

INNOVATIONS IN NATURAL RESOURCES

*The Maryland Department of Natural Resources
Annual Report for FY '95 and FY '96*

DEPARTMENT OF NATURAL RESOURCES
INFORMATION RESOURCE CENTER
NON-CIRCULATING

THE MISSION

For today and tomorrow
the Department of Natural Resources inspires people
to enjoy
and live in harmony with
their environment,
and to protect
what makes Maryland unique --
our treasured Chesapeake Bay,
our diverse landscapes
and our living and natural resources.

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THE MESSAGE

In support of Governor Parris N. Glendening's goal for a more efficient, more productive state government, DNR underwent a major reorganization in Fiscal Year 1996, and developed a three-year budget reduction plan.

In addition to considering our role in natural resources management, environmental protection, recreation and public safety, DNR management also evaluated how our programs and services support other priorities for the State, including Education, Economic Development and Quality of Life. Subsequent efforts to realign our resources to best support DNR's most important core services, resulted in a redefined mission, redirected goals, the stop or consolidation of a number of programs and the reduction of staffing positions.

The results of the changes we have made to date and those that will be forthcoming have left us with an agency that, while leaner, is continuing implementation of new, innovative ideas.

Externally, we have placed an increased focus on partnerships, both public and private. By collaborating with other state, federal and local government agencies, industry, business and environmental interests, and Maryland's greatest resource -- its citizenry -- we are able to develop and implement important programs that could not be carried out by one group alone. Internally, we have adopted a team approach to a number of our operations, including Ecosystem Management, Public Lands Planning, Urban Initiatives, Organizational Quality and Improvement, Conservation Education and Advocacy Development.

The more we explore the wonders that are Maryland's natural resources, the more we learn about the interdependence of our natural and living resources: how what we do on the land affects the Chesapeake Bay and its tributaries, and Maryland's wildlife and fishery species. And the more we understand the interdependence of our resources, the more we also understand the importance of the relationship between our agency and Maryland's citizens.

John R. Griffin
Secretary

THE ORGANIZATION

EXECUTIVE DIRECTION

John R. Griffin, Secretary
Carolyn D. Davis, Deputy Secretary

OFFICE OF THE ATTORNEY GENERAL

Principal Counsel: Joseph P. Gill

PUBLIC COMMUNICATIONS OFFICE

Director: Liz Kalinowski

Legislative Officer: Nita Settina

Responsible for media, marketing and intergovernmental relations efforts, PCO staff members work with the Governor's Office, and DNR executive, unit and program staff to: promote consistent public messages; coordinate special events and exhibits; foster advocacy, volunteer and outreach efforts; cultivate public-private partnerships; develop sales and promotion strategies; provide graphic design and copy assistance; direct legislative efforts; and coordinate information technology.

CHESAPEAKE BAY & WATERSHED PROGRAMS

Assistant Secretary: Verna E. Harrison

Protection, Restoration and Enhancement of the Chesapeake and Coastal Bays

CHESAPEAKE AND COASTAL WATERSHED SERVICE

Director: David G. Burke

Working with public and private partners, CCWS develops and supports implementation of watershed, greenway and waterway management strategies for the restoration, long-term protection and economic vitality of the Chesapeake and Coastal Bays Ecosystems.

EDUCATION, BAY POLICY AND GROWTH MANAGEMENT

Director: Theresa Pierno

In addition to coordinating a conservation education program, this unit: develops and implements Bay restoration policy; works with public and private partners to protect the state's "green infrastructure"; acts as liaison to the Chesapeake Bay Program, Tributary Strategy Teams and the Governor's Bay Cabinet; and houses the Regional Chesapeake Bay Program, providing leadership in development of regional Chesapeake Bay initiatives in Maryland, Virginia, Pennsylvania, and the District of Columbia.

REGIONAL CHESAPEAKE BAY PROGRAM

Director: Carolyn Watson

This unit works with federal agencies and regional jurisdictions, such as Virginia, Pennsylvania and the District of Columbia, to develop policy for the conservation and restoration of the plant, fish and wildlife species of the Chesapeake Bay. This Unit also develops State programs of regional significance such as the *Maryland Bay Game* and the *Chesapeake Bay Fact Signs* at the Chesapeake Bay Bridge. The Director chairs the Living Resources Subcommittee of the Regional Chesapeake Bay Program.

RESOURCE ASSESSMENT SERVICE

Director: Paul Massicot

Through collection, management and interpretation of scientific and economic data, this unit: impacts natural resource and environment-related regulatory and policy decisions; restores, protects and manages Maryland's tidal and non-tidal ecosystems; and works with federal, state and local agencies, citizens and businesses to motivate their involvement and to share information.

