FOR PEOPLE TO PLAY IN”

-Education/stewardship

“GOOD IF THERE WAS A PROGRAM TO EDUCATE THOSE WHO USE THE PARKS -TO BE CLEAN AND RESPECTFUL; AS WHEN WE FOUND IT-IF WE FOUND IT IN GOOD CONDITION WE WOULD LEAVE IT IN GOOD CONDITION”

-Farming preservation

“DO WHAT WE CAN TO HELP FARMERS-RECENTLY LIVE NEAR A RUN THAT WAS IMPROVED, FIXED THE BANKS, INCREASED THE SIZE SO IT DOESN'T FLOOD, IS BETTER FOR THE WILDLIFE AND CERTAINLY FOR THE GENERAL IMPROVEMENT FOR THE ENTIRE AREA-POSITIVE”

Eastern Region

-Land conservation

“LAND CONSERVATION IS VERY IMPORTANT THEY HAVE FORGOTTEN ABOUT FARMERS, AND INDUSTRIAL BUILDING IS RUINING FAMILIES AND THEY ARE BEING HURT BY THESE INDUSTRIAL PROGRAMS. FAMILIES ARE LOSING THEIR HOMES AND LANDS TO CORPORATE BUILDING AND POLLUTION.”

-Clean water

“ I WOULD LIKE TO SEE THEM REBUILD ISLANDS IN OUTER CHESAPEAKE BAY; PROTECT FROM DIRECT BEATING OF WIND AND SURF. NEED A FEW CHANGES AS TO DONATING FISH INTO CHESAPEAKE BAY. CATCH SIZES AND CATCHING METHODS SHOULD BE RENEWED AND TAKEN CARE OF.”

“WE LIVE IN A WATER/MARSH COMMUNITY AND I THINK IT IS EXTREMELY IMPORTANT TO KEEP FOR WATERFOWL AND LOCAL FAUNA/ANIMALS SO THEY HAVE TO HAVE A PLACE TO BREED AND RAISE YOUNG OR THEY ARE GOING TO DIE OFF.”

Suggestions regarding land preservation and recreational opportunities provided by the DNR.

Western Region

-Concerns regarding energy infrastructures

“I JUST THINK THAT NON RENEWABLE AND RENEWABLE ENERGY CAN BE DONE WITHOUT EFFECTING THE PARKS”

-More advertising

“IT NEEDS TO BE MORE AVAILABLE THROUGH ADVERTISING SO MORE FAMILIES KNOW WHAT AND WHEN THE OPPORTUNITIES ARE AVAILABLE. IN GENERAL, I THINK IT NEEDS TO BE AVAILABLE.”

-More areas for hunting

“STATE PROPERTY LINES SHOULD BE MARKED MORE CLEARLY AND THERE ARE NO PUBLIC SHOOTING RANGES. THE FREE MAPS DON'T EXPLAIN THE ACTUAL PROPERTY BOUNDARIES”

-Protection of historical sites

“THINK THERE IS A LOT OF OLD HOMES THAT SHOULD HAVE BEEN PRESERVED, FOR HISTORICAL SAKE”

Central Region

-Clean the Bay

“GET TO WORK ON GETTING POLLUTION OUT OF POTOMAC RIVER AND CHESAPEAKE BAY”

-More educational opportunities

“EDUCATION FOR THE YOUNG KIDS IS IMPORTANT, AND OYSTER REACH FOR THE BAY/FREE EDUCATIONAL OPPORTUNITIES-KIDS CAN HELP OUT, THEY HAVE A BIGGER STAKE”

-Conserve the land and acquire more open space

“I BELIEVE IN LAND CONSERVATION. UP UNTIL 10 YEARS AGO CARROLL COUNTY HAD MORE LAND IN AGRICULTURAL PRESERVATION THAN ANY STATE. I'M HAPPY WITH THE STATE PARK SITUATION”

“I DON'T WANT TO SEE HISTORICAL LANDMARKS DISAPPEAR. I'D RATHER THERE BE LESS COMMERCIALISM BECAUSE I ENJOY NATURAL PARKS.”

“I THINK THEY NEED TO CONCENTRATE ON BUYING AND PRESERVING AREAS THAT HAVE THE GREATEST EFFECT ON THE WATERSHED. BUY UP REMAINING FARMS THAT GO TO FORECLOSURE INSTEAD OF LETTING DEVELOPERS BUY THEM. TURN THEM INTO PARKS INSTEAD OF DEVELOPMENTS.”

“PRESERVATION & PROTECTION AGAINST ECONOMIC AND DEVELOPMENT USE FROM THE PEOPLE WHO WANT TO GRAB IT, SAVE THE LAND FOR THE PEOPLE”

-Alternative energy: People strongly for and against it

“I REALLY DON'T WANT TO SEE THEM PUT THAT PIPELINE THROUGH. I REALLY WISH THEY WOULD STOP USING THE EXTRACTION METHOD FOR NATURAL GAS THAT THEY USE IN THE PENNSYLVANIA VALLEY. IT ENDANGERS LIFE LAND WATER AIR AND ALL THOSE THINGS. IT'S VERY DANGEROUS ...”

“I THINK THAT LAND NEEDS TO BE USED TO HARVEST FOSSIL FUELS SO WE CAN TRY TO CONTINUE TO KEEP ENERGY COSTS DOWN. REGULATIONS NOT BE PUT IN PLACE TO LIMIT WHAT LANDOWNERS CAN DO WITH THEIR LAND.”

-Increase staff members

“I KNOW THE BUDGET IS SMALL BUT A LOT OF THE PLACES THAT I HAVE GONE TO ARE UNDERSTAFFED. NEED MORE PEOPLE TO MONITOR VISITORS. I WOULD STRESS THAT THE STAFF THEY HAVE ARE INCREDIBLY DEVOTED AND EXCELLENT AT THEIR JOBS.”

-A lot of people pleased with DNR

“KEEP UP THE GOOD WORK!!”

-Lower prices, particularly for low-income residents

“LOWER INCOMES SHOULD HAVE ACCESS EVEN IF THEY CANNOT AFFORD IT AT THE TIME”

-More advertising/clarification

“MORE OUTREACH TO SCHOOLS SO THEY KNOW ABOUT THE AREAS. MORE CLARIFICATION OF THE RELATION BETWEEN DNR AND THE PARKS SYSTEM”

“MORE PROMOTING WHAT'S OUT THERE, THE HEALTH BENEFITS, ENVIRONMENT. I DON'T THINK THERE'S ENOUGH PROMOTION OF WHAT WE HAVE & WHAT'S OUT THERE.”

“THE DNR TO DO MORE PROMOTION TO YOUNGER PEOPLE AS WHAT THERE IS TO DO & WHAT THEY OFFER. I HOPE THEY ARE DOING A GOOD JOB OF GOING TO SCHOOLS & TELLING KIDS WHAT THEY DO & THAT WOULD BE VERY HELPFUL FOR KIDS. I THINK IT'S A GOOD THING TO DO.”

-Volunteering opportunities/community outreach

“WOULD LOVE TO SEE A LITTLE MORE EMPHASIS ON ORGANIZING VOLUNTEERS TO DO PARK CLEAN UPS AND STUFF, MAYBE A LITTLE MORE AGGRESSIVE IN COMMUNITY OUTREACH”

Eastern Region

-Protect the environment

“I'D LIKE TO SEE THE CONSERVANCY PROGRAMS STRENGTHENED AND EXPANDED. I'M VERY MUCH IN FAVOR OF PROTECTING THE ENVIRONMENT.”

Southern Region

-Acquire more land now before it is developed for commercial use

“AS LONG AS THE MONEY IS GOING TOWARD THE PARKS AND RECREATION, IT'S ALL WELL AND GOOD FOR PRESERVING THE LAND, BUT I FORESEE THE LAND BEING TAKEN AWAY FROM THE PUBLIC IN THE FUTURE AND USED FOR PRIVATE INTERESTS.”

-Clean the Bay

“DO SOMETHING ABOUT FARM RUNOFF AND GETTING THE BAY BACK TO GOOD HEALTH”

-Education/promotion

“I WISH THAT THERE WERE MORE EDUCATIONAL OPPORTUNITIES ABOUT LAND PRESERVATION AND KIDS IN CLASSROOMS SHOULD BE BETTER EDUCATED ABOUT LAND PRESERVATION”

“MAKING THESE PLACES MORE PUBLIC IN TERMS OF INFORMATION, BUT SOMETIMES IT'S ROUGH TO FIND PUBLIC LANDS AND NATURE SIGHTS. ADVERTISE MORE, PUBLISH MORE ABOUT THESE PLACES, AND MAKE THE KNOWLEDGE MORE AVAILABLE TO PEOPLE ABOUT WHERE IT IS.”

-More trails, closer to urban areas

“NO SUGGESTIONS, MY BIGGEST COMPLAINT IS THAT MOST OF THESE PLACES ARE NOT CLOSE, THEY'RE KIND OF FAR AWAY.”

“THEY COULD DO SO MUCH MORE; WE HAVE TO DRIVE A LONG TIME TO EXPERIENCE SOMETHING THAT IS REALLY NATURAL. THE BIKING TRAILS ARE REALLY FAR AWAY FROM US, IT SEEMS UNSAFE TO GET THERE, YOU HAVE TO GET IN YOUR CAR TO GET TO THESE BIKE TRAILS, IT'S A SHAME.”

-More patrolling

“THEY NEED TO PUT MORE PEOPLE IN THE PARKS TO PATROL THE PARKS. SOMETIMES WE GO UP TO CEDARVILLE AND NOBODY WAS THERE FOR HOURS & HOURS”

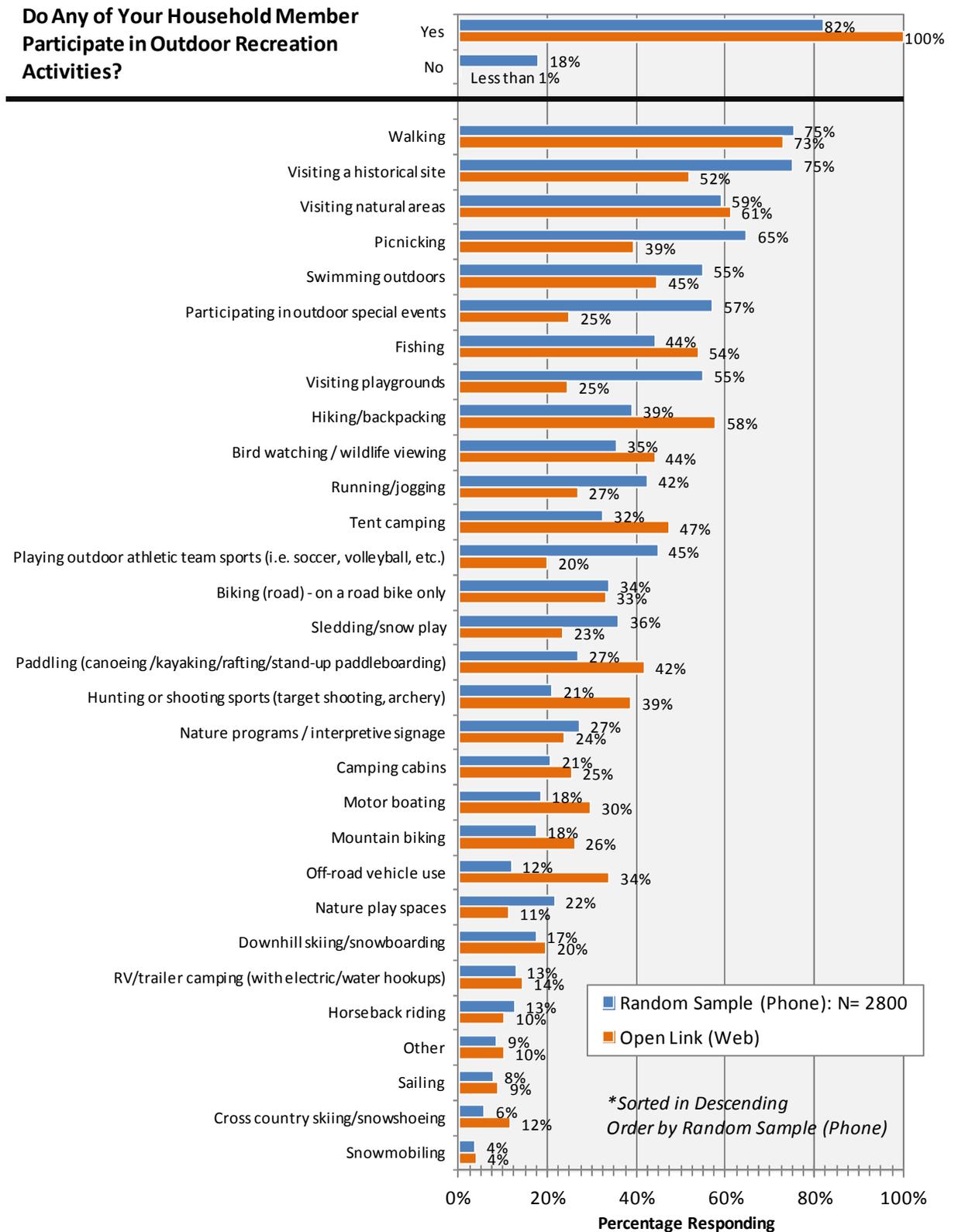
ONLINE OPEN LINK SURVEY ANALYSIS

As mentioned in the introduction, the responses to the online open link version of the survey are “self-selected” and thus not included in the above analysis. The survey received 2,475 responses. The highlights of this research are provided below.

Overall, the open link survey respondents are avid outdoor recreational enthusiasts. As such, they are prevalent users of the state parks, forests, and wildlife areas managed by the DNR. Approximately two-thirds of the respondents to the open link survey believe that the availability of parks, trails, outdoor recreation facilities, and outdoor education programs is extremely important. However, only 6 percent of the open link respondents feel that the parks, trails, outdoor recreation facilities, and outdoor recreation programs are completely meeting the needs of their household. The three most important aspects of outdoor recreation most in need of improvement are “number of trails available”, “number of parks”, and “connectivity of trails”. Even though the open link respondents are avid users of the DNR facilities and feel that their needs are not completely being met, they also feel that the DNR is currently underfunded and are supportive of efforts to spend public funds to acquire land to prevent development.

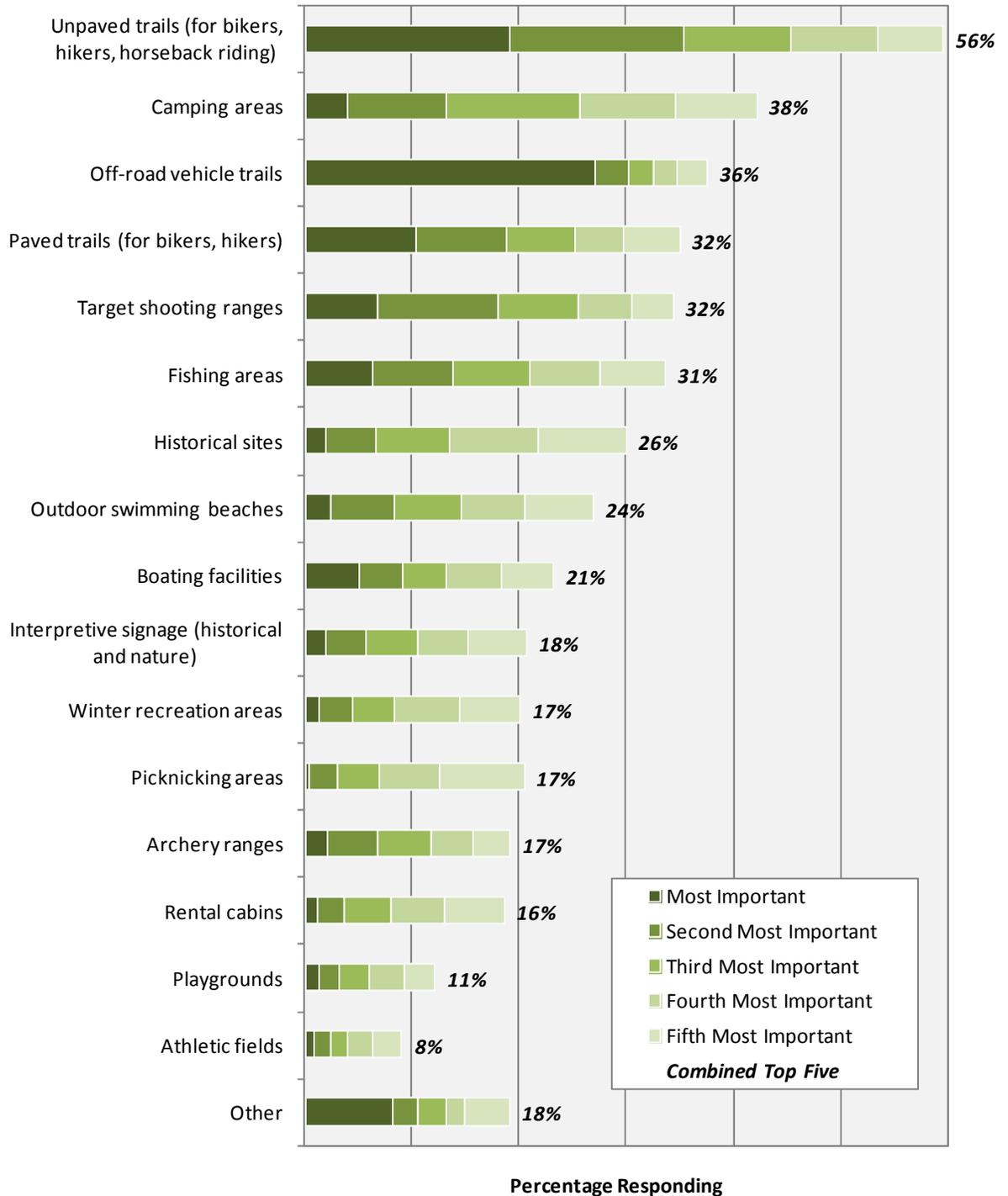
As seen in Figure 21, all of the respondents to the open link survey indicate that a member of their household participates in outdoor recreation. In particular, they are most likely to participate in walking (73 percent), visiting natural areas (61 percent), hiking/backpacking (58 percent), and fishing (54 percent).

Figure 21
Outdoor Recreation Activities Participated In – Random Sample vs. Open Link



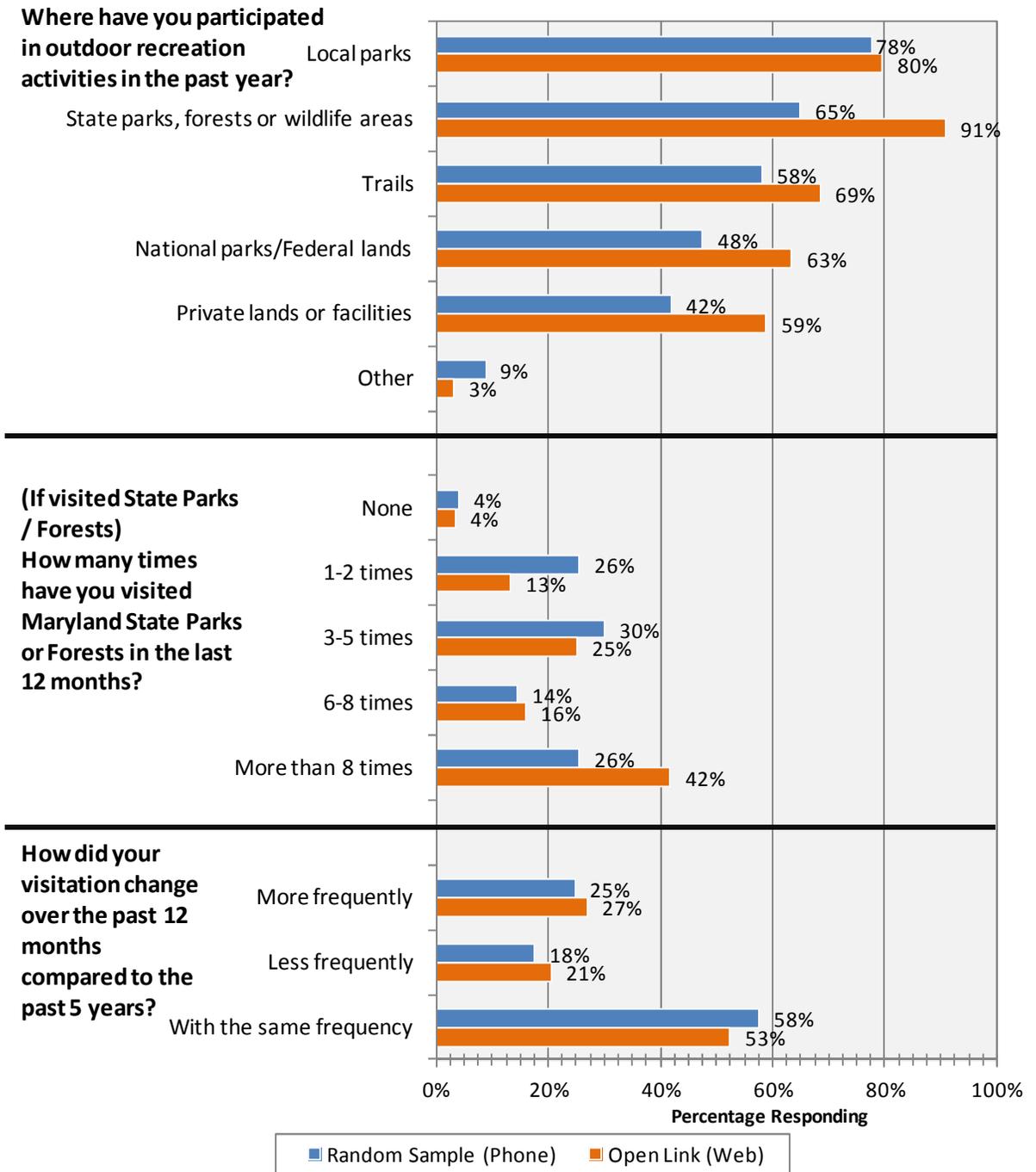
Open link survey respondents indicated that the five most important outdoor recreation facilities to be added, expanded, or improved included: unpaved trails (for bikers, hikers, horseback riding) (56 percent), camping areas (38 percent), off-road vehicle trails (36 percent), paved trails (for bikers, hikers) (32 percent), target shooting ranges (32 percent), and fishing areas (31 percent).

