

Selected Findings by Sustainable Forest Criteria: Maryland Forest Resource Assessment, 2010

Conservation of Biological Diversity

- Loss of forest land to development, 151,500 acres between 1986 and 2008, and fragmentation of existing forests are among the most wide-spread threats to biodiversity.
- Maryland is characterized by a maturing forest mostly between 40 and 100 years old, with relatively low acreage in old growth (<1%) or early successional forest (9%).

Maintaining Productive Capacity of Forest Systems

- The proportion of larger, sawtimber-sized trees (76%) is increasing as forests mature.
- Sixty-three percent of Maryland's forests are in the oak-hickory forest type.
- Less than 58% of average annual growth of forests is removed by harvesting,

Maintaining Forest Ecosystem Health and Vitality

- As with biodiversity, the greatest threat to forest health is considered to be forests converted to development, anticipated to increase 48% between 1990 and 2015. Development threat is highest in the central portion of the state.
- Wildfire is being effectively controlled, and current trends show declines in acreage of unplanned wildfire ignitions.
- Future shifts of species assemblages are likely in response to changing climate, with increases in pine and losses of sugar maple/beech/birch forests.
- Invasive species pose significant threats to forest health, with current damages from exotics like Hemlock Woolly Adelgid, Emerald Ash Borer, Gypsy Moth, Beech Bark Disease. Future damage is likely from pests like *Sirex* wood wasp which is present in neighboring Pennsylvania, while efforts are underway to avoid introduction of problems like Sudden Oak Death from the west coast.
- Other forest stresses include damage from high populations of white-tailed deer and an array of invasive, exotic plants.

Conserving and Maintaining Soil and Water Resources

- Forests are the most protective land use for water quality, so the conversion of forests to other land uses is one of the most significant threats to Maryland's water quality.
- Riparian areas and other hydrologically active areas like seeps, springs, and toe slopes are especially important locations to have forests present on the landscape.

Maintaining Forest Contributions to Global Carbon Cycles

- Maryland's forests are contributing an increasing amount to sequestration of carbon, tied to the greater size of trees in the maturing forest landscape.
- Estimates of carbon in forest biomass suggested a 31% increase from 2004 to 2008.

Maintaining and Enhancing Long-term Multiple Socioeconomic Benefits to Meet the Needs of Societies

- Forest industry is a significant economic engine in Maryland, a \$4+ billion industry and the fifth largest economic sector; the greatest influence of primary forest harvesting and management activity is in the rural areas, Eastern Shore, Western Maryland, and Southern Maryland, but is present statewide.
- Recreation is an important forest use, but safety and environmental issues with motorized recreation like all-terrain vehicles are increasing.
- Maryland's forests are 76% privately owned. Most people who own forests don't plan to manage the forest primarily for timber; 84% of landowners own less than 10 acres of forest.
- Acreage of lands protected from development has been increasing through state and local acquisitions as well as easements and donated easements.

Legal, Institutional, and Economic Framework of Forest Conservation and Sustainable Management

- Maryland has a robust suite of laws for protecting forests, from the landmark Sustainable Forestry Act of 2009 to the Forest Conservation Act, Critical Area Law, Non-tidal Wetlands

Law, sediment and erosion control requirements, and local government comprehensive plan requirements.

- Maryland has committed to practice sustainable management on forests and third-party certify all State Forests under both Forest Stewardship Council and Sustainable Forestry Initiative standards.
- Chesapeake Bay commitments include expanded riparian forest buffers, increased forest conservation in priority areas, and urban tree canopy goals.