

The State of Chesapeake Forests

Edited by: Eric Sprague

David Burke Sally Claggett Albert Todd Eric Sprague, The State of Chesapeake
Forests, Coordinator
David Burke, The State of Chesapeake Forests, Director
Lawrence A. Selzer, Chief Executive Officer
Patrick F. Noonan, Chairman Emeritus
Erik J. Meyers, Vice President for Sustainable Programs
The Conservation Fund
1655 N. Fort Myer Drive, Suite 1300
Arlington, Virginia 22209-2156
www.conservationfund.org

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Sally Claggett, Chesapeake Bay Program Coordinator Albert Todd, Watershed Program Leader United States Department of Agriculture Forest Service, State and Private Forestry Northeastern Area 410 Severn Avenue, Suite 109 Annapolis, MD 21403 www.na.fs.fed.us



The Northeastern Area (NA) is a unit of the State and Private Forestry branch of the USDA Forest Service. Its mission is to lead and support sustainable forest management and use across the landscape to provide benefits for the people of 20 Northeastern and Midwestern States and the District of Columbia. NA works with State forestry agencies and other partners to influence the wise management, protection, and sustainable use of urban and rural forest resources and provides financial support and professional expertise to States, private forest landowners, nonprofit groups, tribal nations, and communities. The NA Chesapeake Bay Watershed Forestry Program was established to bring direct support for Chesapeake Bay restoration and stewardship goals. For more information on State and Private Forestry Programs, visit www.na.fs.fed.us.



The preparation of this report was guided by the input, advice, and review of many individuals and organizations across the Chesapeake Bay watershed. Over 200 people participated in interviews and workshops in 2004, representing a variety of organizations including Federal, State, and local government agencies, regional environmental groups, forest product companies and trade associations, and universities. In addition, many people helped provide scientific data, analysis and text used in the report. The State of the Chesapeake Forests project was funded by the USDA Forest Service, Northeastern Area, State and Private Forestry.

Contributing Authors

Richard Birdsey, USDA Forest Service David Burke, The Conservation Fund Brett Butler, USDA Forest Service Sally Claggett, USDA Forest Service Jennifer Curkendall, USDA Forest Service Sarah Ewing, The Conservation Fund Jim Finely, Penn State University Tom Horton, Author Jim McGlone, VA Department of Forestry Kent Mountford, Cove Corporation David Nowak, USDA Forest Service

Judy Okay, VA Department of Forestry Rich Pouyat, USDA Forest Service Steve Raciti, Cornell University Eric Sprague, The Conservation Fund Court Stevenson, University of Maryland Ken Stolte, USDA Forest Service Bern Sweeney, Stroud Water Research Center Albert Todd, USDA Forest Service Sarah Weammert, Chesapeake Research Consortium Ted Weber, The Conservation Fund Rich Widmann, USDA Forest Service

Technical Advice

Carin Bisland, US EPA Grace Brush, Johns Hopkins University Mark Bryer, The Nature Conservancy Marisa Capriotti, USDA Natural Resource Conservation Service Peter Claggett, USGS Christine Conn, MD Department of Natural Resources Tracey Coulter, PA Bureau of Forestry Tom DeMoss, US EPA Mike Foreman, VA Department of Forestry John Greis, USDA Forest Service Morgan Grove, USDA Forest Service Jeff Horan, MD Department of Natural Resources

Cheryl Kollin, American Forests Lori Lynch, University of Maryland Doug MacCleery, USDA Forest Service Doug Samson, The Nature Conservancy Don Outen, Baltimore County Neil Sampson, Sampson Group Rob Schnabel, Chesapeake Bay Foundation John Scrivani, VA Department of Forestry Tom Simpson, University of Maryland Cooperative Extension Evan Smith, The Conservation Fund Anne Hairston-Strang, MD Department of Natural Resources Susan Winter, USDA Forest Service Wayne Zipperer, USDA Forest Service

Production Assistance

Crystal Andrews Kristen Fleming Tom Frieswyk, USDA Forest Service Jen Hauck, The Conservation Fund Zoe Johnson Elizabeth LaPoint, USDA Forest Service Lara Lutz, Editor Meg McCants, The Conservation Fund Erik Meyers, The Conservation Fund Howard Weinberg, University of Maryland Rebecca Whitney, USDA Forest Service John Wolf, National Park Service

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Graphics, charts and diagrams

John Damm, Damm & Ripley Graphic Presentation Fauve Hill Art and Design Studio Phyllis Saroff, Saroff Illustration Juliette Watts, USDA Forest Service

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FORWARD

bounce back from environmental insults. In the 1970's, Mother Nature delivered the Bay a fierce blow—the worst rain and flooding in perhaps two centuries. That decade sent the ecosystem into a tailspin from which it still has not recovered. In retrospect, it is not so surprising.

