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 on-line resources to obtain more information on these and other statewide initiatives.

Maryland’s GreenPrint 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 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 can be found online.

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18 http://www.green.maryland.gov/whatis.html
19 http://www.greenprint.maryland.gov/
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\(^2\) 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\(^2\) valued for their high aquatic biodiversity and Tier II watersheds\(^2\), 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\(^2\) 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\(^2\) can be found online.

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\(^2\) http://www.dnr.maryland.gov/wildlife/Plants_Wildlife/digitaldata.asp
\(^2\) http://www.streamhealth.maryland.gov/stronghold.asp
\(^2\) http://dnr.maryland.gov/ccp/bi.asp
\(^2\) http://dnr.maryland.gov/fisheries/fhep/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](http://www.mdsg.umd.edu/sites/default/files/files/Sea-Level_Rise_Projections_Final.pdf),” 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](http://dnr.maryland.gov/ccp/habitats_slr.asp) were identified is available on line.

![Image of wetland area]

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](http://www.dnr.state.md.U.S./climatechange/) can be found on line.

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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.
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.
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 Inventory\(^{33}\) 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
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.

<table>
<thead>
<tr>
<th>Wetland Type</th>
<th>Acres Statewide</th>
<th>% Acres within GreenPrint TEA</th>
<th>GreenPrint TEA Acres Unprotected</th>
<th>GreenPrint TEA Acres Protected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estuarine</td>
<td>1,343,030</td>
<td>2.1</td>
<td>19,638</td>
<td>8,437</td>
</tr>
<tr>
<td>Palustrine</td>
<td>407,643</td>
<td>65.2</td>
<td>169,637</td>
<td>95,965</td>
</tr>
</tbody>
</table>

*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 Trust**[^34] (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.

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 Space**\(^{35}\) (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 POS**\(^{36}\) 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 POS**\(^{37}\) 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 Foundation**\(^{38}\) (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.

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\(^{35}\) http://www.dnr.state.md.U.S./land/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.
The Rural Legacy Program (RLP) 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 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.

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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**

![Graph showing protected lands activity history](image)

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 and 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.”

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. 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

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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 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 may 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/marcellUS/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.

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\textsuperscript{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

\textsuperscript{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, 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”, 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.

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46 http://www.chesapeakebay.net/groups/group/maintaining_healthy_watersheds_goal_implementation_team
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 2100 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

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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](https://www.biodynamics.com/biodynamics.html)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.

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49 [https://www.biodynamics.com/biodynamics.html](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
Counts 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 provide 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 Conservation

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.

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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 (LLCs)
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 (LLCs) 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, LLCs are working to ensure the sustainability of our economy, land, water, wildlife, and cultural resources.

Currently, 22 LLCs have been established. Collectively, these LLCs form a network of resource managers and scientists who share a common need for scientific information and interest in conservation. Each LLC 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 LLCs that co-occur within Maryland’s borders. The North Atlantic LLC joins the piedmont and coastal plain regions of the state to its northern New England neighbors and to Virginia in the south. The Appalachian LLC folds Maryland into a partnership with other Appalachia states. The activities sponsored by the LLCs 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 LLC conservation strategies in meeting shared objectives. More information about the LLC program and the partnerships found within Maryland can be found on-line.\(^52\)

\(^51\) [http://www.landscape.org/chesapeake](http://www.landscape.org/chesapeake)
\(^52\) [http://lcncnetwork.org/About](http://lcncnetwork.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.

![Image of boats on water]

**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).

\(^{53}\) http://www.malpf.info/certification.html
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 31\textsuperscript{55}, 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.\textsuperscript{55}

\textsuperscript{55} http://www.mdp.state.md.us/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 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 may be found online at http://www.roads.maryland.gov/Index.aspx?PageId=567.
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[^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.

[^57]: [http://mht.maryland.gov/heritageareas_program.html](http://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

According to the National Park Service, "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. 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.

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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
The Maryland Commission on Indian Affairs 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.

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.