Figure 22
Five Most Important Outdoor Rec. Facilities to be Added, Expanded, or Improved
– Open Link



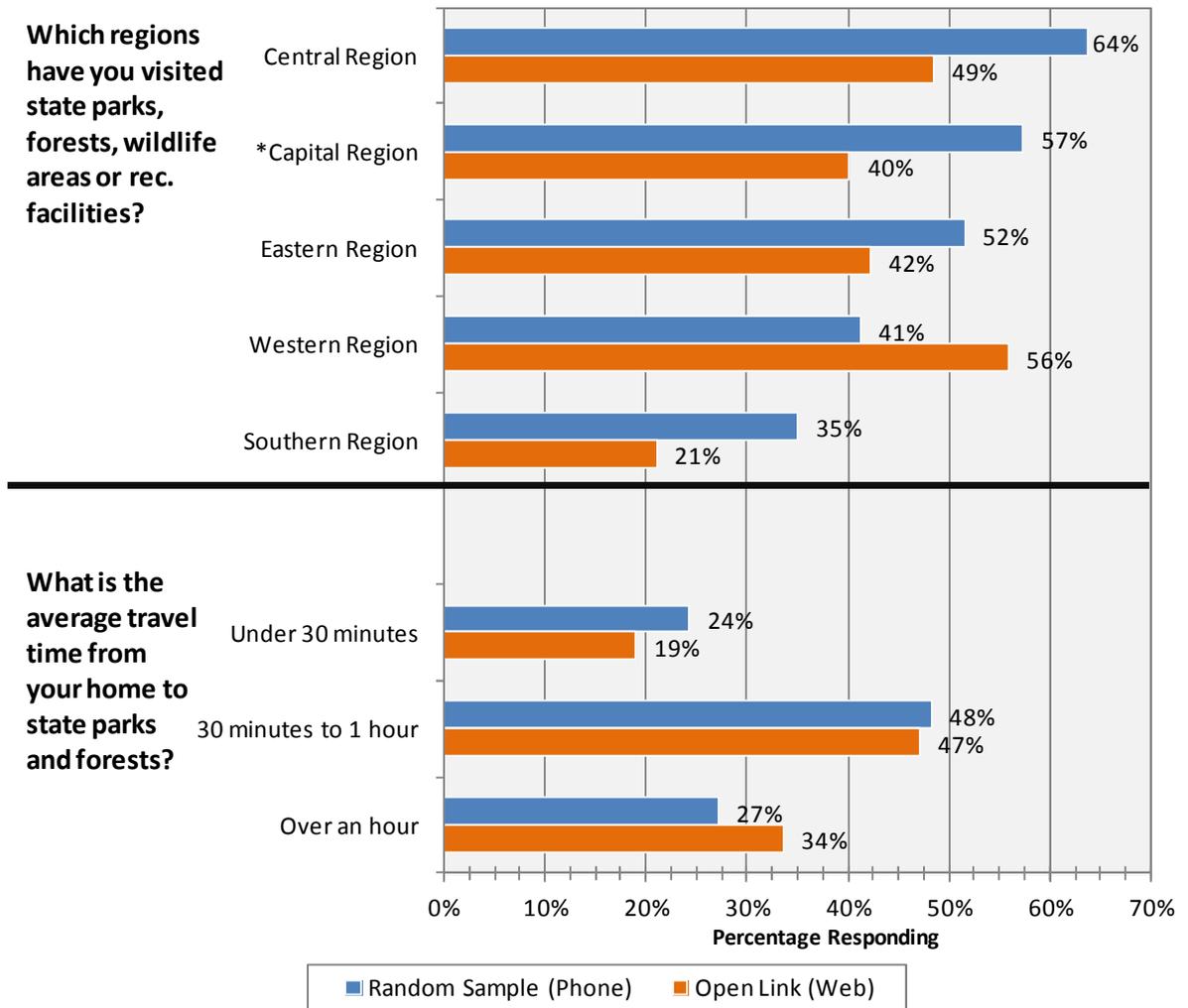
Over 90 percent of the open link respondents have used a state park, forest or wildlife area in the past 12 months. Over 40 percent of the open link respondents indicate that they have visited a state park, forest, or wildlife area more than 8 times in the past 12 months.

Figure 23
Type of Facility Participated At/ Frequency of Participation / Change in Frequency
 – Random Sample vs. Open Link



The majority of open link respondents visited a state park, forests, wildlife areas, or recreational facilities in the Western Region (56 percent), followed by the Central Region (49 percent), the Eastern Region (42 percent), the Capital Region (40 percent), and the Southern Region (21 percent). This correlates with the fact that the open link survey has more responders that either live or have second homes in the Western Region than the random sample survey.

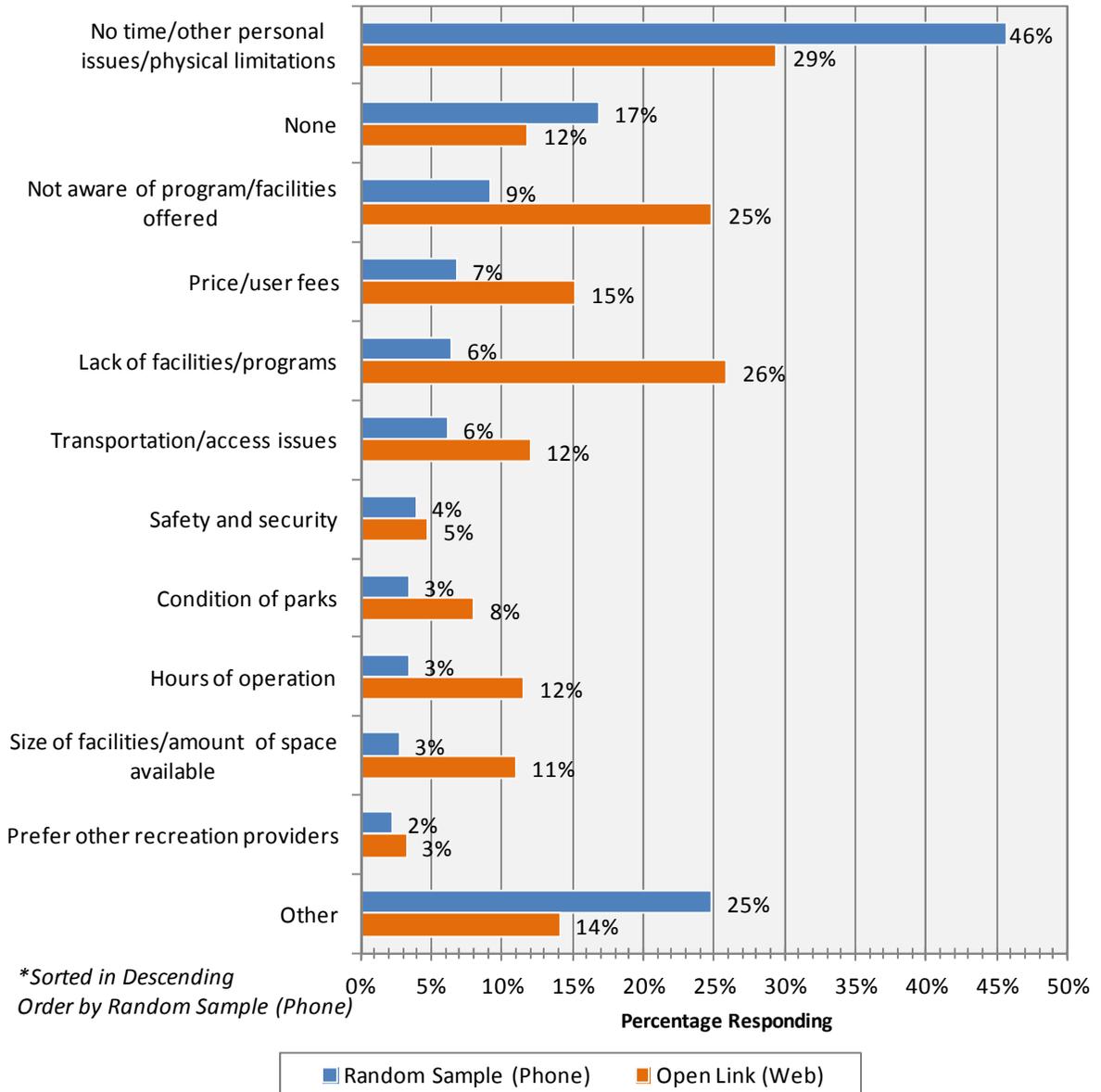
Figure 24
Location of Visitation / Travel Time to Location
– Random Sample vs. Open Link



* Note that the four DNR sub-regions used for analysis and reporting throughout this document differ slightly from the five sub-regions used by Tourism and Planning, which includes a separate “Capital Region.” After the survey had been fielded, it was decided that the four DNR regions would be the primary geography used for comparisons since the DNR is already largely organized around these four sub-regions for many other purposes. Since the survey had already fielded, however, it was not possible to revise the question above to remove the Capital Region as a choice as to which regions respondents had visited. In any case, this question is a “multiple response” choice question, meaning respondents could have visited any or all of the five sub-regions in question. As such, the inclusion of a fifth region in this question does not affect any potential response patterns.

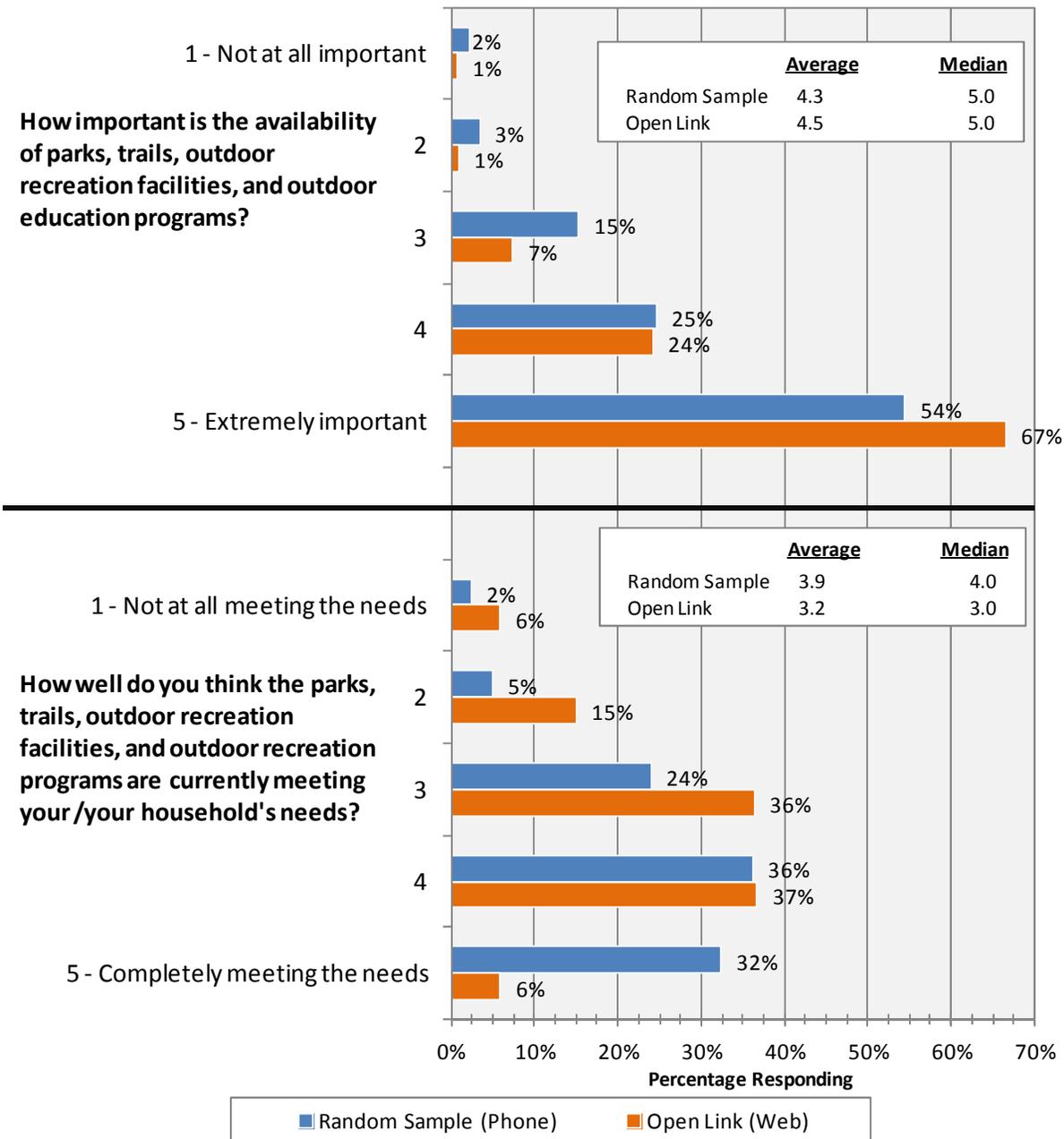
As seen in Figure 25, the most common barriers to participating in outdoor recreation more frequently among open link responders include: no time/other personal issues/physical limitations (29 percent), lack of facilities/programs (26 percent), and not aware of program facilities offered (25 percent).

Figure 25
Barriers to Participating in Outdoor Rec. More Frequently
– Random Sample vs. Open Link



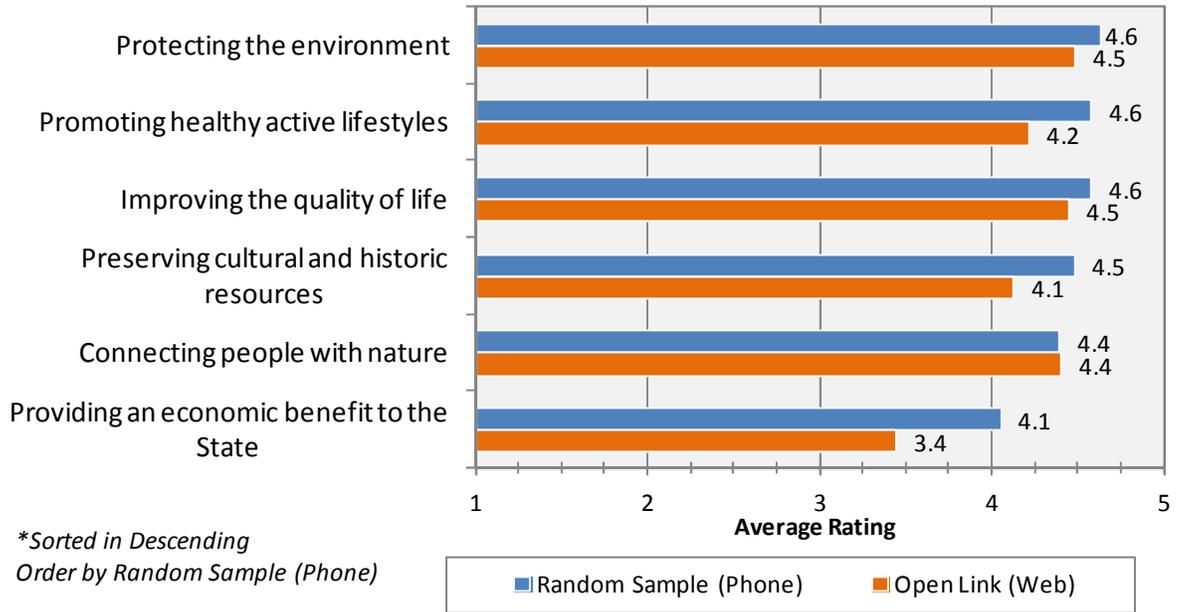
Two-thirds of the open link survey respondents feel that the availability of parks, trails, outdoor recreation facilities, and outdoor education programs are “extremely important”. Only 6 percent of open link respondents feel that the parks, trails, outdoor recreation facilities and outdoor education programs are “completely meeting the needs” of their household, which is significantly less than the random sample responders.

Figure 26
Importance and Level of Needs Being Met for Parks, Trails, Outdoor Recreation Facilities, and Education Programs
 – Random Sample vs. Open Link



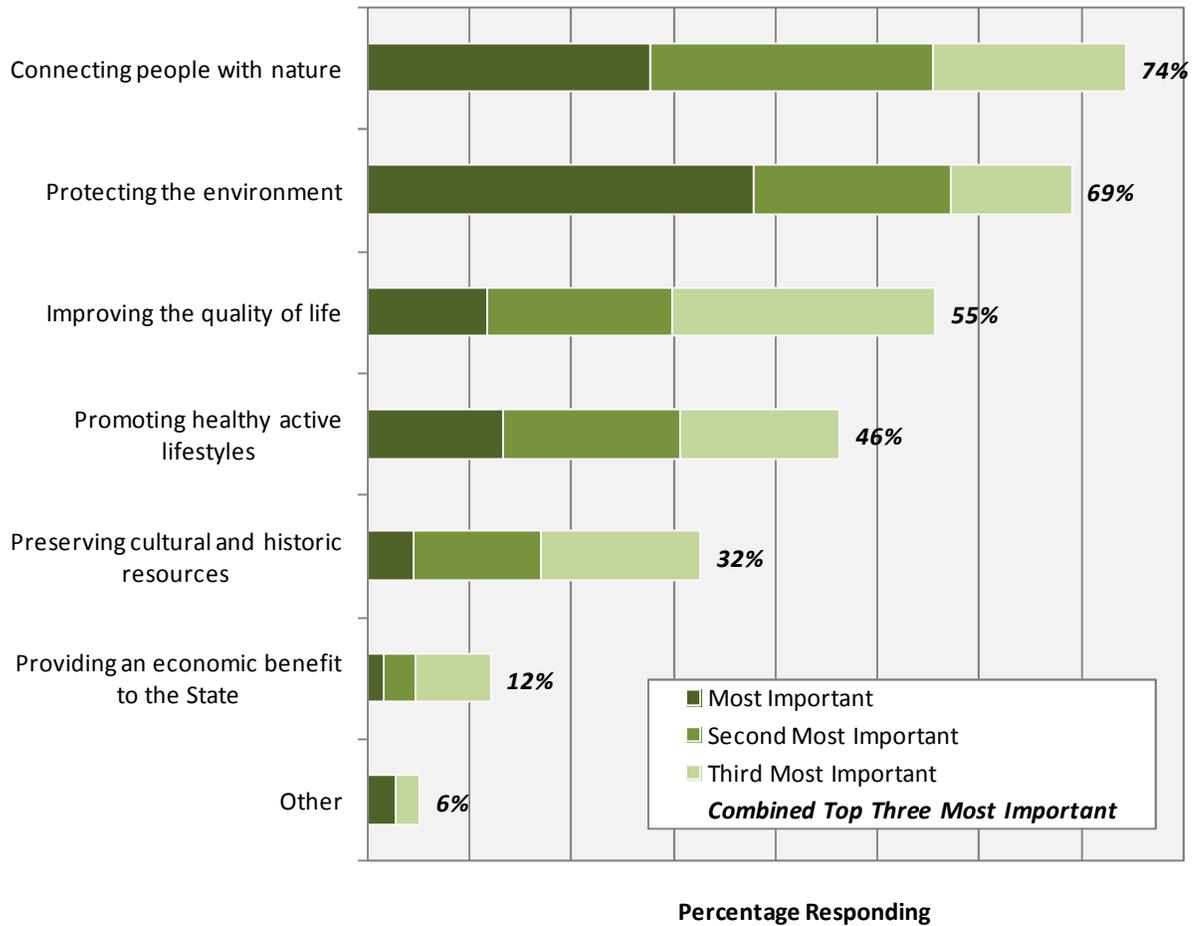
The open link respondents feel that the attributes of “protecting the environment” and “improving the quality of life” are the most important benefits of land conservation and outdoor recreation. Each of these attributes received an average rating of 4.5 on a 1 to 5 scale, where 1=Not at all Important and 5=Extremely Important.

