Case Study: Green Maryland—Connecting the Dots

Consider the following:

- Before European colonization, 95 percent of Maryland was carpeted by green forest. By 1993, forest area had decreased to 47 percent of the state's land area.
- Maryland has lost 50 percent of its pre-settlement wetlands.
- Between 1790 and 1990, Maryland's population grew from 320,000 to 4,780,000 people.
- At least 180 plant species and 35 animal species have been eliminated from Maryland, including elk, gray wolves, bison, and mountain lions. Another 310 plant species and 165 animal species are rare, threatened, or endangered.

Is it too late for Maryland to take action to protect its rich ecosystems and wild treasures? Is there hope for maintaining a balance between the needs of humans and the needs of wild species?

Recently, Maryland has been working hard to strike a balance between the natural and built environments and to find innovative methods to accommodate growth while still protecting the best features of Maryland.

Greenways

In 1990, a Maryland executive order established the Maryland Greenways Commission, with the goal of providing a statewide natural infrastructure by protecting and connecting important natural corridors throughout the state. Since then, Maryland has protected more than 1,500 miles of greenways corridors, including more than 600 miles of land trails and 300 miles of water trails. Consequently, the state is a national leader in efforts to preserve a network of natural corridors that connect areas of open space.

Greenways are natural corridors that have been set aside to connect larger areas of open space and to provide for the conservation of natural resources, including city water supplies, protection of habitats, and movement of plants and animals. Greenways also offer opportunities for linear recreation like bike trails, alternative transportation, and nature study. The Maryland Greenways program works with local governments, citizen groups, land trusts, businesses, and private organizations.

What Types of Corridors?

Among the corridors in the greenways system are trails along rivers, streams, ridgelines, abandoned rail lines, and wild vegetated corridors. To be considered part of the statewide greenways network, land must be under some form of permanent protection and serve at least one of several greenways functions:

- Riparian and water quality protection
- Wildlife and ecological corridors
- Linear shaped parks (can be natural areas or developed recreation sites)
- Trails (as long as they include a significant vegetated buffer).

All Maryland greenways provide some ecological benefits, and most serve multiple purposes. For example, parks along stream valleys, especially in urban areas, tend to take on multiple functions such as buffers, flood control, wildlife corridors, and recreation. Most corridors, however, can be classified as primarily ecological or recreational. Most of the current land is publicly owned, but numerous easements are being placed on private properties to enhance the growing network of corridors.

The Baltimore and Annapolis Trail exhibits a green corridor. It is an established recreational greenway following the route of the old Baltimore and Annapolis Railroad. The linear park connects two towns, stretches 13.3 miles, and covers 112 acres. The trail has a 10-foot-wide paved surface within a 66-foot-wide landscaped corridor. Walkers, runners, bicyclists, equestrians, and various forms of wildlife all use the trail.

Case Study: Green Maryland—Connecting the Dots (cont.)

Sample Map

As part of the project, an atlas of greenways, water trails, and green infrastructure was created. For each county in the state, the greenways maps show protected lands, including those owned by a conservation or government agency, those owned or under easement to a land trust, and those under agricultural easements. The maps also depict existing, planned, and potential greenways corridors. To see a sample map for Baltimore County, visit this link: http://dnr.maryland.gov/greenways/introduction.html.

The GreenPrint Program

The sample map of Baltimore County and other maps in the atlas illustrate that Maryland has protected green space. Yet, is it enough? Maryland has only two million acres of ecologically significant land that has not been consumed by development. Of these two million acres of "green infrastructure," almost three-fourths are unprotected. Billions of dollars are spent each year to construct or maintain the state's built infrastructure of roads, bridges, and utilities that residents depend on. By contrast, the state's green infrastructure, which exists naturally, is under tremendous development pressure. Without protection, the remaining green infrastructure is vulnerable and subject to further loss and fragmentation.

So how is Maryland increasing its protection of the state's green infrastructure? Protecting land requires money. In May 2001, the governor signed into law a new $35 million GreenPrint program as a major expansion to the Greenways program. GreenPrint aims to help protect Maryland's most-valuable remaining ecological lands and the state's long-term ecological health.

The program follows a three-step process:
1. Identifying the most important unprotected natural lands in the state by using the most up-to-date computer mapping techniques
2. Linking, or connecting, those lands through a system of corridors or connectors
3. Saving those lands through targeted acquisitions and easements

The program will support efforts to steer growth to appropriate areas while preserving portions of the landscape that make Maryland both bountiful and captivating.

Green Infrastructure Assessment

A Green Infrastructure Assessment is an essential component of the program to help identify and prioritize areas in need of conservation and restoration. It has focused on two types of important resource lands: "green hubs" and "green links." Green hubs form the heart of Maryland's green infrastructure and typically span hundreds of acres. The hubs serve a vital function in maintaining the state's vibrant and unique ecology. Green hubs are connected by green links—ribbons of land such as stream valleys and mountain ridge lines that function as "habitat highways." The habitat highways allow safe passage for wildlife through their natural domain; facilitate seed and pollen transport, which helps plant life thrive across the state; and keep streams and wetlands healthy by protecting adjacent vegetation. Preserving linkages between the remaining large habitat areas will ensure the long-term survival and continued diversity of Maryland's natural resources and environment.

Case Study: Green Maryland—Connecting the Dots (cont.)

Who Gains from the Program?

The GreenPrint program affects all Maryland citizens. For some people, like those who harvest and process timber, it affects their jobs. The program supports Maryland's economy, especially forest products, seafood, and tourism. For other people, the green infrastructure provides places for hobbies, recreational activities, and learning opportunities. Nature lovers can enjoy hiking, camping, observing, and photographing a wide variety of plants and animals.

Developers, private landowners, and others will benefit from having a clear understanding of where the most ecologically valuable lands are located and where targeted conservation activities will be directed. Local governments will be able to enhance their efforts to provide open space, recreation lands, and natural areas that retain the unique character of their communities and rural landscapes. The GreenPrint program helps preserve and safeguard Maryland's rich quality of life and its special natural landscapes, such as picturesque, rolling mountains; forest lands and wooded wetlands; expansive native marshes; and the Chesapeake Bay. Action taken today will help ensure that future generations have the same opportunities to enjoy Maryland's outstanding natural resources and high quality of life as residents do today.

Sources:
Maryland Department of Natural Resources (E).
Smart Growth Network/ICMA 2002 (C).

Questions to Consider:

- How did Maryland identify high-priority lands to target conservation efforts?
- What do you think are the most important components of Maryland's plans?
- Does this program favor or discourage growth? Explain.
- Do you think the program will succeed? Why or why not? Which criteria would you use to determine success?
- Does your state have a similar program?
- Do you think this program would be funded in a tight budget year? Why or why not?