Tropical storm Agnes in 1972, combined with several more unusually wet years in the Bay's history, came at a time when much of the historic resilience of the watershed was depleted. The Bay's major system of resilience, the forest that once covered most of the watershed, was 40% gone. Together, the forests, wetlands, bay grasses, and oysters, once constituted a marvelous system of buffers and filters, stabilizers, and regulators. They lent the Bay a tremendous resilience, a capacity to absorb environmental insult and recover.

Ultimately, the Bay depends on the quality and quantity of rainwater that runs from the lands of its watershed; and no other land use-pasture, cornfield, lawn, or urban street—consistently delivers the clear, pure water received from the forest. We can only speculate about the quality of freshwater flows to the pristine Bay that existed when the old-growth forest covered almost all the watershed from New York to Norfolk. Forests that have not been altered by man are so rare and scattered now, that even most professional foresters have never studied their workings. Nonetheless, study after study confirms that even today, the forested lands of the watershed are the most beneficial use to which we

put the land in terms of water quality. This includes well-managed commercial and private forestlands, which from the Bay's standpoint are a healthy alternative to both development and agriculture.

Just by growing, forests in the Bay's watershed today are sopping up an estimated 184 million pounds of nitrogen from polluted air each year that would wash into watershed if it fell on paved streets. The forests are thus accomplishing about three times the annual reduction of nitrogen achieved by all the technological pollution control efforts of the last two decades combined. And the trees do it for free, while other solutions cost billions. Yet, we rarely think of the trees in this way.

Today's environmental problems stem from both how many people live in a place and how they live—the per capita consumption of land and natural resources. The wasteful conversion of open space to developed lands removes the Bay's filters and buffers and developing wetlands and forests is a largely irreversible process. But to assign this blame to "industry" or "agriculture" or "developers" is to ignore a critical fact. Many of the problems with the Chesapeake Bay are the cumulative

impact of fulfilling the wants and needs of the people who live here. People often multiply their impact by a factor of one when they should be multiplying by the 16 million who inhabit the Bay's watershed. We are wasting too much land on paving and using too much energy. We are frittering away the heritage of the places we live—the character of our natural landscapes, the community of our small towns, and the vitality of our urban centers. Fortunately, the alternatives leading to a restored Bay do not mean an impoverished existence; rather, they may lead to an even higher quality of life.

Another major concern is that if the Bay and our watersheds continue in an unrestored state, political leaders, decision-makers, and we who live around the Bay, will redefine success. As public memory of a truly healthy estuary recede, the concept of "restored" may also be reduced to a more "achievable" state. With fishing closed to shad since 1979, adults who have never caught a shad are not overly worried about bringing back what they have never had. The same goes for oysters, bay grasses, and streams. Each new generation experiences a marginal Bay, one more degraded than that of decades ago. This point of view inevitably leads to lower expectations and less pressure on politicians to do right by the Bay.

What must we do then, to save the Bay? Despite notable efforts and successes, the challenge is not being met. Just holding the line against further decline is not restoration. If the wealthiest, most powerful, and technologically advanced nation in the history of the planet cannot live in a place without ruining it, what message does that send to the rest of the world? We need more than a reinvigorated commitment to fighting for the Bay and the environment. We must redefine the nature of the struggle.

We must learn to see the Bay whole, as water and watershed and airshed inseparably linked; to see the bay as a system whose forests are every bit as much components of pollution control and environmental health as sewage treatment plants and sediment fences. It seems easy to accept spending \$50 million or more on sewage treatment, but the protection or restoration of a filtering, cleansing forest is "uneconomic" to invest in. Forests—so vital for wildlife, clean water, and clean air—must be also seen as essential to restoring the Bay and to maintaining our quality of life. We must regain the Bay's natural resilience through the natural systems like forests that help the Bay help itself!

Tom Horton
Excerpts from Turning the Tide: Saving the Chesapeake Bay

PREFACE

Many organizations compile information and data on the value, trends, and threats to the condition and sustainability of forests in the Chesapeake Bay watershed. The State of Chesapeake Forests report pulls together much of this varied information to provide a resource for governments, environmental organizations, and other groups interested in establishing forest protection and sustainable management as a key strategy for improving the Bay watershed's environment, economy, and quality of life.