Figure 27
Importance of Benefits of Land Conservation and Outdoor Recreation – Average Rating
– Random Sample vs. Open Link



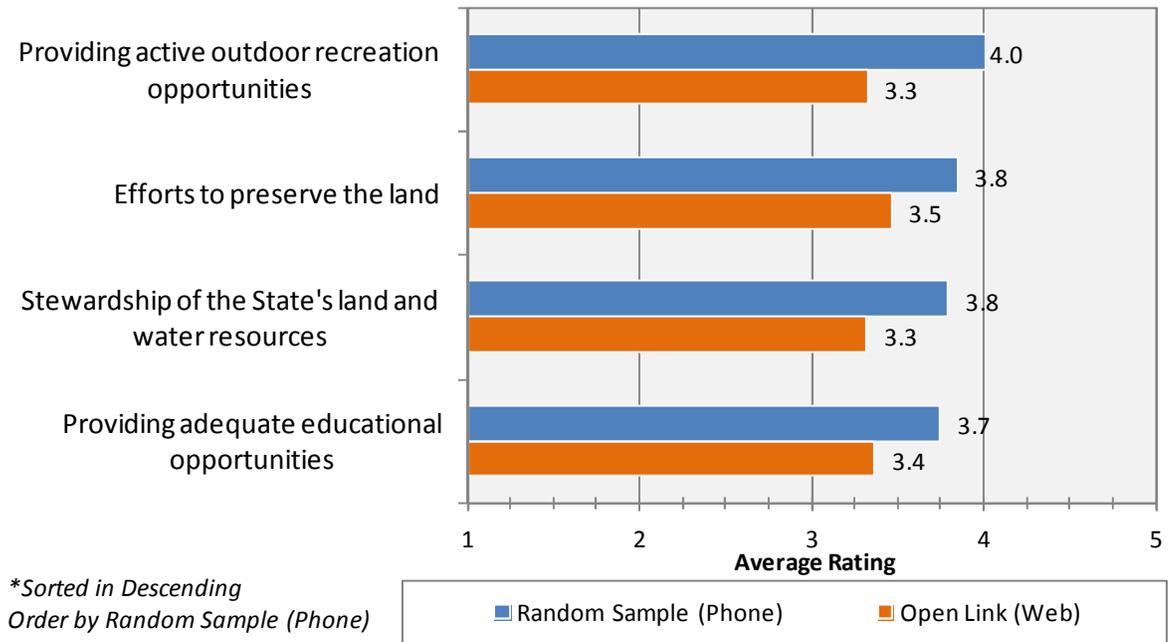
The open link respondents feel that the top three most important benefits of land conservation and outdoor recreation are: connecting people with nature (74 percent), protecting the environment (69 percent), and improving the quality of life (55 percent).

Figure 28
Three Most Important Benefits of Land Conservation and Outdoor Recreation
– Open Link



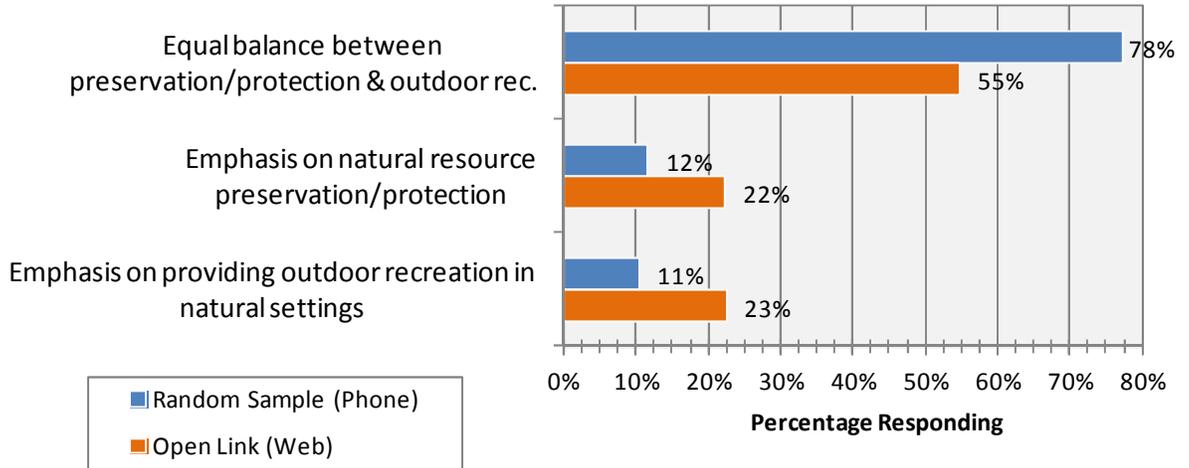
The level of satisfaction with the DNR was lower for the open link respondents than for the random sample respondents. Among open link respondents, the attributes of “efforts to preserve the land” and “providing adequate educational opportunities” received an average rating of 3.5 and 3.4 respectively on a 1-5 scale, where 1=Not at all Satisfied and 5=Extremely Satisfied”. “Stewardship of the State’s land and water resources” and “providing active outdoor recreation opportunities” received an average rating of 3.3.

Figure 29
Level of Satisfaction with the Following Areas of DNR – Average Rating
– Random Sample vs. Open Link



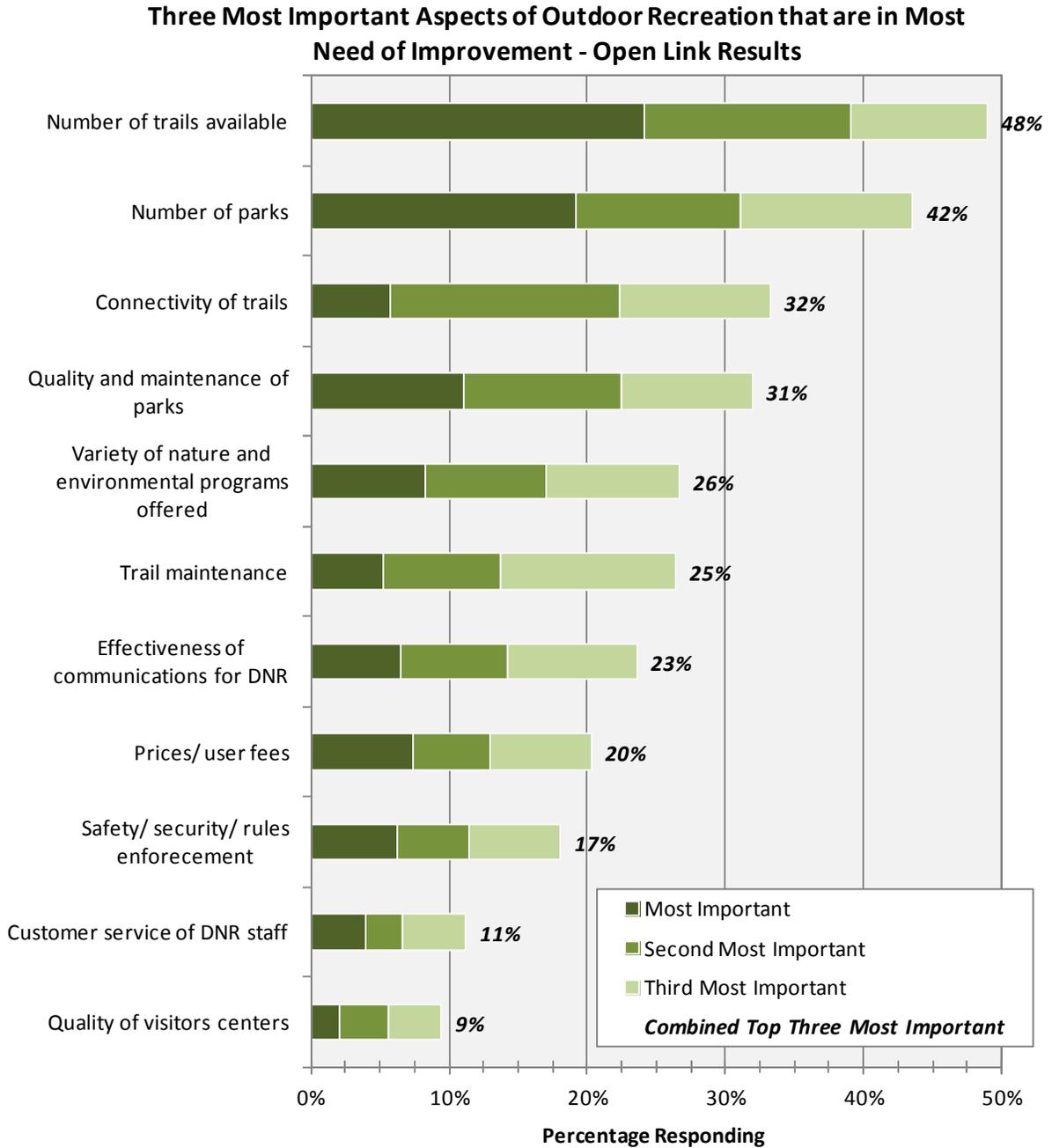
The majority of open link respondents (55 percent) feel that the DNR should pursue an equal balance between natural resource preservation/protection and providing outdoor recreation in natural settings. The remaining respondents are equally split between the two directions (22 percent emphasis on preservation/protection and 23 percent on outdoor recreation).

Figure 30
Emphasis Respondents Would Like to See the DNR to Pursue
– Random Sample vs. Open Link



The open link respondents feel that the top three aspects of outdoor recreation most in need of improvement are: number of trails available (48 percent), number of parks (42 percent) and connectivity of trails (32 percent).

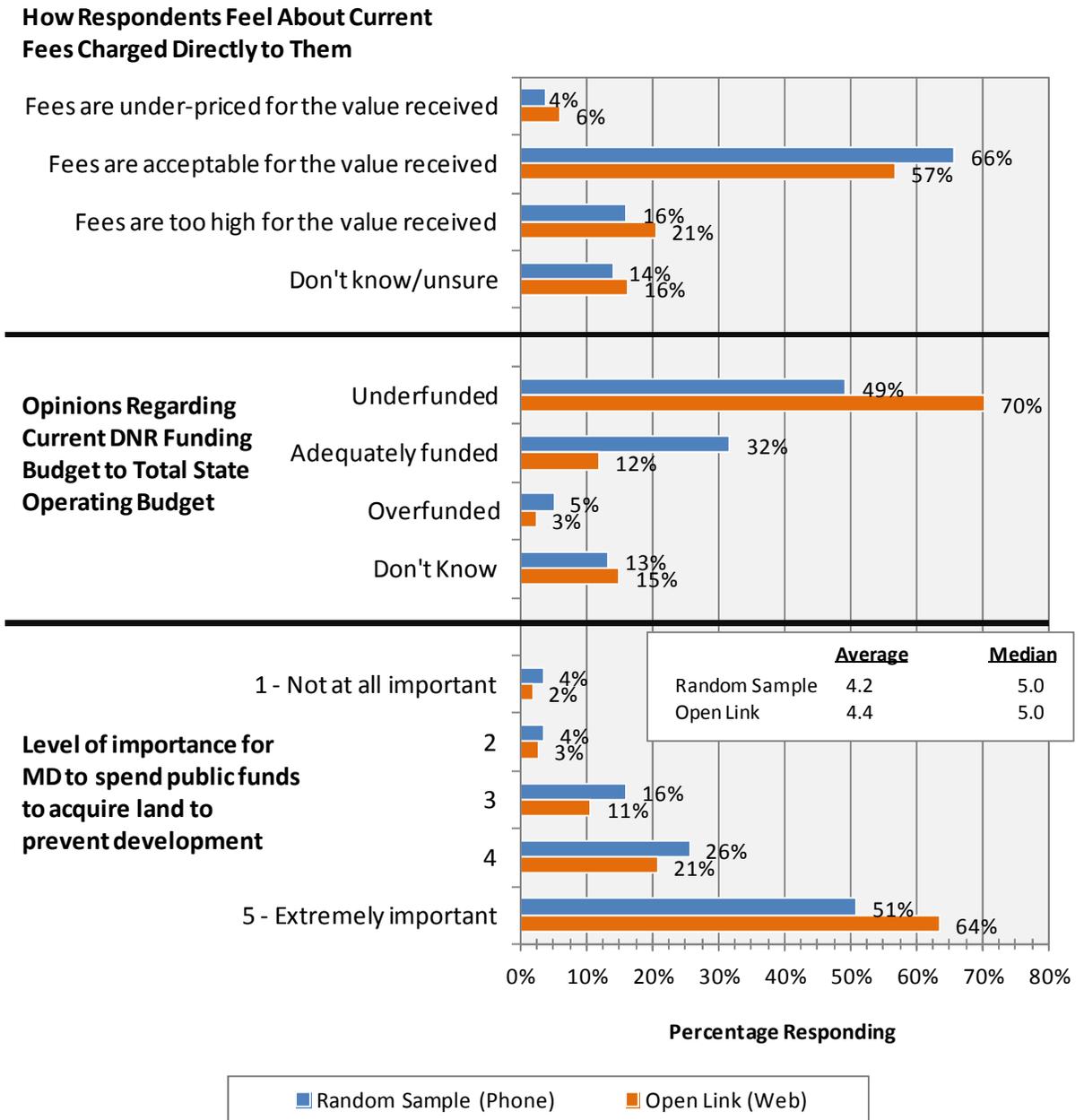
Figure 31
Three Most Important Aspects of Outdoor Recreation that are in Most Need of Improvement – Open Link



Seventy percent of open link respondents feel that the DNR is currently underfunded, while only 3 percent believe it is over funded. However, while the majority of respondents believe that the current fees are acceptable (57 percent) another 21 percent of the open link respondents feel that the current DNR fees are too high for the value received.

Sixty-four percent of the open link respondents to the open link survey also feel that it was “extremely important” for Maryland to spend public funds to acquire land to prevent development.

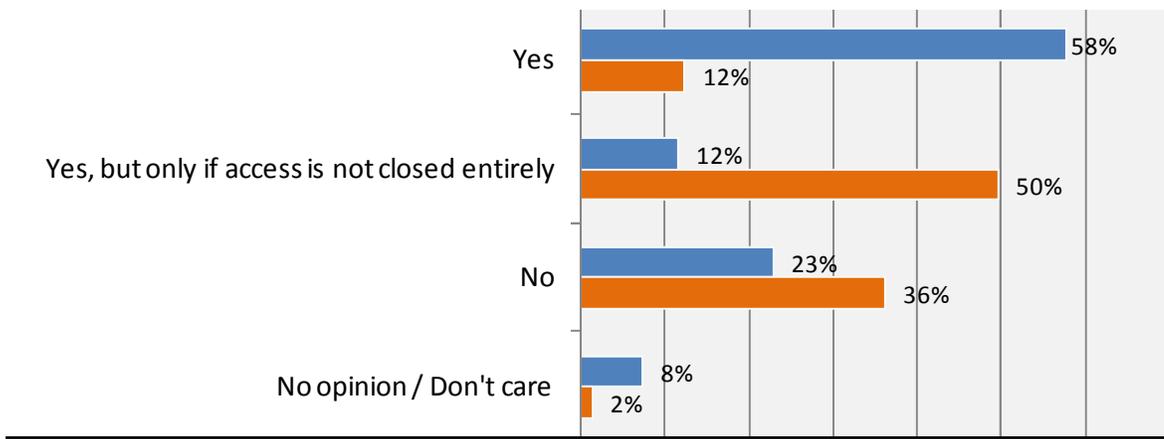
Figure 32
Fees and Funding
– Random Sample vs. Open Link



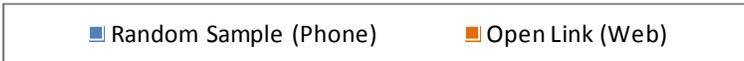
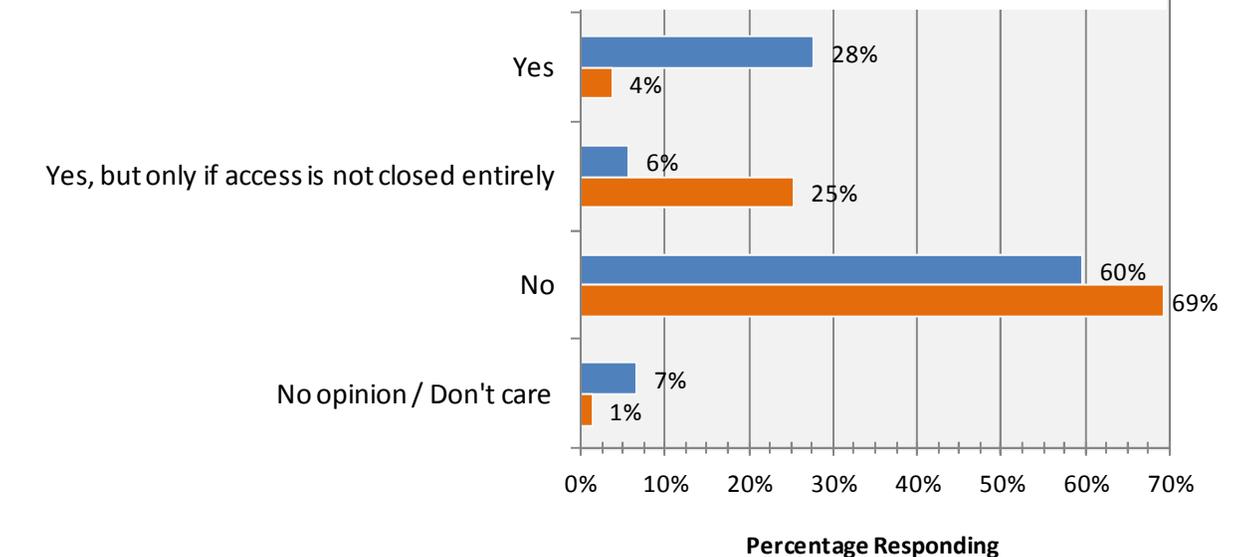
Overall, the respondents to the open link survey are more unfavorable towards allowing energy resources on public lands than respondents to the random sample survey. Thirty-six percent of the open link respondents are unfavorable towards renewable energy resources, while 69 percent are unfavorable towards non-renewable resources. Of those that are favorable towards this issue, the majority prefers the allowance of the resources as long as access to the public lands is not closed entirely (50 percent renewable resources and 25 percent non-renewable resources).

Figure 33
Renewable Energy vs. Non-Renewable Energy
– Random Sample vs. Open Link

Are respondents supportive of allowing renewable energy resources on public lands such as wind farms and solar fields, even if access to some parts are limited?



Are respondents supportive of allowing non-renewable energy resources on public lands such as coal and natural gas, even if access to some parts are limited?



Maryland Land Preservation and Recreation Plan Survey 2013

Resident Name:

Telephone #:

Call Backs 1 2 3

Time of Start __:__

Time of Finish __:__

Length of Interview:

Survey #:

Good (morning, evening), I'm _____ and I'm calling on behalf of the Maryland Department of Natural Resources. We are conducting a brief survey and would like your input to help plan for the land preservation and outdoor recreational needs of Maryland's residents. This is not a sales call. As a thank you for your time, you will be entered, if you wish, in a drawing for one of ten State Park day passes or camping passes.