MANAGEMENT SERVICE

**Assistant Secretary: Allen W. Cartwright, Jr.
Fiscal, Administrative and Personnel Services**

FINANCE & ADMINISTRATIVE SERVICE

Director: Bonnie P. Mulieri

Providing fiscal and support services to DNR programs statewide, this unit oversees DNR's \$184 million operating budget; fulfills federal grant reporting and billing requirements; tracks departmental revenues and expenditures; administers procurement contracts; and manages employee payroll, the vehicle fleet, building maintenance and mail service.

HUMAN RESOURCE SERVICE

Director: Kathryn Marr

This unit supports DNR's work force and helps them meet personal and career goals in concert with department outcomes, by providing a variety of services including: career counseling; position recruitment, classification and testing; training and development services; and employee benefit and personnel information management.

MANAGEMENT ANALYSIS & AUDIT

Director: Steven Powell

Ensuring department-wide operational effectiveness and compliance with State statutes, regulations, policies and procedures, DNR's internal auditors: assist executive staff with management issues, planning, organization, troubleshooting and direction of unit objectives; reviews and assesses program performance and departmental procedures; develops DNR business policies and regulations; offers efficiency recommendations; performs internal audits of facilities and activities; and conducts external examinations of boat dealers, license agents and contractors.

MANAGEMENT INFORMATION SERVICE

Director: Al Gorham

MIS staff support DNR's work force through the design, management, and maintenance of the department's technical infrastructure, including: implementation and maintenance of a variety of databases, E-mail and the Internet; operation of business systems; coordination of Financial Management Information System activities and data processing procurement; and representation of DNR with the State's information technology office and various information technology committees.

PUBLIC LANDS

Assistant Secretary: James W. Dunmyer
Acquisition, Development, Management and Conservation
of Public Lands and Waterways and Natural Resources Law Enforcement

LAND & WATER CONSERVATION SERVICE

Director: Michael J. Nelson

Housing Program Open Space, Resource Planning and Engineering and Construction staff, this unit is responsible for: public land and easement acquisition; local grants for Rural Legacy, land acquisition, recreational facility and waterway improvements; state facility and waterway improvement; resource planning, mapping, review and technical assistance; and architectural design, engineering, and construction; and management and maintenance of existing and planned land- and water- based facilities.

MARYLAND ENVIRONMENTAL TRUST

Executive Director: John Bernstein

MET negotiates and accepts conservation easements over properties of environmental, scenic, historic, or cultural significance; provides grants, loans and technical assistance to local land trusts; coordinates a Rural Village Protection program; and administers the Keep Maryland Beautiful Awards program.

NATURAL RESOURCES POLICE

Superintendent: Colonel John R. Rhoads

Created in 1868 as the State Oyster Police Force, the NRP is the oldest state law enforcement agency in Maryland, and one of the oldest conservation law enforcement organizations in the United States. The agency's responsibilities include preserving and protecting Maryland's natural resources and its citizens, through the enforcement of conservation, boating, and criminal laws, and serves as the primary search and rescue agency on Maryland waters and in remote areas of the state.

STATE FOREST AND PARK SERVICE

Superintendent: Colonel Rick Barton

SFPS staff manages natural, cultural, historic and recreational resources in 47 forests and parks across the state, and provides related educational services.

RESOURCE MANAGEMENT SERVICE

Assistant Secretary: Sarah Taylor-Rogers, Ph.D.

Resource-based Services to Landowners and Local Governments; Living Resource Management; Hunting and Fishing Licenses; Boater Registration

CHESAPEAKE BAY CRITICAL AREA COMMISSION

Executive Director: Ren Serey

Created by an Act of the Maryland General Assembly in 1984, the Commission is charged with promulgating Criteria necessary to: minimize stormwater runoff impact; conserve fish, plant and wildlife habitat; and establish land use policies for the Critical Area which accommodate growth and address the environmental impacts of development activities in the Bay's sensitive shoreline areas. Local Critical Area programs are carried out by 61 Maryland jurisdictions.

ENVIRONMENTAL REVIEW

Director: Ray C. Dintaman, Jr.

An independent umbrella group, this unit is the single point of contact for environmental review and the single voice on multi-resource issues, providing balanced viewpoints, timely responses, and consistency in reviews, serving other DNR units in an information, coordination and consistency role.

FISHERIES SERVICE

Director: Dorothy L. Leonard

DNR's Fisheries Service restores fish resources in need of conservation; manages commercial and recreational harvesters to maintain sustainable quality fisheries; and promotes fishery ethics and public involvement.