SCREENER

1. Are you at least 18 years old or older?
 1. Yes (Continue with Q.3)
 2. No (Continue with Q.2)

2. Is there someone at this number who is at least 18 years old?
 1. Yes (Ask to speak with them and Repeat Introduction)
 2. No (Terminate)

3. Are you somewhat familiar with the recreational and leisure interests of the members of your household?
 1. Yes (Continue with Q.4)
 2. No

- 3a. Is there another adult member of the household who is familiar with the recreational interests of the household?
 1. Yes (Continue with Q.4)
 2. No (Terminate)

23. Sex: Do not Ask
 1. Male (N=1,400)
 2. Female (N = 1,400)

38. What county do you live in? (Read list if necessary)

	Quota		Quota
Allegany County	36	Howard County	139
Anne Arundel County	261	Kent County	10
Baltimore City	301	Montgomery County	471
Baltimore County	390	Prince George's County	419
Calvert County	43	Queen Anne's County	23
Caroline County	16	Somerset County	13
Carroll County	81	St. Mary's County	51
Cecil County	49	Talbot County	18
Charles County	71	Washington County	71
Dorchester County	16	Wicomico County	48
Frederick County	113	Worcester County	25
Garrett County	15	Other/DK/NS	TERM
Harford County	119		

4. Do you or members of your household participate in outdoor recreation activities?

1. Yes (Continue with Q. 5)
2. No (Continue with Q. 5)

5. In which of the following activities do you participate?

a. Water Recreation

Boating

1. Motor boating
2. Sailing
3. Paddling (canoeing /kayaking/rafting/stand-up paddleboarding)
4. Swimming outdoors
5. Fishing

b. Trail-based recreation

6. Walking
7. Running/jogging
8. Hiking/backpacking
9. Biking (road) – on a road bike only
10. Mountain biking
11. Horseback riding
12. Off-road vehicle use

c. Park outdoor activities

13. Picnicking
14. Visiting playgrounds
15. Playing outdoor athletic team sports (i.e. soccer, volleyball, etc.)

- d. Winter recreation
 - 16. Cross country skiing/snowshoeing
 - 17. Downhill skiing/snowboarding
 - 18. Snowmobiling
 - 19. Sledding/snow play

- e. Camping
 - 20. RV/trailer camping (with electric/water hookups)
 - 21. Tent camping
 - 22. Camping cabins

- f. Nature/wildlife related recreation
 - 23. Hunting or shooting sports (target shooting, archery)
 - 24. Bird watching / wildlife viewing
 - 25. Visiting natural areas
 - 26. Nature programs / interpretive signage
 - 27. Nature play spaces

- g. Historical and Cultural
 - 28. Visiting a historical site
 - 29. Participating in outdoor special events

 - 30. Other:
 - 99. **(DNR)** Don't Know/Refuse

- 6. In the past year have you participated in outdoor recreation activities at:
 - 1. Local parks (Continue with Q.11)
 - 2. State parks, forests or wildlife areas (If yes continue with Q.7)
 - 3. National parks/Federal Lands (Continue with Q.11)
 - 4. Trails (Continue with Q.11)
 - 5. Private lands or facilities (Continue with Q.11)
 - 6. Other (Specify:_____)
 - 7. **(DNR)** Don't Know/Refuse

- 7. How many times have you or any member of your household visited Maryland State parks or forests in the last 12 months?
 - 1. 1-2 times
 - 2. 3-5 times
 - 3. 6-8 times
 - 4. More than 8 times
 - 5. None
 - 6. **(DNR)** Don't Know/Refuse

8. How did your visitation over the past twelve months compare to your visitation patterns over the past five years? In the past, do you think that you or any member of your household visited Maryland State parks or forests operated by the DNR:
 1. More frequently
 2. Less frequently
 3. With the same frequency
 4. **(DNR)** Don't Know/Refuse

9. In what regions have you visited state parks, forests, wildlife areas or recreational facilities?
 1. Western Region (Includes Allegany, Garrett, and Washington Counties)
 2. Capital Region (Includes Frederick, Montgomery, and Prince George's Counties)
 3. Central Region (Includes Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties as well as Baltimore City)
 4. Eastern Region (Includes Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties)
 5. Southern Region (Includes Calvert, Charles, and St. Mary's Counties)
 6. **(DNR)** Don't Know/Refuse

10. When visiting a state park or forest what is your average travel time from your home?
 1. Under 30 minutes
 2. 30 minutes to 1 hour
 3. Over an hour
 4. **(DNR)** Don't Know/Refuse

11. On a scale of 1 to 5, where 1 means "Not at all important" and 5 means "Extremely important", how important to you and your household is the availability of parks, trails, outdoor recreation facilities and outdoor education programs?
 1. Not at all important
 - 2.
 - 3.
 - 4.
 5. Extremely Important
 6. **(DNR)** Don't Know/Refuse

12. On a scale of 1 to 5, where 1 means "Not at all meeting the needs" and 5 means "Completely meeting the needs", overall, how well do you think the parks, trails, outdoor recreation facilities and outdoor education programs are currently meeting your/your household's needs?
 1. Not at all meeting the needs
 - 2.
 - 3.
 - 4.
 5. Completely meeting the needs
 6. **(DNR)** Don't Know/Refuse

13. On a scale of 1 to 5, where 1 means “Not at all important” and 5 means “Extremely important”, please rate the importance of the following benefits of land conservation and outdoor recreation: [SHUFFLE]

- a. Connecting people with nature
- b. Protecting the environment
- c. Promoting healthy active lifestyles
- d. Preserving cultural and historic resources
- e. Providing an economic benefit to the State
- f. Improving the quality of life

- 1. Not at all important
- 2.
- 3.
- 4.
- 5. Extremely Important
- 6. **(DNR)** Don't Know/Refuse

13g. Are there any other benefits of land conservation and outdoor recreation you would like to mention?

- 1. Specify
- 2. **(DNR)** Don't Know/Refuse

14. Using a scale of 1 to 5 where 1 means “Not at all satisfied” and 5 means “Extremely satisfied”, please rate your satisfaction with the DNR in the following areas:

- a. Efforts to preserve the land
- b. Providing active outdoor recreation opportunities
- c. Providing adequate educational opportunities
- d. Stewardship of the State's land and water resources

- 1. Not at all satisfied
- 2.
- 3.
- 4.
- 5. Extremely satisfied
- 6. **(DNR)** Don't Know/Refuse

15. Which of the following word phrases indicates what emphasis you would like to see the DNR pursue? [SHUFFLE]

- 1. Emphasis on natural resource preservation/protection
- 2. Emphasis on providing outdoor recreation in natural settings
- 3. Equal balance between preservation/protection and outdoor recreation
- 4. **(DNR)** Don't Know/Refuse

16. What are the greatest barriers to your participating more frequently in outdoor activities, if any (Select all that apply):
1. Not aware of program/facilities offered
 2. Size of facilities/amount of space available
 3. Lack of facilities/programs (Specify)
 4. Price/user fees
 5. Transportation/access issues
 6. Condition of parks
 7. Safety and security
 8. Hours of operation
 9. No time/other personal issues/physical limitations
 10. Prefer other recreation providers
 11. Other (Specify):
 12. None
 13. **(DNR)** Don't Know/Refuse
17. How do you feel about the current fees charged directly to you by the DNR:
1. Fees are under-priced for the value received
 2. Fees are acceptable for the value received
 3. Fees are too high for the value received
 4. **(DNR)** Don't Know/Unsure
18. The State of Maryland currently allocates \$229 million for the Department of Natural Resources, which amounts to 0.6% of the state's operating budget. When considering the operations of the DNR do you think the department is:
1. Underfunded
 2. Adequately funded
 3. Overfunded
 4. **(DNR)** Don't Know
19. Using a scale of 1 to 5, where 1 means "Not at all Important" and 5 means "Extremely Important", how important is it to you that the State of Maryland spend public funds to acquire land to prevent the loss of exceptional natural areas to development?
1. Not at all important
 - 2.
 - 3.
 - 4.
 5. Extremely Important
 6. **(DNR)** Don't Know/Refuse
20. Are you supportive of allowing renewable energy resources on public lands such as wind farms and solar fields, even if it closes or limits access to some parts of public lands?
1. Yes
 2. Yes, but only if access is not closed entirely
 3. No
 4. No opinion / Don't care

21. Are you supportive of allowing non-renewable energy resource collection such as coal and natural gas, even if it closes or limits access to some parts of public lands?
1. Yes
 2. Yes, but only if access is not closed entirely
 3. No
 4. No opinion / Don't care
22. Do you have any additional comments or suggestions that you would like to offer regarding land preservation and recreational opportunities provided by the DNR?
1. Specify
 2. **(DNR)** Don't know/Refuse

Just a few more questions about yourself to assist in classifying your responses...

~~23. Please indicate your gender:~~

- ~~a. Male~~
- ~~b. Female~~

24. What is your home zip code? _____ 99999 = Don't know/Refuse
25. In what year were you born? _____ 9999 = Don't know/Refuse
26. Including yourself, how many people live in your household? _____ 99 = Don't Know/Refuse
27. How many members of your household are under age 18? _____ 99 = Don't Know/Refuse
28. How many members of your household are over age 55? _____ 99 = Don't Know/Refuse
29. Do you or any members of your household have any disabilities that would require a need for ADA-accessible facilities or services?
1. Yes
 2. No
 3. Don't know
30. Which of these categories best applies to your household?
1. Single, no children
 2. Couple, no children
 3. Household with children at home
 4. Household with children no longer at home
 5. **(DNR)** Don't Know/Refuse
31. How many years have you lived at your current residence? _____ 99 = Don't Know/Refuse
32. Do you own a second home in the State of Maryland?
1. Yes
 2. No
33. (If Yes to Q. 35) What is your second home zip code? _____ 99999 = Don't know/Refuse

34. Are you of Hispanic, Latino, or Spanish origin?

1. No
2. Yes
3. Refused

35. What race do you consider yourself to be?

1. White
2. Asian, Asian Indian, or Pacific Islander
3. Native American
4. Black or African American
5. Other (Specify)

36. Which of these categories best describes the total gross annual income of your household (before taxes)?

1. Under \$25,000
2. \$25,000 to under \$50,000
3. \$50,000 to under \$75,000
4. \$75,000 to under \$100,000
5. \$100,000 to under \$150,000
6. \$150,000 to under \$200,000
7. \$200,000 to under \$250,000
8. \$250,000 or more
9. Prefer not to answer

37. Would you like to be entered for the drawing to win one of 10 State Park day passes or camping passes?

1. Yes (Verify phone number, collect name, email address)
2. No

Thank you for your time, please feel free to visit www.dnr.state.md.us/land in May 2013 if you would like to review the results of this survey.

Collect first name for verification

Appendix I: LPRP Local Plan Review Checklist

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LPRP LOCAL PLAN REVIEW CHECKLIST/ COMMENT SHEET FOR STATE PLAN

Jurisdiction Name:

Recreation and Parks Chapter	Guidelines Page	Local Plan Page
Identification of State and county goals for recreation and parks	8	III-1-2
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
<p>County goals as referenced in the 2010 Comprehensive Plan:</p> <ul style="list-style-type: none"> • Support concentration of development through investment in and provision of public facilities. • Concentrate development in suitable areas. <p>Supporting objectives and policies for recreation and parks are:</p> <ol style="list-style-type: none"> 1. Create new and enhanced park and recreation facilities that link existing parks and communities, expand recreational opportunities and preserve environmental, aesthetic, and cultural quality. 2. Establish a county-wide system of recreational community facilities (including boat landings, waterfront parks, regional parks, neighborhood parks, and, in high-density areas, children's play lots), which meet year-round recreation desires. Provide additional public open space and recreation lands, particularly active parks, in and near development districts. 3. Accommodate and promote fishing, boating, sailing and other water-oriented recreational activities. Provide adequate public access to the waterfront, rivers, and bays through the purchase and maintenance of public landings as well as developed and natural waterfront parks 4. Acquire additional land to accommodate future facilities 5. Meet the existing and future demands for recreation and parks through state, local, and privately managed facilities 6. Promote quality public events for community enjoyment and tourism. 7. Preserve the County's natural, recreational, historical and cultural heritage in conjunction with economic and social well-being to maintain and enhance quality of life. 8. Maintain a countywide network of open space including large blocks of forest and wetlands. Make use of the greenways and open spaces for passive outdoor recreation and pedestrian connections to enhance quality of life in growth areas. 		
Implementing Programs		
a.) Description of principal implementing programs	8	III-2
b.) Description of how the implementing programs help to achieve the goals for parks and recreation	8	III-6
c.) Description of how goals are consistent with the Strategic Guidelines for Recreation and Parks	8	II-1-2; III-26-27

Reviewer Comments:

- None

Items for use/reference in State Plan:

- The Plan includes four acquisitions of approx. 300 acres. Three of them provide increased water access to the Patuxent River. The plan also includes 10 facility-development projects. Others are on the list but not priorities due to low levels of funding (page ES-1).
- “The St. Mary’s County Board of Commissioners delegates oversight responsibility for planning, developing, and implementing the recreation and parks program to an appointed nine-member Recreation and Parks Board. The County Commissioners retain approval authority for plans and funding recommended by the Recreation and Parks Board” (page III-2).
- Due to the economic downturn, the County’s capital budget has declined from \$2.55 million in FY 2005 to \$800,000 for each of the fiscal years of 2013 through 2017.

Data Elements: Inventory, Supply, and Demand

Supply of Recreational Lands and Facilities

Local inventory of parkland and associated parkland acreage needs analysis using the standard 30 acres per 1,000 population analysis method or approved alternative methodology (Appendix A of the <i>Guidelines</i>)	8	III-8-13
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Reviewer Comments: None

Items for use/reference in State Plan

- Using the 30 acres/1,000 population standard, the County was short of its goal by 875 acres in 2011. “If no more land is acquired and the population increases as projected, the deficit will increase to over 1,700 acres by 2022” (page III-28).
- The County is expected to grow from 105,000 in 2010 to about 141,000 in 2025. The population of senior citizens will expand from 11% of the population in 2010 to 17% in 2025.
- “Between 2006 and 2011 St. Mary’s County made significant progress towards implementing the 2005 LPPRP land and facility recommendations. The recreation inventory increased by over 3,000 acres (20%). Major additions by the county included the Hayden and Fenwick properties and, by the State, Newtowne Neck State Park, St. Inigoes State Forest, and Salem State Forest.... A notable element of the acquisitions was the increase in land available for hunting (from 7,413 acres in 2005 to 9,325 acres in 2011)” (page III-12). However, page II-29 notes that 9,600 acres of State land cannot be counted toward the County acreage goal, and none of the remaining 5,731 acres contribute toward the goal either, because they don’t exceed the 60 acres per 1,000 threshold above which State land can be counted.

Facility Inventory (Appendix B of the <i>Guidelines</i>)*	8	Appendices A and B
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
Analysis of Facility Supply (Appendix B of the <i>Guidelines</i>)	8	Appendix C
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
Analysis of Facility Demand (Appendix B of the <i>Guidelines</i>)	8	Pages III-14-16, Appendix C
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
<ul style="list-style-type: none"> The County supplemented the 2003 State survey for determining baseline demand with an internet survey, which generated 366 detailed responses, and the knowledge and experience of Recreation and Parks staff. 		
Analysis of Facility Needs (Appendix B of the <i>Guidelines</i>)	8	III-16-18
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
15-Year Capital Improvement Program for Land Acquisition, Facility Development, and Rehabilitation Priorities		
Identified for the Short-Term (2012-2016)	8	Table III-10 (page III-19) and pages III-18-25
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
Identified for the Mid-Term (2017-2021)	8	Table III-10 (page III-19) and pages III-18-25
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
Identified for the Long-Term (2022 and beyond)	8	Table III-10 (page III-19) and pages III-18-25
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
<ul style="list-style-type: none"> One ongoing project is the extension of the Three Notch Tail from 7 to 25 miles. Eleven miles are in the 		

capital improvements plan, with the final 9.6 miles among the projects that do not show on the County's priority list through 2022.

* The tables in Appendix B should address athletic fields, baseball diamonds, basketball courts, and tennis courts. In addition to these, the tables should address the top 10 needs identified by the County.

Agriculture Chapter	Guidelines Page	Local Plan Page
Description of progress that has been made toward achievement of the agricultural land preservation goals and objectives identified in the 2009 State LPPRP and the most recently adopted County LPPRP.	3	IV-4
Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for agricultural land preservation programs	3	IV-5-17
<p><u>Reviewer Comments:</u></p> <p>The County's land preservation effort has six components: rural zoning, TDR, easement funding, a growth management policy, a right to farm law, and zoning incentives for new forms of agriculture.</p> <p>Revisions needed to draft plan for agricultural land preservation.</p> <ul style="list-style-type: none"> • St. Mary's County's application to the agricultural certification program described a Priority Preservation Area (PPA) of about 80,000 acres, with 42,000 acres to be protected there in order for the County to meet the 80% protection goal. Page IV-7 of the draft LPPRP says that 78,130 acres need to be protected in the PPA. This discrepancy should be resolved in the final draft. Also, the LPPRP points to the clustering regulations as a means of permanently protecting agricultural land. This is true, but clustering is not a preferred method of land preservation because it puts a subdivision next to each preserved parcel, thereby fragmenting the resource base and introducing suburban neighbors with whom farmers will have to contend. • In referring to children's lots available through the MALPF program, page IV-8 says, "Recently, the Program changed that policy for future easements to limit the number of lots to three, although they are not restricted for use by children of the grantee." Legislation to allow up to three unrestricted lot rights did not pass in 2011, so as of this moment the policy remains up to three family lots (one lot for the personal use of the owner and/or two or three for the personal use of the owner's children) or one unrestricted lot. • On the map on page IV-9, does "All permanently protected lands" refer to "Publicly owned lands"? If so, the later description should be used because it is more precise than the former. • The key for the map on page IV-20 is printed too small to read. 		
<p><u>Items for use/reference in State Plan:</u></p> <p>Comments related to land use and land preservation</p> <ul style="list-style-type: none"> • In 2005, the County reported that, given rates of development and land preservation, it would not be able to meet its 60,000-acre goal by 2022 because there wouldn't be enough undeveloped farmland left. The 2012 draft LPPRP notes that changes to zoning and the TDR program will enable the County to meet its goal. (The graph on page IV-18 doesn't show the point at which the land in farms and land preserved line cross, but the 		

trend through 2020 is definitely much better than it was.)

- 52,745 acres—23% of the County—are in agriculture. Developed land increased from 21% to 29% of the County between 2002 and 2009. This change is not as bad as it appears, however, because low density rural residential is now counted as development, whereas it was often counted as resource land in 2002 (page II-1).
- The 2007 Census of Agriculture counted 68,648 acres of land in farms, up 500 acres from 2002. The number of farms also rose, from 577 to 621, while the average farm size shrank from 118 to 111 acres. Almost 40,000 acres are dedicated to cropland. Sales value is highest for grains, followed by nursery products.
- 113,000 acres were assessed agricultural for tax purposes in 2010. The County identifies 19,076 acres preserved through MALPF, Rural Legacy, MET, MHT, and local TDR. MDP data show about 1,500 acres more.
- The County cites a preservation goal of 60,000 acres countywide; the goal within the Priority Preservation Area is 42,000 acres. The PPA and PPA plan were adopted in 2010. The PPA contains “all unprotected RPD parcels greater than 25 acres as of 2009...with a secondary focus on adjacent parcels 15 to 25 acres” (page IV-23).
- The purpose of the Rural Preservation Zoning District (RPD), in which most of the farms and preserved lands fall, is ‘to foster agricultural, forestry, mineral resource extraction, and aquaculture uses and protect the land base necessary to support these activities’” (page IV-5).
- The County helps finance its land preservation effort through a recordation tax and a fee-in-lieu program that allows a developer to pay 120% of the value of an average TDR (page IV-11) instead of actually going through the process of purchasing one. The County uses the money in the fund for agriculture preservation. (Page IV-14 says the fee is 125%.) However, these funding sources “have been replacing general fund and local transfer tax contributions as well as bond funding rather than bolstering them” (page IV-17).
- Although MALPF is dissolving agricultural districts next year, the County will retain its own five-year districts so that landowners can qualify for a County tax break of “100 percent credit on the County portion of their tax bill for their agriculturally assessed land and for their farm buildings” (page IV-13).
- Base zoning in the 178,000-acre RPD is 1:5. Landowners need to use TDRs beyond the first right, and can use TDRs to achieve a maximum density of 1:3. Major subdivisions (greater than five lots) must cluster development on 50% or less of the site. Lots and roads are sited on the least productive part of the parcel.
- The County limits residential growth to 2% per year, and a maximum of 30% of that may occur in the rural zone.

Comments related to the business of agriculture

- The market value of production in St. Mary’s was \$15.947 million in 2007: up from \$12.196 million in 2002 but below \$20.230 million in 1997, when tobacco still featured prominently. St. Mary’s County was more affected by the tobacco buyout than any other County, with 260 growers taking the buyout and 45,301 acres coming out of tobacco production. The County still lacks the infrastructure or critical mass of farmers to support other types of agriculture (page IV-15). The plan adopted by the Tri-County Council in 2003 supports agricultural development through targeted marketing programs, support for on-farm diversification, and information and education (page IV-16).
- St. Mary’s also participates in the Southern Maryland Agricultural Development Commission, which was established in 2000. SMADC’s program includes grants to farmers for new enterprises; efforts to retain farmers and recruit new farmers; resources, networking, and education/training for farmers; access to fresh and local food; and educating the next generation (pages IV-16-17).
- The County has three farmers markets, with a fourth due to open soon. “The County assisted the Mennonite Community set up a wholesale produce auction that opened in Loveville in April 2005” (page IV-17).
- In 2010 the zoning code was amended to allow wineries, equestrian facilities, and more types of value-added production. A provision to allow distilleries is also being considered.

Agricultural Land Preservation Program, Program Development Strategy

- “Enact a local PDR program to be able to act more quickly and consistently than the MALPF Program. Ramp up spending dramatically at the local level by leveraging funds to buy easements while the land is still available. Consider another dedicated revenue source. Also establish an installment purchase agreements/zero coupon bonds. Direct these funds into the designated preservation area.
 - “Explore the possibility of a local land trust acting as an intermediary with the Amish and Mennonite communities to conserve their lands without government action or participation. Research efforts of the Lancaster Land Trust in Pennsylvania which has been successful in working with these communities
 - “An annual review of development in the Rural Preservation District (RPD) should be conducted and, if the preservation of agriculture and the farmland base is not succeeding, consider additional zoning ordinance revisions to further protect agricultural land and operations in the RPD.
 - “Continue efforts to preserve the farmable land-base in areas outside the agricultural preservation area, especially through the creation of rural legacy areas and other land conservation measures (page IV-23).” [The complication with this strategy is that it could diminish the effort to preserve the PPA.]
 - The state should increase funding for MALPF, as recommended in the “Final Report of the Task Force to Study the Maryland Agricultural Land Preservation Foundation” (January 2005).
 - Speed up the settlement time for MALPF easements. [The LPPRP also recommends an increase in the number of children’s lots allowed. This is unlikely to occur, and is undesirable, in MDP’s opinion.]
 - “Once the County budget situation stabilizes, consider restoring County general fund revenues to the County’s Agricultural and Land Preservation Program to bolster the recordation tax revenues, if revenues from the recordation tax begin to decrease again following their recent increase. Increase the general fund contribution in years of surplus.
 - “Amend the Zoning Ordinance to designate an Agricultural/Cottage industry zone to allow auxiliary commercial enterprises on farms. This zone could be a part of or similar to the floating zone described above under Land Use. This would affirm existing valued elements of the rural economy. These types of businesses are an integral part of the Mennonite and Amish communities, which are, in turn, critical to St. Mary’s County agriculture” (page IV-24).
-
- Landowners are discouraged from selling an easement to the MALPF program because the process can take up to two years. “During that time, land values have increased so rapidly that the landowners’ original offering price is out of step with values ‘on the ground’” (page IV-8). [This is a valid point, though the economic downturn may have reduced its immediacy.]

OPTIONAL: See Guidelines Appendix D for including a more detailed presentation of information on agricultural land preservation

Natural Resources Chapter	Guidelines Page	Local Plan Page
County Goals for Natural Resource Conservation		
What are the County’s goals for Natural resource lands and conservation?	5	V-2/3
<p><u>Reviewer Comments:</u></p> <p>County goals are complementary to State Goals. Good identification of issues that need to be addressed in order to achieve environmental protection.</p>		
<p><u>Items for use/reference in State Plan:</u></p> <p>County natural resource conservation goal from the 2010 Comprehensive Plan: “Maintain a county wide network of open space including large blocks of forest and wetlands. Make use of the greenways and open spaces for passive outdoor recreation and pedestrian connections to enhance quality of life in growth areas.”</p> <p>The County visions for Environmental Protection and Resource Conservation are:</p> <p><u>Environmental protection:</u> 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.</p> <ul style="list-style-type: none"> • Land and natural features important to maintaining the environmental health of the county, which present constraints for development, and which are critical to reducing damage to the Chesapeake Bay, are preserved from disturbance and enhanced to increase the effectiveness of their benefits for erosion control, filtering of sediments and nutrients and provision of essential habitat for wildlife. In return, citizens receive benefits of reduced construction costs, minimization of erosion and flood events, improved water quality for drinking and recreation, and increased property values from a more scenic living environment. <p><u>Resource conservation:</u> waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved.</p> <ul style="list-style-type: none"> • Farms and forest resources are preserved from urban or suburban encroachment and the rural character and attributes of the county are maintained and enhanced. Landowner equity and property values have been enhanced by an active program of purchase and transfer of development rights. • Protection of the rural countryside and traditional economies and activities -- fishing, farming, forestry -- are recognized as important components of the community and rural character. This rural character is worth maintaining not only for its scenic beauty, but because of its attraction as a setting for technology and service industries which are logically concentrated near the Patuxent River Naval Air Station. • A coordinated cross-county network of greenways and scenic easements is established and waterfront access is enhanced to provide for passive and active recreation and an enhanced natural environment. • Large contiguous tracts of sensitive areas are outside of designated growth areas and zoned for rural or resource protection. Specifically, the McIntosh Run natural heritage area is excluded from the Leonardtown development district, and the St. Mary's watershed natural area and lands westward thereof are excluded from the Lexington Park development district. • Over 107,000 acres—47% of the County—were forested in 2007 (page II-1). • The county has established a goal to retain St. Mary’s County’s rural character in the 80% of the county land area designated as rural. 		

- St. Mary’s plan has a new focus for natural resource conservation by recognizing the important role conservation plays for the successful development and implementation of its Phase II Watershed Implementation Plan. The county recognizes that the most cost effective means to meet the TMDL and to prevent future water quality degradation is by conserving the natural filters that reduce pollution, such as forests, floodplains and wetlands, and by responsibly managing development.
- Identification and protection of sensitive areas are consistent with natural resource priorities identified in Maryland GreenPrint.
- The plan identifies several issues that need to be address to achieve environmental protection and natural resource conservation 1) continue to evaluate and adjust the Annual Growth Policy (AGP) which controls the annual percentage of new dwelling units in the Rural Preservation Zoning District in order to discourage further development of rural areas, 2) pursue acquisition of environmentally sensitive areas and properties that could then be used for passive recreational activities, 3) continue to identify and protect sensitive areas, 4) encourage consideration of hazard mitigation in early stages of development, 5) use full suite of regulatory programs, tax and funding incentive programs, TDR and installment purchase agreements, and planning programs to achieve natural resource goals, 6) improve understanding of watershed resources and impacts related to activities of those who live, work and recreate in the watershed, 7) continue to develop ordinances and programs to effectively protect sensitive areas, set and measure progress for preservation goals, set limits on allowable loss of resources and assure mitigation for impacts is the responsibility and duty of those who benefit from the impact.

Local Priorities for Natural Lands and Resources

a.) Has the County established a priority preservation and conservation area for natural resources in its comp. plan?	5	V-9
b.) If so, do the boundaries of these areas differ from DNR’s GreenPrint lands? Why? Please provide a map if possible	5	Need to compare with GreenPrint TEAs – good comparison with Green Infrastructure
c.) What are the principle implementing ordinances and programs to achieve County goals for conserving natural lands and resources?	5	V-4, Table V-2
d.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have been implemented.	5	V-20
e.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have NOT been implemented.	5	V-16-19 Good discussion of strengths and weaknesses
f.) Summary of changes (if any) in the County’s intentions to conserve natural resources and priority land.	5	
g.) Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for natural resource land conservation	5	V-4/5

Reviewer Comments:

- Impressive goal for rural land conservation of 80%. Excellent integration of green infrastructure and other county and state-based resource assessments into natural resource planning, regulatory and policy procedures. This plan is a good model for other counties and demonstrates how natural resource conservation can be accomplished through a variety of approaches including planning, regulation, TDRs, acquisition/easement and collaborative partnerships.
- The LPPRP guidelines ask that the county compare its goals and designated areas for natural resource conservation with the State's GreenPrint conservation priorities. County designated areas should be compared with areas identified as "Targeted Ecological Areas" through Maryland's GreenPrint program. GreenPrint Targeted Ecological Areas are preferred for Stateside Program Open Space funding based on their high ecological value.
 1. Interactive and static maps are available at: <http://www.greenprint.maryland.gov/>. A GreenPrint map for Saint Mary's County has been provided, but may not reflect the most current status of protected lands.
 2. GIS data for Targeted Ecological Areas can be downloaded from the DNR Data Download site found at: <http://dnrweb.dnr.state.md.us/gis/data/>
 3. Access the "Targeted Ecological Areas" shapefile under the "Focal Areas" folder.
- Please change the reference to Greenprint as a land conservation program (page V-18). That funding source has been discontinued, and land conservation funding comes from Stateside Program Open Space.

Items for use/reference in State Plan:

- The county has set an impressive goal for rural resource conservation which constitutes 80% of the land area in the county. Concerted efforts are being taken to focus growth into the remaining 20% of the county. Implementation strategy is multi-faceted and comprehensive and is a good model for other Maryland counties. Strategy elements include 1) Comprehensive Planning Context, 2) Use of resource data and inventories, 3) Designated conservation and other natural resource areas, 4) Planning, land use management authority, easements and funding
- St. Mary's County's designated conservation areas are the Huntersville Rural Legacy Area, the Mattapanay Rural Legacy Area, the St. Mary's River Wildland, and the Chesapeake Bay Critical Area and a Natural Resources Focus Area (initially proposed in the 2005 LPPRP and adopted in the 2010 Comprehensive Plan). The Natural Resources Focus Area links the St Mary's River Wildland and State Park to the Huntersville Rural Legacy Area and encompasses large portions of the McIntosh Run subwatershed (which is noted as habitat for a number of rare, threatened and one federally endangered species and is one of the most heavily forested watershed in Southern Maryland).
- Implementing Ordinances/Programs: Critical Area Program, forest conservation regulations, stormwater regulations, requirements for open space conservation and clustering etc.), tax and funding incentive programs (Agricultural Districts, Maryland Agricultural Land Preservation Foundation Easements, a transfer of development rights program, installment purchase agreements, etc), and planning programs (Wicomico Scenic River Management Plan, Tributary Strategies for the Patuxent and Lower Potomac Rivers, Breton Bay and St. Mary's Watershed Restoration Action Strategy.
- The county has met its 2005 goal of expanding the Huntersville RLA and has added the Mattapanay RLA. They have expressed an interest to expand Huntersville RLA and integrate Phase II WIP planning.
- In 2007 the County made significant changes to the TDR provisions, including eliminating the requirement to deduct acreage for sensitive natural resource lands from the TDR calculations. This resulted in TDRs being lifted from a number of environmentally constrained grandfathered lots.

Recreation and Parks Chapter	Guide- lines Page	Local Plan Page
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- Feedback mechanisms in the RLA review process need improvement in order that local applicants (land trusts and the County) get direction regarding the status of applications. Prompt feedback is important so that the local community can use its resources to respond to evolving opportunities.
 - Local funds for land preservation increased in 1999 and more dramatically in 2001 when the County dedicated a portion of its increased recordation tax to conserve and protect rural lands.
 - There are also weaknesses in the County’s ability to protect portions of green infrastructure using its planning authority. In the zoning and subdivision regulations, the County has linked protection of sensitive habitats, such as forest interior dwelling species (FIDS) habitat to green infrastructure, but the requirements are only one of several ways an applicant may meet the plan approval requirements. Green infrastructure needs to be better integrated into County laws and regulations, thereby giving staff more authority to work with site designers and engineers to integrate green infrastructure into subdivision and site plans.
 - Environmental review needs to occur earlier in the plan review process before development applications advance beyond a point of accommodating reasonable changes.
- Requested State Actions:
- Restore and increase State funding for natural resource conservation, in particular continue to fund acquisitions during period of reduced land prices such as has occurred in the past several years.
 - Assist the County in developing measurable natural resource planning objectives as part of the development of Phase II Watershed Implementation Plans.
 - Streamline the easement acquisition and Rural Legacy application process to make it more responsive to County and land trust needs.
 - Increase access to the state’s RTES inventory to improve and flag development sites for RTES habitat review.
 - Increase the number of MDE inspectors for sediment and erosion control inspections and compliance.

Data Sharing

Date that last County Preserved Lands GIS data layer was received by MDP	5	Oct. 2011
GIS maps of County Lands targeted for natural resource conservation received?	5	

Reviewer Comments:
Please review the Guidelines pages 5 and 6 for more information on data sharing.

Items for use/reference in State Plan:

LPRP LOCAL PLAN REVIEW CHECKLIST/ COMMENT SHEET FOR STATE PLAN

Jurisdiction Name: Caroline County

Identification of State and county goals for recreation and parks	8	III-1 thru III-3
<p><i>Reviewer Comments:</i></p> <ul style="list-style-type: none"> Chapter I (Introduction) mentions the Eight Visions of the Planning Act. Please note that the Visions were updated to 12 in 2009. See http://plan.maryland.gov/whatIsIt/12visions.shtml 		
<p><i>Items for use/reference in State Plan:</i></p> <ul style="list-style-type: none"> The plan recommends acquisition of 144 acres (the needs-based goal is 96). An acquisition of 75 acres would be for a new regional park in North County, the remainder for a community park near Denton, two community centers, a dredge disposal site, and a trail system to link State parks with towns (LPPRP executive summary). In addition to maintaining a professional parks and recreation department, the County has also established and wants to strengthen partnerships with the public schools, volunteers, nonprofit organizations, churches, and other recreation providers. 		
Implementing Programs	Guide- lines Page	Local Plan Page
a.) Description of principal implementing programs	8	III-4-6
b.) Description of how the implementing programs help to achieve the goals for parks and recreation	8	Table VII-1
c.) Description of how goals are consistent with the Strategic Guidelines for Recreation and Parks	8	III4-6
<p><i>Reviewer Comments:</i></p> <p>Trails comments:</p> <ul style="list-style-type: none"> There should be some reference to the plans for operation & maintenance of the existing and proposed trails. Locating, constructing and maintaining <u>sustainable</u> trails should be spelled out as a key priority. There is only mention of trails in the south part of the county, but not the north, and the only trail specific enhancements listed seem to be trails through state or private lands. They mention 58 miles of trails throughout the county, but the only trail that is listed is the rail trail in Ridgely. There should be an overall trails map included in the LPPRP. There is no mention of how the county trail system will connect to trails in adjoining counties. They plan states that, "Consideration should be given to trail development in and around the towns where most of the parks and recreation facilities are and will be located." Have any specific trails been pinpointed? 		
<p><i>Items for use/reference in State Plan:</i></p> <ul style="list-style-type: none"> 40% of County recreation land lies within the towns, which do most of the maintenance on them.. “General fund ‘pay-go’ appropriations for capital improvements at existing or new park facilities have been zero since FY2010” (page III-6). 		

Data Elements: Inventory, Supply, and Demand		
Supply of Recreational Lands and Facilities		
Local inventory of parkland and associated parkland acreage needs analysis using the standard 30 acres per 1,000 population analysis method or approved alternative methodology (Appendix A of the <i>Guidelines</i>)	8	III-23
<p><u>Reviewer Comments:</u></p> <ul style="list-style-type: none"> The MEIRS system is currently inactive, so further updates are not necessary. Facility inventory and GIS data should be sent to DNR & MDP. Please identify the towns shown on the enlarged map areas in Figure III-1A. 		
<p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> Deficit as of 2010 20 acres of recreation land; based upon projected growth and no land acquisitions the deficit of recreation land would increase to 96 acres by 2025. Based upon <u>C. County and Town Priorities</u> includes an aggressive acquisition program of approximately 144 acres towards the needs-based goal. The program allows for some of the separate facility needs being accommodated on the same site, thereby requiring less land than if each facility were on a standalone site. 		
Facility Inventory (Appendix B of the <i>Guidelines</i>)*	8	III7-11
<p><u>Reviewer Comments:</u></p> <p>p.ES-1 (and with more details in Table III-2, p.III-7): It appears the number of acres of recreation land in the County seemed to have decreased? In 2006, they reported 4,696 acres total; 466 acres County; 3,023 acres State; and 1,207 acres other; however, in this report, they reported 2,541 acres total; 456 acres County; 1,330 acres State; and 755 acres other. The report does discuss a loss of resource lands but it's not entirely clear why there is such a difference in recreation land. It would be good to know if this is due to recharacterization or loss thru disposal, etc.</p>		
<p><u>Items for use/reference in State Plan:</u></p> <p>“Under the County’s subdivision regulations...certain subdivisions must provide recreational or open space area in the subdivision. The Planning Commission may require the dedication or reservation of a reasonable recreation or open space area beyond the minimum requirements based on the character of the site, surrounding area, or the nature of the proposed development.... The regulations have not resulted in significant contributions to public recreation in the County” (page III-19). A fee-in-lieu option is also available.</p>		
Analysis of Facility Supply (Appendix B of the <i>Guidelines</i>)	8	III7-11
<p><u>Reviewer Comments:</u></p> <p>Table III-1 (p.III-6): In terms of the POS apportionment figures, it looks like the County used the amounts net of the 2011 budget adjustments. If so, the 2006 and 2007 figures should be \$212,378 and \$554,796, respectively, with a total figure being \$1,544,228. Alternatively, the County may consider just using the gross apportionments for each year and not factor in the budget decrease and subsequent payback numbers.</p>		
<p><u>Items for use/reference in State Plan:</u></p>		
Analysis of Facility Demand (Appendix B of the <i>Guidelines</i>)	8	III11-12

<u>Reviewer Comments:</u> None		
<u>Items for use/reference in State Plan:</u> The over-65 population is expected to increase by 4,000 from 2010 to 2030, or from 14% of County population to 20%. This virtually mirrors what is projected for Maryland as a whole.		
Analysis of Facility Needs (Appendix B of the <i>Guidelines</i>)	8	III-12
<u>Reviewer Comments:</u> <ul style="list-style-type: none"> • Primary deficits (existing or extensive in the future) include Multipurpose fields for team sports, indoor fitness facilities, baseball/softball diamonds, and trails. • Secondary deficits (longer-term or lower-magnitude) are fishing, swimming, and skate parks. 		
15-Year Capital Improvement Program for Land Acquisition, Facility Development, and Rehabilitation Priorities	Guide- lines Page	Local Plan Page
Identified for the Short-Term (2012-2016)	8	III13-19
<u>Reviewer Comments:</u> None		
<u>Items for use/reference in State Plan:</u> <ul style="list-style-type: none"> • For the short-term, the county estimates \$689,000 for land acquisition, \$705,000 for Capital Development, and \$350,000 for Facility Rehab 		
Identified for the Mid-Term (2017-2021)	8	III13-19
<u>Reviewer Comments:</u> None		
<u>Items for use/reference in State Plan:</u> For the mid-term, the county estimates \$370,000 for land acquisition, \$2,285,000 for Capital Development, and \$630,000 for Facility Rehab.		
Identified for the Long-Term (2022 and beyond)	8	III13-19
<u>Reviewer Comments:</u> None		
<u>Items for use/reference in State Plan:</u> <ul style="list-style-type: none"> • For the long-term, the county estimates \$250,000 for land acquisition, \$8,023,000 for Capital Development, and \$1,030,000 for Facility Rehab. • In addition to 144 acres of recreation land, the County needs include the following: <ul style="list-style-type: none"> ■ Two regional parks ■ Multiple community and neighborhood parks ■ School recreation park improvement program ■ Three to four indoor fitness and community centers ■ New water access points and rehabilitation of existing [sic] New trail development and existing trail enhancement.		

* The tables in Appendix b should address athletic fields, baseball diamonds, basketball courts, and tennis courts. In addition to these, the tables should address the top 10 needs identified by the County.