FOREST, WILDLIFE & HERITAGE SERVICE

Director: Eric C. Schwaab

FWHS' diverse programs collectively provide management assistance for land-based resources, ensuring forest retention and habitat conservation. As part of an integrated approach to managing resources -- consolidating wildlife and heritage concerns with forestry assistance -- FWHS also regulates hunting activities and threatened and endangered species protection.

LICENSING AND REGISTRATION SERVICE

Director: Bruce A. Gilmore

Through six regional service centers, LRS staff acts as goodwill ambassadors, assisting the public with vessel titling and registration, off-road vehicle registration, commercial fishing licenses and hunting and sportfishing licenses. In addition to its support of outdoor recreational opportunities, this unit collects special revenues and statistical information which support other DNR programs.

THE MATRIX TEAMS

ADVOCACY TEAM

Team Chair: Nita Settina

DNR consistently relies on customer feedback and support to achieve program goals. Development and cultivation of those relationships, and ultimately engaging customers in its mission -- is the focus of the Advocacy Team. Through assessment and other strategies this team makes recommendations on how to foster internal support for public involvement in DNR decision-making processes, and proactively develops partnerships with key public stakeholders to cultivate development of and support for programs, policies and mission.

CONSERVATION EDUCATION

Team Chair: Daryl Anthony

Coordinating DNR's conservation education efforts, this team promotes a stewardship ethic in Marylanders by providing programs, information and materials on natural resources.

COUNCIL ON QUALITY & ORGANIZATIONAL INNOVATION

Team Chair: Eric C. Schwaab

Working to help change DNR's culture from a traditional top-down, hierarchical bureaucracy to a participatory organization that engages and rewards the activities of every member, the council works with leadership and staff to: obtain measurable improvements in quality of service, productivity, and DNR's work environment.

ECOSYSTEM COUNCIL

Team Chair: David G. Burke

With assistance from Chesapeake and Coastal Watershed Services staff, the Ecosystem is working with other DNR units to develop an Integrated Natural Resource Management Strategy to broaden, ecosystem-based management philosophy and policy. The three basic components of the strategy will be establishment of a green infrastructure; integration of existing plans; and unification of ecosystems and economies.

REGIONAL TEAMS

Team Chair: Michael J. Nelson

Coordination and cooperation of units on a regional basis are an effective way to incorporate an interdisciplinary approach in day-to-day unit operations. The four regional teams foster a better understanding of the Department's goals, priorities and key policy issues, and improved working relationships among units. Each regional team has identified a regional enhancement project to protect and conserve natural resources within its region.

URBAN RESOURCES COORDINATING COUNCIL

Team Chair: Gene Piotrowski

To address the unique social, economic and environmental issues facing Maryland's urban populations, the Urban Resources Council is developing strategies to develop recreation opportunities and stewardship policies through partnerships with local government and citizens, and to increase workforce sensitivity and commitment to urban problems.

THE CHESAPEAKE BAY

TO SUPPORT A VITAL AND LIFE-SUSTAINING CHESAPEAKE BAY AND ITS TRIBUTARIES ... DNR scientists use monitoring and assessment information to identify factors critical to the Bay's health. Working closely with public and private stakeholders, the Chesapeake Bay and Watershed programs focus on cost-effective waterway restoration, protection and enhancement.

INNOVATIONS IN LEADERSHIP

- ✓ Paramount to the preservation of Maryland's natural resources in FY '96, was DNR's participation in development of the **Governor's Environmental Agenda**. The agenda expands the scope and depth of the State's environmental restoration and protection efforts with new initiatives including: linking schools to real-time Bay data; a coastal "clean marinas" program; and creative, cost-saving techniques to control nutrient pollution on agricultural lands.
- ✓ Dedicated to local implementation of statewide nutrient reduction and habitat restoration strategies, **Maryland's Tributary Teams** successfully initiated a broad array of projects designed to accelerate the Bay cleanup. Unique in the nation, the teams were appointed by Governor Glendening to be a "sparkplug" for citizen action and include representatives of all major stakeholder organizations.

BAY PARTNERSHIPS

- ✓ **Maryland's citizens** play a critical role in the preservation of the Bay. Shared concern for diverse issues has led citizens to take direct action for many causes. From cleaning up the Chesapeake Bay to trail building, teaching children, and assessing water quality, volunteerism provides citizens the opportunity to fill a real need while making a difference in their communities. A growing number of business people, developers, and political leaders have also become involved in helping the Bay and its living resources through interest groups, advisory committees, donations and individual volunteer work.
- ✓ A partnership between the Baltimore-Washington International Airport and DNR is working to restore water quality and aquatic habitat through monitoring and management of aircraft deicing fluid. The **Sawmill Creek Targeted Watershed Project** has become an international model for deicing management, and is being looked at by Canadian airports.
- ✓ During FY '96, 270 groups, individuals and businesses participated in hands-on activities to restore and protect Maryland's waterways through the **Adopt-A-Stream** program, contributing an estimated 6,200 hours of volunteer time.