Agriculture Chapter	Guide- lines Page	Local Plan Page
Description of progress that has been made toward achievement of the agricultural land preservation goals and objectives identified in the 2009 State LPPRP and the most recently adopted County LPPRP.	3	Ch. 4
Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for agricultural land preservation programs	3	Exec. Sum
<p><i>Reviewer Comments</i></p> <ul style="list-style-type: none"> • Figure IV-2—the map following page IV-5—shows polygons identified as “TDR Sending” (yellow) and TDR “Sending/Ag Pres District.” Does this mean that the parcels have been preserved by TDR? Acres preserved by TDR are not accounted for in Table IV-2 on page IV-5, but page IV-11 says that 3,500 acres have been preserved by TDR. • What does the County rezoning entail and how does it improve upon or complement the rural zoning now in place? • The County says that it can save 135,000 acres by 2040 but the 2007 Census of Agriculture already shows less than that in land in farms. Will the other acreage consist of forests, wetlands, and other resource land? 		
<p><i>Items for use/reference in State Plan:</i></p> <ul style="list-style-type: none"> • Over 65% of the County’s land lies in farms. The 2007 Census of Agriculture counted 131,277 acres on 574 farms. The acreage figure was up 18% from 2002. The number of farms increased by 68. • The County reports 40,499 agricultural acres under easement to date. [MDP’s total for land under easement of all types is over 45,000.] Another 9,500 acres are protected as recreation or conservation lands, bringing the preservation total to approximately 50,000. [MDP’s data show about 53,000 acres total.] • “With the help of the County’s Rural Zoning and TDR Program, the current rate of preservation could be increased to 3,000 acres annually, meaning the County would reach its aggressive 135,000 acre preservation goal before 2040” (LPPRP executive summary). • Recommendations for land preservation in the comprehensive plan include: <ul style="list-style-type: none"> ■ Comprehensive rezoning for the county. ■ TDR/PDR program refinements, including the following: <ul style="list-style-type: none"> ✓ Design standards in TDR receiving areas; ✓ Wastewater treatment for new development; and ✓ Review of receiving area locations and regulations. ■ Targeting properties in the County’s Priority Preservation Area (PPA) for preservation. ■ Proposal for low impact development regulations (including setbacks, buffers, and other standards for uses in rural zones). ■ County and municipal inter-governmental agreements. ■ Review Adequate Public Facilities Ordinance. • County funds include a local agricultural excise tax. Currently at \$750, the LPPRP recommends that the County “investigate the potential” to increase it to \$5,000 (page IV-16). • From 1997 through 2010, resource land cover in Caroline County declined by 10,837 acres or 6%. • Although 63% of Caroline’s 33,006 residents live in the unincorporated area, the population increase in towns 		

from 2000-2010 was 2,824 while the increase in the unincorporated area was just 870. These number show that recent development was channeled into growth areas.

- Caroline is the only County that appears to be making progress on interjurisdictional TDRs. The towns and the County agree in concept but they have not signed formal agreements.
- All municipal plans were updated in 2009 except for Federalsburg (2007) and Preston (2005). The County updated its comprehensive plan in 2010.

- Poultry is the leading agricultural product in Caroline: \$126.7 million in 2007. Crops, including nursery and greenhouse, totaled \$49 million in sales.
- Acreage in vegetables increased between 2002 and 2007, and accounted for \$6.9 million in sales.
- In 2002, Caroline joined five of her neighboring Counties in signing the Eastern Shore Land Conservancy's land use agreement called *Eastern Shore 2010: A Regional Vision*. The goals include preserving 50% of land outside growth areas by 2010 and sending at least 50% of new development into locally-designated growth areas.
- Priority for easement acquisition is given to lands that can form a greenbelt around town growth areas.
- Major subdivisions are not allowed in the R zone except in designated TDR receiving zones. TDRs have preserved 3,500 acres.
- The County adopted a right-to-farm ordinance in 1997.
- The County does not have its own agricultural marketing specialist.
- Though a small County, Caroline contributed \$1 million in general funds for land preservation in each of the Fiscal Years from 2006 through 2008

Natural Resources Chapter	Guide- lines Page	Local Plan Page
County Goals for Natural Resource Conservation		
What are the County's goals for Natural resource lands and conservation?	5	V-2
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i> Caroline County increased its conservation goal from 100,000 acres to 135,000 acres.		
Local Priorities for Natural Lands and Resources		
a.) Has the County established a priority preservation and conservation area for natural resources in its comp. plan?	5	V-3 Marshyhope and Tuckahoe Rural Legacy Areas, Critical Area, Priority Preservation Area
b.) If so, do the boundaries of these areas differ from DNR's GreenPrint lands? Why? Please provide a map if possible	5	V-4 and Figure V-1 Comparison not completed

c.) What are the principle implementing ordinances and programs to achieve County goals for conserving natural lands and resources?	5	V-6,7
d.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have been implemented.	5	
e.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have NOT been implemented.	5	
f.) Summary of changes (if any) in the County’s intentions to conserve natural resources and priority land.	5	V-7, 8
g.) Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for natural resource land conservation	5	V-8 to V10

Reviewer Comments:

- The report is well constructed and there are general discussions as to accomplishments since the last report, but no direct itemized comparison of goals and strategies implemented.
- Many natural resource values can be protected through agricultural land preservation programs and fall within the areas identified for rural land preservation such as the Priority Preservation Area. There are many opportunities to enhance natural resource protection through agricultural land management plans and cooperative agreements with land owners.
- Geographic preservation priorities should be identified on a map – this would include the two Rural Legacy Areas, Critical Area and Priority Preservation Areas. Overlap with GreenPrint land conservation priorities should be evaluated to further natural resource conservation strategies. It is unclear where the Priority Preservation Area is – can a map be provided?
- Updated natural resource inventory data is available through DNR. This includes updates to existing data and new resource assessment data for coastal ecosystems, fisheries and streams. Please contact DNR (Christine Conn at cconn@dnr.state.md.us) for assistance in accessing this data.
- Page V-9 suggests focusing on ecologically rich watersheds. DNR’s GreenPrint assessment identifies specific ecologically important resources from a statewide perspective that would be good candidates.
- The LPPRP guidelines ask that the county compare its goals and designated areas for natural resource conservation with the State’s GreenPrint conservation priorities. This may have been confused with a comparison with State Green Infrastructure maps. GreenPrint and Green Infrastructure are related but represent separate resource designations. County designated areas should be compared with areas identified as “Targeted Ecological Areas” through Maryland’s GreenPrint program. GreenPrint Targeted Ecological Areas are preferred for Stateside Program Open Space funding based on their high ecological value and include high priority green infrastructure hubs, biodiversity hotspots and other high priority natural resource values. The State will soon release the next version of the GreenPrint map which shows updated Targeted Ecological Areas. Access to this information will be provided to the counties shortly. In the meantime, the county can evaluate the first GreenPrint TEA version using the information provided below.

4. Interactive and static maps are available at: <http://www.greenprint.maryland.gov/>. A

<p>GreenPrint map for Saint Mary’s County has been provided, but may not reflect the most current status of protected lands.</p> <p>5. GIS data for Targeted Ecological Areas can be downloaded from the DNR Data Download site found at: http://dnrweb.dnr.state.md.us/gis/data/</p> <p>6. Access the “Targeted Ecological Areas” shapefile under the “Focal Areas” folder.</p>		
<p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> • 1:20 protective zoning throughout most of county except for designated growth areas is impressive and shows a strong commitment to rural land preservation. • County recognizes that agricultural and forested lands are intermingled and that plans for the preservation of these lands and the rural economy that they support need to be integrated and complementary. • Plan points out potential for regional rural land conservation strategies with Delaware, referencing the Delaware Conservation Corridor concept. • Overall, the plan seems to cover the bases in terms of considering natural resource conservation and it’s a good sign that they increased their own conservation goal by 30,000 acres. The current zoning of 1-20 is good and they claim that they are re-zoning now in part to try and strengthen their TDR program. That is a good thing if it works out. They recognize the landscape value of trying to plan in the context of the GI which is good as well. 		
<p>Data Sharing</p>		
Date that last County Preserved Lands GIS data layer was received by MDP	5	
GIS maps of County Lands targeted for natural resource conservation received by MDP?	5	
<p><u>Reviewer Comments:</u> Please refer to pages 5 & 6 of the Guidelines regarding data sharing.</p>		
<p><u>Items for use/reference in State Plan:</u></p>		

LLPRP LOCAL PLAN REVIEW CHECKLIST/ COMMENT SHEET FOR STATE PLAN

Jurisdiction Name: FREDERICK COUNTY

Recreation and Parks Chapter	Guide- lines Page	Local Plan Page
Identification of State and county goals for recreation and parks	8	7, 8, 14 and 22
<p><u>Reviewer Comments:</u></p> <ul style="list-style-type: none"> • Laid out well and easily understandable. • SC-P-20 should mention the “Children in Nature” connection. • Has the TEP funding mentioned on page 24 resulted in any projects? 		
<p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> • Frederick County will be adopting the Land Preservation, Parks and Recreation Plan as a stand-alone functional plan to supplement their 2010 County Comprehensive Plan. • School sites and existing school facilities are periodically used as park and recreational spaces by way of a cooperative agreement between the county government and the Board of Education. • With the recent adoption of the 2010 County Comprehensive Plan the County will be implementing a new planning process. Rather than having a separate countywide plan, which was primarily a policy document, and eight individual regional plans, the 2010 County plan provides the goal and policy direction as well as the detailed land use plan for the entire county. • Three major water features (Lake Linganore, the Monocacy River, and Potomac River) are cited as being either a recreational resource and a drinking water source or a recreational resource for a surrounding vacation home community. • A map has been attached to: (1) highlight the community growth areas; (2) differentiate the municipal growth areas from the unincorporated growth areas; (3) and show the connection between the community growth areas, priority preservation areas, and the green infrastructure. • Under the State standard the county exceeds the 30 acres/ per 1,000 population. Using the County’s standard of 25 acres/1000 population, which focuses only on locally owned, municipal, and county parkland, the eligible parkland would be 19.7 acres/ 1,000 population. • In the six-year Capital Improvements Plan (FYs 2012-2017), most County funding for acquiring parkland and developing new facilities comes from local sources: County Recordation Tax (45.9%), Recordation Tax Bonds (17.7%), and General Obligation Bonds (29.5%). <p>The following goals for parks and recreation come from the 2010 comprehensive plan:</p> <ul style="list-style-type: none"> • Provide for community services and facilities in an efficient and timely manner relative to the pace of growth. • Maintain adequacy of public facilities and services relative to existing and projected targeted populations. 		

- Locate community services and facilities that maximize accessibility via transit, bicycle, and pedestrian modes of transportation.
- To the extent feasible, distribute public facilities and services throughout the County on a local, regional, or centralized basis.
- Ensure that County facilities serve all County residents equally by employing Americans with Disabilities Act (ADA) standards.
- Develop the County’s park system with a balance of active parks that focus on a variety of recreational uses and passive parks that focus on less intensive uses such as trails, picnicking, historic preservation or natural resource protection.
- County parkland acquisition is guided by the following thresholds:
 - Neighborhood parks: 5-acres/1,000 population
 - Community parks: 10-acres/1,000 population
 - Regional parks: 10-acres/1,000 population
- Consider stream corridors within community growth areas for development as public linear parks to allow for greenway/trail linkages both within and between community growth areas.
- Development of parks in a manner that is sensitive to and protective of natural resource and environmentally sensitive features.
- Coordinate with the municipalities in the provision of park and recreation facilities.
- Develop parks in a manner that prioritizes the preservation of archaeological and historic sites and structures.
- Integrate community parks into community growth areas to maximize bicycle and pedestrian access, and enhance community identity.
- Prioritize funding to accommodate land acquisition for land banking of new sites, and for the expansion of existing parks.
- The park/school concept shall be given high priority in order to more efficiently meet local park and recreational needs. Joint use agreements between the Parks and Recreation Commission and the Board of Education and municipal officials (where appropriate) should continue to be established and refined to make all County schools available for recreational use.
- Promote the development and operation of revenue producing facilities.

Implementing Programs

a.) Description of principal implementing programs	8	7
b.) Description of how the implementing programs help to achieve the goals for parks and recreation	8	8
c.) Description of how goals are consistent with the Strategic Guidelines for Recreation and Parks	8	9

Reviewer Comments:

- What are the trail goals for the next 5 years? What relationship does the Trails Plan have to the LPPRP? We would like a copy of the trails plan, and a copy of the proposed network map would be helpful in the LPPRP.

<u>Items for use/reference in State Plan:</u>		
Data Elements: Inventory, Supply, and Demand		
Supply of Recreational Lands and Facilities		
Local inventory of parkland and associated parkland acreage needs analysis using the standard 30 acres per 1,000 population analysis method or approved alternative methodology (Appendix A of the <i>Guidelines</i>)	8	27 and 28
<u>Reviewer Comments:</u>		
<ul style="list-style-type: none"> How did the county determine the 25 per 1,000 acre locally adopted acreage standard? Why is state land not included? 		
<u>Items for use/reference in State Plan:</u>		
<ul style="list-style-type: none"> Since 2005 an additional 1,020 acres of public parkland has been acquired by the County, State, and municipal governments and school system. 		
Facility Inventory (Appendix B of the <i>Guidelines</i>)*	8	26, 29, 30 and Appendix D
<u>Reviewer Comments:</u>		
<ul style="list-style-type: none"> It appears that either a few of the pages in Appendix D are not numbered correctly or some of the pages are missing. 		
<u>Items for use/reference in State Plan:</u>		
Analysis of Facility Supply (Appendix B of the <i>Guidelines</i>)	8	26, 27 and 28
<u>Reviewer Comments:</u>		
<ul style="list-style-type: none"> None 		
<u>Items for use/reference in State Plan:</u>		
<ul style="list-style-type: none"> The County has adopted its own adequacy standard for park land to ensure that it can provide an ample amount of local park acreage and recreational facilities to meet the needs of residents and visitors. 		
Analysis of Facility Demand (Appendix B of the <i>Guidelines</i>)	8	30
<u>Reviewer Comments:</u>		
<ul style="list-style-type: none"> A copy of the survey results from the 1998 County survey would be a helpful appendix/ 		

<u>Items for use/reference in State Plan:</u>		
<ul style="list-style-type: none"> • By 2020, the County’s population is projected to increase to 283,150 people and by 2030 to 328,550. • The county conducted a random survey which involved 1,500 county residents. The survey included questions about usage, adequacy and the preference of residents on spending priorities for parks and recreation facilities. 		
Analysis of Facility Needs (Appendix B of the <i>Guidelines</i>)	8	30 and 31
<u>Reviewer Comments:</u>		
<ul style="list-style-type: none"> • Facility needs are calculated based on the 1998 Needs Assessment for participation and Frequency of use rates in conjunction with State Planning Guidelines. 		
15-Year Capital Improvement Program for Land Acquisition, Facility Development, and Rehabilitation Priorities		
Identified for the Short-Term (2012-2016)	8	Appendix B (69)
<u>Reviewer Comments:</u>		
It seems the County takes municipalities into consideration for the parkland goals – would it make sense to include projects the municipalities have planned for the future (or is this already included)?		
<u>Items for use/reference in State Plan:</u>		
<ul style="list-style-type: none"> • The County’s short-term goals include five capital development projects, two acquisition projects and one rehabilitation project. 		
Identified for the Mid-Term (2017-2021)	8	Appendix B (70)
<u>Reviewer Comments:</u>		
None		
<u>Items for use/reference in State Plan:</u>		
<ul style="list-style-type: none"> • The County’s mid-term goals include six capital development projects and two rehabilitation projects. 		
Identified for the Long-Term (2022 and beyond)	8	Appendix B (71)
<u>Reviewer Comments:</u>		
None		
<u>Items for use/reference in State Plan:</u>		
<ul style="list-style-type: none"> • The County’s long-term goals include twelve capital development projects and four acquisition projects. 		
•		

* The tables in Appendix b should address athletic fields, baseball diamonds, basketball courts, and tennis courts. In addition to these, the tables should address the top 10 needs identified by the County.

Agriculture Chapter	Guide-lines Page	Local Plan Page
Description of progress that has been made toward achievement of the agricultural land preservation goals and objectives identified in the 2009 State LPPRP and the most recently adopted County LPPRP.	3	35-46
Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for agricultural land preservation programs	3	35-46
<p><u>Reviewer Comments:</u></p> <ul style="list-style-type: none"> • For the final draft, please comment on the progress made to implement the recommended program improvements from the previous LPPRP, summarized at the bottom of this page. • Page 43 mentions the subdivision remainder parcels that exist all over the county. A map of these parcels in the final LPPRP would be helpful, if such a map could be completed by then. 		
<p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> • About 57% of Frederick County—243,500 acres—is zone agricultural. • The County has well over 47,000 acres under easement, and its program ranks 10th in the entire nation, according to Farmland Preservation Report (2011). • The agricultural support network of farm equipment sales/service, feed stores, and processing businesses is healthy in Frederick County. • “The County ranks at the top, statewide, in a number of areas including number of farms (1,200+), equine facilities and horses, and dairy. Nationwide Frederick ranks among the top 75 counties for dairy production” (LPPRP, page 38). • The County has done a good job of creating a greenbelt around Burkittsville and is using its Rural Legacy areas and other programs to create greenbelts around Walkersville and large parts of Myersville, Middletown, New Market, Woodsboro, Thurmont, and Emmittsburg. The Rural Legacy area also seeks to preserve the area between Frederick and Walkersville; other programs have preserved land there so far. • The County Commissioners have expressed an interest in upzoning thousands of acres of agriculturally-zoned land, though no action has been taken yet. <p>The LPPRP does not have a specific section to discuss achievement of goals and objectives from the 2009. Our review of the 2009 plan said the following:</p> <p>Recommended program improvements include an evaluation of critical farms funding, with an eye toward increasing it; creation of Priority Preservation Areas; easement purchase on properties lacking development rights if they are adjacent to easements (easements are already purchased on similar properties that are within 2,000 feet of a comprehensive plan growth area); evaluation of the rural residential option; and “[c]onsideration of maximum lot sizes in the agricultural zoning district...(LPPRP page 49).</p>		

As far as we can tell, only the PPA has been acted upon. The consideration of maximum lot sizes and a limit subdivision for large farm parcels (which are used for residences) is an action item again this year.

- The County's 2010 comprehensive plan includes the following goals and policies for agricultural land preservation:

Goals:

- Preserve the County's prime agricultural lands for continued production.
- Encourage the growth of new, and the preservation of existing agricultural industries in Agricultural designated areas in order to support local farm operations.
- Permanently preserve through various agricultural programs at least 100,000 acres of agricultural land by 2020 and protect a total agricultural base of 200,000 acres as a Rural Reserve to support a diversity of agricultural practices.
- Maximize state funding and technical resources for a coordinated agricultural land preservation effort. Maintain compatibility and create a regional mass with agricultural preservation activity with adjoining counties.

Policies:

- Enhance the existing Agricultural Preservation Program by identifying Priority Preservation Areas, which will assist in the protection and retention of the County's agricultural industry resource base.
- Minimize the development in areas of our best agricultural lands to preserve critical masses of farmland. Prohibit expansion of designated Rural Residential areas into surrounding lands designated Agricultural/Rural.
- Support Frederick County's farming economy and farming communities and services necessary to sustain a viable agricultural industry.
- Support land use initiatives to maintain and enhance Rural Communities to service the agricultural industry.
- Prohibit the expansion of community growth areas for development into Priority Preservation Areas. Community water and sewer service will not be extended beyond Community Growth Planning for public water and sewer has support growth in municipal and unincorporated growth areas.
- Areas into lands designated Agricultural/Rural.

Other growth policies in the 2010 comprehensive plan support agricultural land preservation:

- Size - and ultimately develop - Community Growth Areas in direct relationship to infrastructure capacity, green infrastructure elements, and the relationship to surrounding agricultural uses.
- Community Growth Areas are not to be extended into Priority Preservation Areas.
- Pursue redevelopment strategies as a way to minimize the need to expand existing Community Growth Areas or establish new Community Growth Areas.

- Further expansion of the designated Rural Residential areas into the surrounding Agricultural/Rural or Natural Resource designated areas is not permitted.

The County supports the business of agriculture in a number of ways:

- The County Office of Economic Development (OED) created a Frederick County Agricultural Strategic Plan in 2001 and updated it in 2008.
- An Business Development Specialist for agriculture is on the staff of the OED. Page 38 of the LPPFP says that the “Office provides the following support:
 - Assisting the Ag-Industry with the development of business plans to start or expand agricultural businesses.
 - Acting as an information source and liaison on behalf of the Ag-Industry
 - Promoting and educating the citizens of the county on the impact and benefits associated with a thriving Ag-Industry.
 - Encouraging the relocation of Ag-Industries into Frederick County and promoting the retention and expansion of the existing Ag-Industry.
 - Sponsor the Homegrown Here campaign to support the use of County farm products in local restaurants, stores, and farmers markets.
 - Supports and administers an Agricultural Business Council.”
- The County has a right-to-farm ordinance and offer property tax credits of 100% of ag assessed land on properties under easement and also in districts. A credit is given on agricultural buildings regardless of the landowner’s participation in the preservation program.
- County zoning supports activities on farms such as corn mazes and seasonal events. The county is home to four wineries, and ag zoning allows activities such as tasting rooms, tours, and events.
- Clustered lots must be placed on the least protective soils.
- “Remainder parcels that have no further subdivision rights exist throughout the County often times in tracts of 100 acres or more.... There is no permanent preservation easement placed on these parcels” (LPPRP page 43).
- Recommendations and action items for improving the County’s land preservation program can be found in the report created for the Certification program and in MDP’s review of that report.