RESEARCH & RESTORATION

- ✓ Supported by \$93,750 in Program Open Space funding, construction began on the **Anita C. Leight Estuary Center** in Harford County. This 62-acre Chesapeake Bay National Estuarine Research Reserve will provide opportunities for estuarine research, education and passive recreation, complementing ongoing research at Jug Bay and Monie Bay.
- ✓ In conjunction with the University of Maryland Center for Environmental and Estuarine Studies, DNR's Coastal and Estuarine Geology Program is evaluating the extent and distribution of **sediment pollutants** in the Patapsco/Back River areas. Study results will help scientists assess the degree to which reductions in contaminant loading to the Baltimore Harbor are affecting the concentrations present in surficial sediments.

PROTECTING THE SHORELINE

- ✓ By providing technical and financial assistance to private landowners and local jurisdictions, DNR leads Maryland's effort to improve the overall health and productivity of the Chesapeake Bay through the restoration of **riparian forest buffers (RFBs)**. In FY '96, the Forest Service helped re-establish RFBs on more than 200 acres, protecting more than 16 miles of streambanks and shorelines.
- ✓ DNR and Charles County provided funding to purchase 143 acres that protect more than a mile of **Nanjemoy Creek** shoreline. The county has also committed to undertake land management costs associated with a new facility.
- ✓ In FY '96, the **Critical Area Commission** : received for review and comment 742 local projects, 50 State projects and 30 local program amendments; completed 4-year comprehensive reviews of three programs, providing technical assistance to seven local governments); processed 48 grants, awarding more than \$750,000 to local governments for program implementation and maintenance; and provided \$109,000 to retain circuit rider services.

WHAT'S NEXT...

- ▲ 600 new miles of **riparian forest buffer** planting along side Maryland stream banks by the year 2010.
- ▲ The **Bay Game**, a fun, educational tool to help young people learn about the watershed.

THE ECOSYSTEM & LIVING RESOURCES

TO STRENGTHEN ANIMAL, FISH AND PLANT SPECIES POPULATIONS AND PROMOTE HEALTHY, DIVERSE ECOSYSTEMS... DNR defines resource conditions and trends on a watershed basis, and works with landowners and local governments to protect and enhance existing habitat, conserve resources, improve coordination of regulatory authority and increase cost-effectiveness of acquisition.

INNOVATIONS IN BIODIVERSITY

- ✓ Recognizing the importance of managing the Chesapeake as a single, integrated resource unit, the 1987 Bay Agreement set a demanding timetable for the creation of **living resource management plans** to guide the coordinated management of its fish and waterfowl. To date, 14 fishery management plans (FMPs) have been prepared for 20 Chesapeake Bay species (most recently for black sea bass), and an FMP for catfish is scheduled for completion. A document explaining the effects of land use on aquatic habitats has been outlined.
- ✓ In a unique approach to **Heritage & Biodiversity Conservation**, DNR programs encourage voluntary stewardship and ecosystem management (through the delivery of regional and local technical assistance, management options and incentives) to provide for the long term conservation of the full array of native ecosystems, natural communities and species that comprise the biological integrity of Maryland.
- ✓ Increased emphasis on protecting **natural communities** (rather than individual species) is the genesis of a nearly completed classification of Maryland's plant communities. This classification will provide a more efficient perspective for establishing biodiversity conservation priorities and will allow for more effective management of all wild plants and animals.

THE ECOSYSTEM APPROACH

- ✓ The Southern Regional Team's **Patuxent River Enhancement Project** assessed DNR acquisition interests along the River between Route 4 and Indian Creek. In addition to identifying parcels for acquisition, one mile of riparian forest buffers was planted, Forest Stewardship Plans on 1.150 acres were prepared, and two controlled burns were conducted to improve habitat.
- ✓ In Allegany County, the Western Regional Team initiated **the Town Creek Enhancement Project**, a partnership between the local community and participating government agencies. Its mission is to better conserve and manage the watershed's natural resources by implementing an "on-the-ground" approach to ecosystem management, including educating property owners about the availability of voluntary stewardship programs.