OPTIONAL: See Guidelines Appendix D for including a more detailed presentation of information on agricultural land preservation

Natural Resources Chapter	Guide- lines Page	Local Plan Page
County Goals for Natural Resource Conservation		
What are the County's goals for Natural resource lands and conservation?	5	49
<u>Reviewer Comments:</u> None		
<u>Items for use/reference in State Plan:</u> County goals from the Comp Plan: NR-G-01 Protect natural resources and environmentally sensitive areas in Frederick County. NR-G-02 Encourage the use of local, non-polluting, renewable and recycled resources (water, energy, food, material resources). NR-G-03 Manage growth and land development in Frederick County in a manner that is in harmony with the conservation and protection of our natural environment. NR-G-04 Promote a reduction in per capita consumption of energy in Frederick County.		
Local Priorities for Natural Lands and Resources		
a.) Has the County established a priority preservation and conservation area for natural resources in its comp. plan?	5	54
b.) If so, do the boundaries of these areas differ from DNR's GreenPrint lands? Why? Please provide a map if possible	5	54
c.) What are the principle implementing ordinances and programs to achieve County goals for conserving natural lands and resources?	5	59-61
d.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have been implemented.	5	52-56
e.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have NOT been implemented.	5	
f.) Summary of changes (if any) in the County's intentions to conserve natural resources and priority land.	5	
g.) Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for natural resource land conservation	5	49-50
<u>Reviewer Comments:</u> <ul style="list-style-type: none"> The County is to be commended for initiating and following through with a county led Green Infrastructure Assessment that will provide a comprehensive inventory of natural resource lands and their values, with the intent of moving this assessment into a functional Green 		

Infrastructure Plan.

- The LPPRP guidelines ask that the county compare its goals and designated areas for natural resource conservation with the State's GreenPrint conservation priorities. County designated areas (such as the Green Infrastructure areas identified in the General Plan) should be compared with areas identified as "Targeted Ecological Areas" through Maryland's GreenPrint program. GreenPrint Targeted Ecological Areas are preferred for Stateside Program Open Space funding based on their high ecological value.
- Interactive and static maps are available at: <http://www.greenprint.maryland.gov/>
- GIS data for Targeted Ecological Areas can be downloaded from the DNR Data Download site found at: <http://dnrweb.dnr.state.md.us/gis/data/>
- Access the "Targeted Ecological Areas" shapefile under the "Focal Areas" folder.
- A map of protected lands within the county would also be helpful to the interpretation of this plan
- The county is working on a number of great Natural Resource Analyses.

Items for use/reference in State Plan:

- Green Infrastructure natural resource protection areas have been identified in the General Plan. County is in the process of developing a county specific Green Infrastructure Plan in partnership with MDNR and USEPA which will be more comprehensive and data rich than the existing designated Green Infrastructure areas already identified. The plan will identify specific natural resource areas valued for habitat, wildlife and additional ecosystem service benefits. This plan will complement and build off of the State Green Infrastructure Assessment.
- County demonstrates a comprehensive approach for preserving natural resource land including regulatory protection, mitigation banking, watershed planning and TMDP implementation, stewardship, land use controls and subdivision ordinances to protect endangered species habitats and forest resources.
- Recommendations for improving County ability to protect natural resources:
 1. Support the efforts of private non-profit land trusts that operate within the County and focus on voluntary preservation easements.
 2. Consider revisions to the Resource Conservation zoning district as part of the Zoning Ordinance update that may help to strengthen its resource protection component.
 3. Look at ways to strengthen watershed planning as part of the region plan update process. This would foster continued support for participation in the Watershed Resource Action Strategy (WRAS) projects with the State Department of Natural Resources.
 4. Establish an analysis process utilizing GIS data layers of natural resource features as part of the region plan update process.
- The County has developed a stand-alone Historic Preservation Plan (2007)

Data Sharing			
Date that last County Preserved Lands GIS data layer was	5	October	
Recreation and Parks Chapter		Guide- lines Page	Local Plan Page
Identification of State and county goals for recreation and parks	5	8	III-1
<i>Reviewer Comments:</i> • None			
conservation received by MDP?			
<i>Reviewer Comments:</i> Please refer to the Guidelines pages 5 & 6 regarding data sharing.			
<i>Items for use/reference in State Plan:</i>			

LPRP LOCAL PLAN REVIEW CHECKLIST/ COMMENT SHEET FOR STATE PLAN

Jurisdiction Name: CECIL COUNTY

Items for use/reference in State Plan:

- POS funding for the County was \$1,879,814 at the peak in 2007 but fell to \$86,092 in FY 2010. The figure was \$173,000 in FY 2011. Half the funds must be used for land acquisition because the County hasn't met its goal.

State goals:

- Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens, and thereby contribute to their physical and mental well-being.
- Recognize and strategically use parks and recreation facilities as amenities to make communities, counties, and the state more desirable places to live, work and visit.
- Use State investment in parks, recreation, and open space to complement and mutually support the broader goals and objectives of local comprehensive / master plans.
- To the greatest degree feasible, ensure that recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile, and help to protect natural open spaces and resources.
- Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.
- Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

County goals:

- From comp plan: “Acquire park land and develop recreation facilities for all major user groups” (III-1).
- From 2005 and 2011 LPPRPs:
 - Create a leadership role for the County in the overall organization of recreation in Cecil County.
 - Improve methods by which information about recreation programs is gathered and disseminated in Cecil County.
 - Provide adequate amounts of recreation land to serve residents throughout the County.
 - Develop additional recreation facilities to meet specific demands.
 - Improve the countywide coordination and provision of recreational programming.
 - Provide adequate level recreation services while keeping government cost as low as possible.
- Policies to guide land acquisition, from the 2005 and 2001 LPPRPs:
 - Ensure maximum use of existing facilities including school sites and existing recreation land.
 - Add onto existing sites wherever possible.
 - Locate new recreation facilities in or convenient to towns and the county's designated development district.
 - Continue to meet existing unmet demand in suburban and rural areas provided this does not contribute to sprawl development.
 - Increase cooperation with the Board of Education in incorporating joint uses of school sites and facilities, especially when renovating schools or building new facilities.
- Four POS projects are active in the County, totaling \$250,293 (25% from local funds) (III-4).

Implementing Programs	Guide-lines Page	Local Plan Page
a.) Description of principal implementing programs	8	III-2,4
b.) Description of how the implementing programs help to achieve the goals for parks and recreation	8	III

c.) Description of how goals are consistent with the Strategic Guidelines for Recreation and Parks	8	III
<u>Reviewer Comments:</u> <ul style="list-style-type: none"> • Congratulations on the creation of the Parks and Recreation Department. 		
<u>Items for use/reference in State Plan:</u> <ul style="list-style-type: none"> • Upon adoption, the LPPRP becomes part of the local comp plan. The LPPRP also serves as the guide for parks and recreation in the County's 8 municipalities. • The County Commissioners appoint an 8-member Board of Parks and Recreation. "The Board's primary function is to assist staff with implementing policies and procedures, CIP development, County project oversight and grass root advocacy" (page III-2,3). The Parks and Recreation Department was created in 2006. • The County is divided into 5 recreation service areas: Rising sun, Perryville, Northeast, Elkton, and Bohemia Manor. • Most of the funding comes from POS, with a small amount of County general funds. <p>Parks and Rec projects are now a part of the County's CIP. The Dept. requested \$288,061 in CIP funds for FY 2012, but the projects have not been approved (III-4).</p>		

Data Elements: Inventory, Supply, and Demand		
Supply of Recreational Lands and Facilities		
Local inventory of parkland and associated parkland acreage needs analysis using the standard 30 acres per 1,000 population analysis method or approved alternative methodology (Appendix A of the <i>Guidelines</i>)	8	ES-2, III-6,
<u>Reviewer Comments:</u> <ul style="list-style-type: none"> • None 		
<u>Items for use/reference in State Plan:</u> <ul style="list-style-type: none"> • As of 2011, County is 1,418 acres short of its land acquisition goal. Without acquisitions, the shortfall will reach 3,000 acres by 2030. • Parkland: County/municipal 1,500 acres; federal and state 13,576 (incl. 5,613 in Fair Hill Natural Resources management area and 5,718 in Elk Neck State Park and State Forest). <p>County LPPRP serves the 8 municipalities of Cecilton, Charlestown, Chesapeake City, Elkton, North East, Perryville, Port Deposit, and Rising Sun.</p>		
Facility Inventory (Appendix B of the <i>Guidelines</i>)*	8	Map III-7
<u>Reviewer Comments:</u> <ul style="list-style-type: none"> • Does Table III-2 need to be updated? Figures seem to be identical to 2005 plan. 		
<u>Items for use/reference in State Plan:</u>		
Analysis of Facility Supply (Appendix B of the <i>Guidelines</i>)	8	III-6, III-10
<u>Reviewer Comments:</u> None		

<i>Items for use/reference in State Plan:</i>		
Analysis of Facility Demand (Appendix B of the <i>Guidelines</i>)	8	III-9-11
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
Analysis of Facility Needs (Appendix B of the <i>Guidelines</i>)	8	ES-2, III-10
<i>Reviewer Comments:</i> None		
<ul style="list-style-type: none"> • 		
<i>Items for use/reference in State Plan:</i>		
<ul style="list-style-type: none"> • Primary deficits are in regional parks, baseball/softball diamonds, turf fields/multi-purpose fields, fishing from piers, indoor recreation centers (basketball), hiker/biker trails. • Secondary deficits are boat ramps and public water access, playgrounds, and picnic pavilions. • Greatest future parkland need is in North East, Elkton, and Rising Sun service areas. • Through 2030: \$12 million for acquisition, \$23.5 million for new facility development, \$500,000 for rehabilitation projects. <ul style="list-style-type: none"> -- 250-410 acres of park and recreation land -- Development of 100-acre regional park in North East/Rising Sun service areas -- 75-100 acre community park in Elkton or in Elkton Service area -- Two community parks of 25-50 acres in Rising Sun and North East recreation service areas -- Additional water access points <p>Trails underway or planned: Elk Neck Trail, Lower Susquehanna Heritage Greenway trail, and the East Coast Greenway. Pursuing the informal Mason Dixon Trail is on wish list but not identified in comp plan (III-20).</p>		
15-Year Capital Improvement Program for Land Acquisition, Facility Development, and Rehabilitation Priorities	Guide- lines Page	Local Plan Page
Identified for the Short-Term (2012-2016)	8	III 13- 17
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
<ul style="list-style-type: none"> • With decline in POS funds, “the County and other organizations need to begin a dialogue to consider new options for funding recreation and parks” (page ES-2). • Funding comes mostly from POS, with a little bit from County general funds. “With no dedicated CIP funds, the Parks and Recreation program is likely to remain substantially under-funded” (page III-21). 		
Identified for the Mid-Term (2017-2021)	8	III 13- 17
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
Identified for the Long-Term (2022 and beyond)	8	III 13- 17
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		

Agriculture Chapter	Guide- lines Page	Local Plan Page
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Description of progress that has been made toward achievement of the agricultural land preservation goals and objectives identified in the 2009 State LPPRP and the most recently adopted County LPPRP.	3	ES-3
Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for agricultural land preservation programs	3	IV-5+
<p><u>Reviewer Comments</u></p> <ul style="list-style-type: none"> • Please update 2004 total of 20,100 acres under easement. (MDP shows almost 27,000 acres of various easements as of Sept. 2011). 		
<p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> • With current funding levels, county will need 49 years to reach 55,000-acre preservation goal. For 1998-2002, there were 93 applicants to MALPF but only 29 accepted offers (page ES-3). • Program development strategy: <ul style="list-style-type: none"> -- Increase state funding for MALPF -- State & County can help resource-based businesses with marketing, financing, business development, etc. <p>Since the last LPPRP, the County significantly downzoned the NAR and SAR zones and eliminated the bonus density for clustering (2007). It also adopted both PDR and TDR programs. On the other hand, “Based on current funding levels it would take the County 67.7 years to acquire easements” to reach the 55,000-acre goal (page IV-12). Page IV-13 says that the County will run out of farmland before reaching the preservation goal if the 1997-2002 trend of land conversion continues; however, this trend is not likely to continue because of the downzoning and the new PDR and TDR programs.</p> <p>In 2002, the County “joined five other Eastern Shore counties in signing <i>Eastern Shore 2010: A Regional Vision...</i> that sets four regional goals to protect the Eastern Shore:</p> <ul style="list-style-type: none"> • Strive to protect from development through the use of voluntary preservation programs 50 percent of Eastern Shore land outside of locally-designated growth areas by 2010. • Recognize our resource-based economy as a key part of the Eastern Shore heritage and future by integrating agriculture, fisheries, and forestry into each county’s economic development plan by 2005. Work with existing communities to guide at least 50 percent of new annual development into locally-designated growth areas by 2005. • Develop a regional transportation plan that integrates the use of public transportation and alternative modes of transport within and among communities by 2010. 37% of county land, 83,209 acres, is in ag use (page ES-1). • 26% of the 2011 population of 103,800 lives in the 8 municipalities. • Rural Conservation Districts (43% of Co. land area) north of C and D Canal and much of Elk Neck peninsula; Resource Protection District (28% of Co. land area) south of canal. • Preservation goal of 30,000 acres by 2025 in southern Resource Protection District, and 25,000 in northern Rural Conservation District (ES-3). (However, this has been supplanted by the goal of preserving 79,000 acres in the 125,800-acre Priority Preservation Area. Of that goal, 53,600 acres are not yet protected.) • Concentrations of easements in south, fewer in north (outside Fair Hill RLA). • Program development strategy: <ul style="list-style-type: none"> -- Create TDR program [done] -- “Provide attractive development opportunities in designated growth areas” (ES-3) -- Create county PDR program [done] -- “Consider providing local incentives for donated easements” (ES-3) -- Increase pace of easement acquisition -- “Reconsider permitted rural residential development densities if other steps are not succeeding” (ES-3) 		

- The County recognizes its strategic location at the head of the 400,000-acre Agricultural Security Corridor (page IV-1), which includes portions of 5 Eastern Shore counties.
- From the 2002 to the 2007 Census of Agriculture, Cecil County gained about 8,000 acres of land in farms (11%) and 115 farms (468 to 583). The number of the smallest and largest farms increased.
- The market value of agricultural crops increased from \$68.6 million to \$95.8 million.
The average age of County farmers in 2002 was 56.6.

Program Development Strategy

- Continue to support a TDR program.
- Provide attractive development opportunities in designated growth areas:
 - Adequate water and sewer infrastructure
 - Revise PUD regulations to make them easier to build in desired locations
 - Smart code ordinance (the county has drafted an implementing ordinance following a 2002 Smart Code Report)
 - Park, recreation areas, and trails
 - Attention to transportation planning, including public transportation
- Reconsider permitted rural residential development densities if other steps are not succeeding.
- Increase State funding for MALPF (State action)
- Revise PDR program to allow Installment Purchase Agreements. (Commissioners are currently reviewing.)
- Increase pace of easement acquisition (more funding plus outreach).
Increase business development assistance, marketing capacity, and access to financing and capital for resource-based industries (along with the State).

OPTIONAL: See Guidelines Appendix D for including a more detailed presentation of information on agricultural land preservation

Natural Resources Chapter	Guide- lines Page	Local Plan Page
County Goals for Natural Resource Conservation		
What are the County's goals for Natural resource lands and conservation?	5	V-1
<i>Reviewer Comments:</i> None		

Items for use/reference in State Plan:

County goals:

- Protect environmentally sensitive resources and natural features in all areas of the County, comprising steep slopes, streams, wetlands, floodplains, and habitat including the habitats of threatened or endangered species;
- Encourage the conservation of agricultural and forested lands; encourage sustainable agribusiness and other natural resource based industries;
- Conserve agricultural and forest resource land, with special focus on the County’s Priority Preservation Area;
- Develop a systematic approach to protect the County’s green infrastructure resources; and
- Manage watersheds in ways that protect, conserve and restore their hydrologic and water quality functions.
 - 13,576 acres are State and Federal natural resource lands. 36% of county land, 80,746 acres, is forested.
 - The County needs better integration of green infrastructure concepts, greenways, and watershed protection goals and policies into the zoning and subdivision ordinances.
 - The State can help the County develop measurable natural resource objectives by working with the County to translate qualitative concepts such as those contained in the Chesapeake Bay 2000 Agreement and the tributary strategies into county-specific and area-specific objectives. Such objectives could be incorporated into future Comprehensive Plans or the zoning ordinance and subdivision regulations. This strategy has the added benefit of helping facilitate coordinated efforts to restore the Bay.

Local Priorities for Natural Lands and Resources

a.) Has the County established a priority preservation and conservation area for natural resources in its comp. plan?	5	V-4
b.) If so, do the boundaries of these areas differ from DNR’s GreenPrint lands? Why? Please provide a map if possible	5	
c.) What are the principle implementing ordinances and programs to achieve County goals for conserving natural lands and resources?	5	Table V-1
d.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have been implemented.	5	V11-13
e.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have NOT been implemented.	5	V11-13
f.) Summary of changes (if any) in the County’s intentions to conserve natural resources and priority land.	5	
g.) Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for natural resource land conservation	5	V-3

Reviewer Comments:

- Under section d. on page II-7 three specific areas are listed (two of which are NHA's). While it is true that those are important ecologically areas, they represent just a sub-set of all the important sites found there. From a sensitive species habitat perspective there are scores of sites across the county that have habitat which supports a large numbers of our Species of Greatest Conservation Need (as identified in the Maryland Wildlife Diversity Action Plan).
- The plan states that DNR's development review time for RTEs is not timely. DNR staff would be happy to discuss the review process and increased coordination opportunities. DNR staff contacts are Tim Larney tlarney@dnr.state.md.us and Greg Golden ggolden@dnr.state.md.us
- "Mineral extraction districts" are not necessarily compatible with natural resource conservation. It is not possible to conserve or protect an area that is going to be subjected to commercial mining. Those districts are large (see figure II-4) and are known to harbor rare and sensitive species. Most of those areas are forested and provide FIDS habitat. They are also part of the Green Infrastructure.
- Table V-2 doesn't seem to add up. Acreages have increased from 55,067 to 73,253, but the County total remains at 222,595.

The LPPRP guidelines ask that the county compare its goals and designated areas for natural resource conservation with the State's GreenPrint conservation priorities. County designated areas should be compared with areas identified as "Targeted Ecological Areas" through Maryland's GreenPrint program. GreenPrint Targeted Ecological Areas are preferred for Stateside Program Open Space funding based on their high ecological value.

- Interactive and static maps are available at: <http://www.greenprint.maryland.gov/>
- GIS data for Targeted Ecological Areas can be downloaded from the DNR Data Download site found at: <http://dnrweb.dnr.state.md.us/gis/data/>
- Access the "Targeted Ecological Areas" shapefile under the "Focal Areas" folder.

Provide a map of GreenPrint TEAs and evaluate, by acreage if possible, the degree to which agricultural and natural resource conservation designated areas support the protection of TEAs.

- DNR encourages the use of the State or County developed Green Infrastructure assessment and other key resource assessment databases to enhance conservation planning for natural resource values, beyond those areas explicitly identified by GreenPrint Targeted Ecological Area maps. While these areas do constitute some of the most ecologically valuable lands in the State, there are many important natural resource areas that occur within Cecil county. The county is encouraged to continue developing natural resource conservation plans and to build on existing efforts to conserve and maintain connectivity of these resources through planning, zoning, acquisition, easement and other approaches.
- Please change references to the GreenPrint funding program (pg V-12). That funding program has been discontinued and State funding for land conservation is through Stateside Program Open Space.

Items for use/reference in State Plan:

- County's designated conservation areas are the Fair Hill and Sassafras Rural Legacy Areas and the Chesapeake Bay Critical Area.
- Three of the Comp Plan's eleven districts particularly emphasize land conservation and resource protection.
- RCD covers most of Elk Neck peninsula and rural areas north of the I-95/US 40 corridor. This district contains 43% of the county land area.
- RPD is located south of the Chesapeake and Delaware Canal and contains 28% of the county land area.
- MED is within the 95/40 corridor and contains 8,400 acres.
- Critical Area comprises 25,800 acres in the county.

Large hubs of Green Infrastructure in the county include:

- Elk Neck Peninsula including Elk Neck State Park, Elk Neck SF, and the Plum Creek Natural Heritage Area
- MED west and north of the Town of Charleston
- Fair Hill
- Ocotoraro Creek, Northeast Creek, and the Bohemia and Sassafras Rivers.
- The Mineral Extraction District?
- Cecil County's Comprehensive Plan provides the framework and foundation for the County's natural resource conservation goals and strategies. These goals inform the zoning ordinance, subdivision regulations, and regulations for wetlands floodplain protection, stormwater management and sediment and erosion control.
- Zoning ordinance includes 110 ft perennial stream buffer, 25 ft intermittent stream buffer. Subdivision policy clusters development and establishes a greenways policy of open space corridors. See Table V-1
- Designated growth areas contain 29% of County land. In 2000, the County adopted an Urban Growth Boundary Plan to encourage water and sewer infrastructure in designated areas.
- County completed a Sassafras River Watershed plan in 2008.
- The 2005 LPPRP recommended the County incorporate a leadership role in the overall organization of recreation in Cecil County. The County fulfilled this goal with the implementation of a Department of Parks and Recreation in 2006.
- To date, the County's approach to natural resource conservation has been largely site and area-specific – focused on protecting specific resources such as stream buffers. Through this LPPRP a broader strategy has been identified connecting the County's existing protected areas (state parks and forests, Critical Areas, wildlife management areas) into a broader, interconnected framework of protected land (RLAs, greenways, agricultural lands, and parks and recreation areas)
- The County has established a goal of protecting 80% of the remaining undeveloped land in its designated Priority Preservation Area.
- Most easements are to protect ag land due to the farmland preservation goals of 55,000 acres by 2025: 30,000 in the RPD and 25,000 in the RCD. Of 37,417 protected lands, approx. 22,987 are ag lands. Easements on natural resource lands include 854 acres of forest legacy and 5,148 by MET, ESLC, and others.
- The County's Comprehensive Plan Amendment Process can provide opportunities to incorporate new policies that can assist with natural resources conservation. Currently, there are no recommended revisions.
- The Comp Plan includes the Lower Susquehanna Heritage Greenway Management Plan, which promotes heritage tourism and greenway development and suggests methods of pursuing land acquisitions.

Other

- No County funds dedicated for natural resource land easement acquisition
- The comprehensive planning program does not include more detailed small area planning efforts in which natural resource protection can be integrated into the broader planning scheme for development, agricultural preservation, and public facilities such as transportation, schools, and recreation. Presently, development proposals are only reviewed against existing zoning and subdivision regulations as they apply to individual properties, with little emphasis on tracking cumulative effects on a watershed or small area basis. Regulations and performance standards only apply to individual developmental submittals and do not facilitate comprehensive reviews based on area-wide objectives, such as tributary strategies or watershed impacts.
- The greenways designated in this plan are very conceptual in nature; essentially lines on the map

Recreation and Parks Chapter	Guide- lines Page	Local Plan Page
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following the stream valleys. Policies need to be established regarding the proposed uses for these greenways (conservation versus recreation, for example) and more detailed maps need to be prepared showing areas already protected, and areas that should be targeted for protection.

- State funding for land conservation through programs such as Greenprint and Rural Legacy has been sharply reduced in recent years. Program Open Space (POS) funding has also been sharply reduced in recent years. Although the County would like to conserve natural resource lands through POS, it has primarily used these funds to acquire park land to meet the increasing demand for recreation.
- MD DNR is promoting Watershed Restoration Action Strategies (WRAS) as a state and local partnership planning to protect and restore water quality and habitat to help implement Maryland's Clean Water Action Plan and meet the Chesapeake Bay Agreement goals. Based on the Clean Water Action Plan, the primary candidate watershed in Cecil County would be the Upper Elk River which, as noted above in Section B.5, is both a Category 1 Priority (Restoration) watershed and a Selected Category 3 watershed. Other candidates would be Furnace Bay and Octoraro Creek.
- Land trusts have proven very effective in Cecil County with almost 6,000 acres of agricultural and natural resource land preserved by the MET, CLT, ESLC and others. Further, land trusts often protect land at little or zero cost, since easements are frequently donated.
- There is potential to create an extensive on-road and off-road recreational trail system serving much of the County and connecting many of the County's large blocks of protected lands. This system has the potential to be a major asset to the County, but again will take a significant effort to make real on the ground.

Data Sharing

Date that last County Preserved Lands GIS data layer was received by MDP	5	January 2004
GIS maps of County Lands targeted for natural resource conservation received by MDP?	5	

Reviewer Comments:
Please refer to page 5 & 6 of the guidelines.

Items for use/reference in State Plan:

Additional Comments

- The plan mentions the potential to create a recreational trail system throughout the county. DNR would be happy to work with Cecil County on any priority recreational trail connections. DNR staff contact is Steve Carr scar@dnr.state.md.us
- Appendix E public meeting minutes are from the 2005 plan.
- Please note that it is no longer a requirement to utilize MEIRS, but inventory data should be included with the next LPPRP update.

LPRP LOCAL PLAN REVIEW CHECKLIST/ COMMENT SHEET FOR STATE PLAN

Jurisdiction Name: ALLEGANY COUNTY

Identification of State and county goals for recreation and parks	8	20-21
<p><u>Reviewer Comments:</u> DNR would be happy to work with the county on their “Bicycle and Pedestrian Master Plan.” Please contact the Statewide Trails Planner, Steve Carr (scarr@dnr.state.md.us).</p>		
<p><u>Items for use/reference in State Plan:</u></p> <p>County goals:</p> <ul style="list-style-type: none"> • Provide 10 acres of locally owned recreation land for communities with a population of 500 or more residents. • Continue to develop the Fairgrounds to its fullest potential, thus supporting its ability to host countywide recreation events such as the County Fair, meetings from clubs and other groups and other large scale events. • Completing the Allegany County Bicycle and Pedestrian Master Plan. This may also provide for more opportunities to view other areas not accessible by bike at this time. Inherent within this plan should be more opportunities for interconnection with other “green spaces” within the county such as a greenway to access the central portion of the RLA along the Braddock Run. • Update and or replace the amenities at the existing facilities and provide for additional amenities as the needs of the population of Allegany County changes. 		
Implementing Programs		
a.) Description of principal implementing programs	8	7
b.) Description of how the implementing programs help to achieve the goals for parks and recreation	8	Throughout the Plan
c.) Description of how goals are consistent with the Strategic Guidelines for Recreation and Parks	8	County goals are listed under State goals on page 20, but the text does not make a connection
<p><u>Reviewer Comments:</u></p> <ul style="list-style-type: none"> • There is no mention of how the County incorporates the Community Parks and Playground funding that the municipalities received into their over all plan. • There is no mention of Frostburg State University and Allegany College of Maryland and how their facilities or staffs are used as part of the Recreation plans for the County. 		
<ul style="list-style-type: none"> • 		
<p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> • Allegany County’s planning efforts are now based on watersheds instead of election districts. Each of the 12 regional plans, which will add up to the comprehensive plan and be completed in three or four years, will contain a recreation element. “The elements will complete an in depth survey per region and determine the need of additional park land per area or region of the county” (page 7). • The County does not have a parks and rec department. Other County staff coordinate “with the Municipalities and local sponsors of the county owned parks for the needs of each facility. The Coordinator then conveys the interests to the Board of County Commissioners on an annual basis to complete the plan for POS funding” (page 8). 		

Data Elements: Inventory, Supply, and Demand		
Supply of Recreational Lands and Facilities		
Local inventory of parkland and associated parkland acreage needs analysis using the standard 30 acres per 1,000 population analysis method or approved alternative methodology (Appendix A of the <i>Guidelines</i>)	8	21-24
<p><u>Reviewer Comments:</u></p> <ul style="list-style-type: none"> • None <p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> • Even though its own goal is less, the County has exceeded the State's default recreational acreage goal of 30 acres per 1,000 acres. (The calculations are contained on pages 23 and 24.) • The County grew by 157 residents between 2000 and 2010. Some of the planning areas lost population, however, while others gained. • With over 71,000 acres of "State forests, Parks, Wildlife Management Areas and Federal parks...[t]he total amount of State and Federally owned land equals .95 acres per resident of Allegany County" (page 21). 		
Facility Inventory (Appendix B of the <i>Guidelines</i>)*	8	26-28
<p><u>Reviewer Comments:</u></p> <ul style="list-style-type: none"> • We would like a further explanation of the tables, specifically the B-1 Table and the other B tables. For example, the 6 billion 7 million supply number under the Fishing from Shore bank and also the 38 million Total Supply for Hunting acres. • It was noted that the County found its GIS database incompatible with MEIRs. MEIRs is no longer in operation, but facility inventories and GIS data should be sent to DNR & MDP. 		
<ul style="list-style-type: none"> • 		

Items for use/reference in State Plan:

The following were the top twelve top facilities for the County:

- Trails of all types
 - Picnic tables
 - Tot lots/playgrounds
 - Fishing access measured in feet
 - Acres for hunting
 - Holes for golf
 - Basketball courts
 - Horseshoe pits
 - Campsites
 - Ball diamonds
 - Tennis courts
 - Football/soccer fields
- The County’s largest regional park is the Fairgrounds. “Since the 2005 plan, a boat launch has been added to the site and there are more ball-fields being added to the location,” plus a new access road that “should be completed within the next 5 years” (page 21).

Analysis of Facility Supply (Appendix B of the *Guidelines*)

8

28-31

Reviewer Comments:

- References to the maps would be helpful, some maps are hard to read.

Items for use/reference in State Plan:

- The last plan noted that the county needed more horseshoe pits; those have since been provided.
- With 21 private hunting clubs in addition to state lands, the county has more than enough land for hunting.
- Frostburg is home to a dog park. The one park available for skateboarding is closed, though the county is encouraging the Cumberland YMCA to work with the city’s parks and recreation department to find a new home for skateboards.
- BMX biking can be done on one track; the “city of Cumberland is exploring other options for more BMX type biking...” (page 29).
- Several county park sites are currently undeveloped.

Analysis of Facility Demand (Appendix B of the *Guidelines*)

8

25, 29, 32-33

Reviewer Comments:

- The results from the county survey seem to be missing from Appendix E.

Items for use/reference in State Plan:

- The analysis used the 2003 “Participation in Local Park and Recreation Activities in Maryland” survey, enhanced with population and demographic projections for the planning areas.
- The County posted a recreational survey on its website in the fall of 2011. “This survey is helping to address the need for additional activities per planning region...” and the results will be used to inform the recreation section of each regional plan (page 29).

Analysis of Facility Needs (Appendix B of the <i>Guidelines</i>)	8	28-29
<i>Reviewer Comments:</i>		
<ul style="list-style-type: none"> • With the recent addition of horseshoe pits, an oversupply of hunting acreage, and a slowly growing population, the County appears to have ample facilities for its top recreational activities. Deficiencies for a few other activities are noted above in the analysis of facility supply. 		
15-Year Capital Improvement Program for Land Acquisition, Facility Development, and Rehabilitation Priorities		
Identified for the Short-Term (2012-2016)	8	
<i>Reviewer Comments:</i>		
<ul style="list-style-type: none"> • The draft LPPRP contains a spreadsheet of funding requirements for the FY 2012 annual program but does not list the capital improvement programs for the short-, mid-, and long-term. 		
<i>Items for use/reference in State Plan:</i>		
Identified for the Mid-Term (2017-2021)	8	
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
Identified for the Long-Term (2022 and beyond)	8	
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		

* The tables in Appendix b should address athletic fields, baseball diamonds, basketball courts, and tennis courts. In addition to these, the tables should address the top 10 needs identified by the County.

Agriculture Chapter	Guide- lines Page	Local Plan Page
Description of progress that has been made toward achievement of the agricultural land preservation goals and objectives identified in the 2009 State LPPRP and the most recently adopted County LPPRP.	3	
Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for agricultural land preservation programs	3	11
<u>Reviewer Comments:</u> <ul style="list-style-type: none"> • None 		
<u>Items for use/reference in State Plan:</u> <ul style="list-style-type: none"> • Allegany County has a right-to-farm statute. <p>The County’s agricultural goals consist of the following (quoted from page 11 of the LPPRP):</p> <ul style="list-style-type: none"> • Establish a Priority Preservation Area. • Continue to Submit applications to both...(MALPF) and Rural Legacy on an annual basis. • Work to become a “Certified” County <ul style="list-style-type: none"> ■ This allows the County to keep more of the Agricultural Transfer taxes that are generated within Allegany County. ■ The County is currently working on the necessary items to apply for the certification. • Continue to encourage voluntary submission into the MALPF and Rural Legacy Programs within Allegany County. • Maximize Areas with increased agricultural value as shown by the Prime Agricultural Soils maps that are included within each Comprehensive Plan. • The matter of compatibility between mineral rights easements and preservation easements “is a limiting factor for easement implementation that has come to the forefront in recent years” (page 12), especially regarding Marcellus shale. • Allegany County created its first Rural Legacy Area in 2010 and acquired its first easement in 2012. The goal is to preserve 50% of the RLA (7,112 acres) in ten years, more if funding permits. • [MDP data show that Allegany County has far fewer acres under easement than any other Maryland County. However, the County is home to more publicly owned land than any other County except for Garrett.] 		
OPTIONAL: See Guidelines Appendix D for including a more detailed presentation of information on agricultural land preservation		
Natural Resources Chapter	Guidelines Page	Local Plan Page

County Goals for Natural Resource Conservation		
What are the County's goals for Natural resource lands and conservation?	5	16
<i>Reviewer Comments:</i> None		
<i>Items for use/reference in State Plan:</i>		
<p>County goals:</p> <ul style="list-style-type: none"> • Continue to Protect Steep Slopes, floodplains and Sensitive Areas. Steep Slopes are defined as any slope greater than 25%. • Maximize areas that have high forestry value as well as areas that have a high natural resource value. If these properties are within the Mountain Ridge RLA encourage participation within that program. • Continue to discourage development within the 100 year flood plain. Identify properties that are within the revised flood plain maps from USGS and target potential sites for flood buyouts through grant funding, and other Federal Emergency Management Programs (FEMA). • Continue to identify areas where Greenways could be used to link urban areas to parks within the county. • Implement a Viewshed Protection Overlay Zone. This would protect the Mountain Tops from development that would impact the view of the mountains and may disrupt the eco-tourism that is being established within the county. • Continue to encourage citizens to participate in the RLA, Maryland Environmental Trust (MET) Program as well as the Conservation Reserve Enhancement Program (CREP). 		
Local Priorities for Natural Lands and Resources		
a.) Has the County established a priority preservation and conservation area for natural resources in its comp. plan?	5	
b.) If so, do the boundaries of these areas differ from DNR's GreenPrint lands? Why? Please provide a map if possible	5	
c.) What are the principle implementing ordinances and programs to achieve County goals for conserving natural lands and resources?	5	17-19
d.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have been implemented.	5	
e.) Description of which parts of the program development strategy from the natural resources element of the last County LPPRP have NOT been implemented.	5	
f.) Summary of changes (if any) in the County's intentions to conserve natural resources and priority land.	5	

g.) Reference to and summary of information from County Comprehensive plan and implementing ordinances/ programs (as appropriate) for natural resource land conservation	5	16-19
<p><u>Reviewer Comments:</u></p> <p>The plan needs to address items a) and b), listed above</p> <p>a) The plan needs to identify geographically specific areas for preservation/conservation based on natural resource values and the goals stated in the plan. The Mountain Ridge RLA is one area already identified as a conservation area. However, for completeness, the natural resource values within the RLA should be summarized, particularly as they relate to meeting State and county goals.</p> <p>b) The RLA should also be compared to the State’s GreenPrint Targeted Ecological Areas. The LPPRP guidelines ask that the county compare its goals and designated areas for natural resource conservation with the State’s GreenPrint conservation priorities. County designated areas should be compared with areas identified as “Targeted Ecological Areas” through Maryland’s GreenPrint program. GreenPrint Targeted Ecological Areas are preferred for Stateside Program Open Space funding based on their high ecological value.</p> <p>7. Interactive and static maps are available at: http://www.greenprint.maryland.gov/. A GreenPrint map for Allegany County has been provided, but may not reflect the most current status of protected lands.</p> <p>8. GIS data for Targeted Ecological Areas can be downloaded from the DNR Data Download site found at: http://dnrweb.dnr.state.md.us/gis/data/</p> <p>9. Access the “Targeted Ecological Areas” shapefile under the “Focal Areas” folder.</p> <ul style="list-style-type: none"> • Please provide a short description for those goals & objectives from the 2005 plan (pages 30-31) that have or have not been implemented as per required content d) & e) above. • The county has done a good job of incorporating ESA’s into their plans and trying to avoid impacts to them by reviewing development projects in those areas. 		
<p><u>Items for use/reference in State Plan:</u></p> <ul style="list-style-type: none"> • The county has not yet established a PPA, this is a goal of the 2012 LPPRP. They do anticipate the boundaries will be smaller than those identified through GreenPrint. 		
Data Sharing		
Date that last County Preserved Lands GIS data layer was received by MDP	5	
GIS maps of County Lands targeted for natural resource conservation received by MDP?	5	
<p><u>Reviewer Comments:</u></p> <p>Please see the Guidelines pages 5 and 6 for information regarding data sharing.</p>		
<p><u>Items for use/reference in State Plan:</u></p>		

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Appendix J: Key Issues Analysis Matrix

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Key Issues Analysis Matrix - Maryland LPRP

 Key Issue Legend RED - minor concern GOLD - opportunity to improve BLUE - key issue/priority WHITE - not applicable	Service Areas				Qualitative Data				Quantitative Data			Consultant's Analysis and Professional Expertise
	Western Region	Central Regions	Eastern Region	Southern Region	Staff Interviews	Technical Advisory Committee	MACo/MRPA	2009 LPRP	Statistically Valid Survey	Online Survey	LOS Analysis	
Statewide Land Use Planning												
Coordination with local CIP and POS projects												Initiate regular outreach to MACo and MRPA
Connect people safely to trails, complete trail gaps												Coordinate local GIS data layer alignment with DNR/DOT gap analyses
Expand quality and quantity of water access opportunities												Continue coordination with Chesapeake Bay Watershed Plan efforts
Pressure from ORV users, mountain bikers												Hold regional focus groups, collaborate with local agencies, non-profits
Seek opportunities to restore DNR funding												Collaborate with local agencies for broader message to policy makers
Balance natural resource protection and recreational uses												Coordinate LOS analysis and land acquisition policies
Explore partnerships with health, academic, non-profit org												
Use of DNR lands for non-renewable energy resources												Share survey results with relevant state agencies
Trail User Conflicts												Publish trail safety guide, improve signage, volunteer patrols
Land Acquisition/More Parks/Develop Existing DNR Assets												Continue DNR focus and legacy on land acquisition
DNR lead by example in sustainability practices												Collaborate with MDP, Sustainable Ag Research & Ed on best practices
Natural Resource and Outdoor Recreation Facilities												
Restrooms												Incomplete statewide data prompts accurate level of service (LOS) analysis.
Natural Surface Trails												Complete statewide inventory database in template provided. Add types of
Paved Trails												Create comprehensive trail guide with uses and difficulty ratings
Historic and Cultural Resources												
Picnic Areas												Expand data set to include local providers of picnic areas
Multi-Lingual Interpretive Signage												Expand current efforts by State Parks to include all DNR divisions
Equestrian												Evaluate the development of regional equestrian facilities
Hunting/Target Shooting												GIS Analysis show adequate level of service statewide
Camping												
Multi-Use Water Access												Continue coordination with Chesapeake Bay Watershed Plan efforts
Mountain Bicycling												Explore statewide collaboration with IMBA & local clubs
ORV Parks and Trails												Continue public outreach, evaluate partnerships and disturbed areas
Access for people with disabilities												
Bird Watching / Wildlife Viewing												
Natural Resource and Outdoor Recreation Activities												
Walking/Hiking												Focus on trail development & statewide connectivity as first priority.
Visiting historic/cultural sites												Not addressed by LOS, except to deliberately exclude it as more appropriate topic for other agencies
Picnicking												
Environmental literacy programs												
Outdoor Classrooms/Field Trips/Children in Nature												Improve transportation opportunities
Equestrian												Improve signage on multi-use trails, user education to reduce conflicts
Water based recreation												
Visiting natural areas												Existing coverage is quite good, vast majority of state within five miles of a natural area-- could reach 100% coverage by filling few service gaps
Fishing												Gaps in Central Region around Baltimore and Washington D.C.
Off Road Vehicle Use												ORV community mobilized for the online survey
Bird Watching / Wildlife Viewing												
Camping												
Public Involvement / Communications / Marketing												
Public doesn't know what's out there												Cross promote with local agencies via social media, web links, events
Promote trails and connection to health/livability												Work with Communications Team to revamp messaging and brand
Cross marketing and promotions												Incorporate multi-disciplinary approach to promotion beyond DNR
Technology improvements needed												Coordinate local GIS data layer alignment with DNR gap analysis
Reinforce trends in recreation programming												Cross promote trends between MRPA and DNR publications
Lack of time for participating in outdoor activities												Explore "Take Time to Play" campaign or similar
Advocacy and volunteerism												Collaborate with local agencies for broader message to policy makers
Program and User Fees												
Expand access in underserved areas												