FISHERY PROTECTION & RESTORATION

- ✓ The Blue Crab Advisory Committee provides Maryland and Virginia a discussion and decision forum for development of a coordinated **blue crab management** policy. The Committee, which examines habitat quality, stock status, economic issues, the regulatory effectiveness and other issues, endorsed new sport and commercial crab harvest regulations in FY '96, intended to reduce harvest pressure on the stock, especially the taking of females in the fall. The most recent assessment indicates that while stocks are not overfished, increased fishing effort should be discouraged.

- ✓ Oyster reefs and bars are key ecological components of the shallow Chesapeake Bay system. In cooperation with a variety of partners -- including the Army Corps of Engineers, the University of Maryland Center for Environmental and Estuarine Studies, the Oyster Recovery Partnership, Inc., and the Maryland Department of Transportation -- DNR is spearheading oyster reef restoration and oyster shell and seed plantings; advancing oyster hatchery technology and facilities; and testing new management strategies at six **oyster recovery** areas.

- ✓ Fishways on major rivers are critical to the restoration of spawning populations of ecologically and economically important American shad, hickory shad and river herring. Construction of permanent **fish passage facilities** underway at Holtwood and Safe Harbor dams on the Susquehanna River, through an agreement with York Haven Power Company, will open more than 400 miles of river for spawning by American Shad and other important species. Also during FY '96, completion of a fishway on Unicorn Branch reopened 14.5 miles of quality habitat to migratory fishes, and construction or engineering design was begun on five more fishways in Maryland.

- ✓ In FY '96, the Natural Resources Police completed a 3-year investigation in conjunction with the U.S. Fish and Wildlife Service and the U.S. Attorney's Office, which resulted in the **federal prosecution**, trial and sentencing of four Maryland men in connection with violating, and conspiracy to violate the Lacey Act -- more than 49,000 pounds of largemouth bass illegally caught in Maryland, fraudulently documented and illegally purchased and resold in New York, Georgia, Michigan, Ohio, and Canada.

WILDLIFE MANAGEMENT

- ✓ Through the collective efforts of DNR, neighboring state wildlife agencies and conservation organizations, Maryland's resident Black Bear population (endangered in 1972) now numbers between 200 and 300. Initiated in FY '96, DNR's **Black Bear Conservation Program** is a landmark first step in implementing a proactive, innovative and evolving black bear management strategy. The program will assist landowners in Western Maryland, offering technical advice to minimize bear-human interaction and may provide financial compensation for property damage caused by black bears.

- ✓ In FY '96, **Bald Eagle** nesting pairs in the Bay region exceeded 200 for the first time since the DDT era, and Maryland's **piping plover** (federally threatened) population trends was the most positive in the multi-state Southeastern Recovery Unit.
- ✓ To address Maryland's rapidly growing deer population, a long-term statewide **deer management** planning effort is being launched. It is estimated that 100,000 deer hunters have an annual impact of more than \$200 million on Maryland's economy; and while most citizens enjoy viewing deer in the wild, increasing incidents of crop damage, deer-vehicle collisions, and damage to vegetation are causing concern. A public opinion survey and a series of public meetings will help DNR to respond to these emerging trends.

WATER QUALITY PARTNERSHIPS

- ✓ Samples from tidal regions of major Bay tributaries are being analyzed to track changes in **water quality**, primary productivity and light penetration, providing input into water quality and ecosystem processes models.
- ✓ DNR staff conducts **environmental reviews** statewide on wetland and toxic permitting, and dredging, mining and solid waste management activities. Along with the Army Corps of Engineers and Maryland's Department of the Environment (MDE), Environmental Review staff played a role in developing Maryland's State Programmatic General Permit and will be given consideration in all future wetland permit decisions. The Corps has also designated DNR as its non-Federal representative for conducting informal consultation with the U.S. Fish & Wildlife Service and National Marine Fisheries Service pursuant to the Endangered Species Act.

LOOKING AHEAD...

- ▲ Creation and sales of a **Black Bear Conservation Stamp** to help fund a damage reimbursement program.
- ▲ A pilot project to demonstrate the beneficial application of coal combustion by-products to mitigate **acid mine drainage** from abandoned deep coal mines.
- ▲ A partnership uniting watermen, citizens and the University of Maryland with DNR to reseed and replant **Bay grasses**.

THE STEWARDSHIP ETHIC

TO FOSTER A NATURAL RESOURCES STEWARDSHIP ETHIC FOR ALL MARYLANDERS... DNR's outreach, advocacy and educational programs deliver consistent messages to the public through media, field trips, seminars, volunteerism, and the use of innovative technologies. By encouraging public involvement in its decision-making process, DNR affords Maryland's citizens a personal stake in the management of their natural and living resources.

INNOVATIONS IN EDUCATION

- ✓ The year-round **Maryland Conservation Corps** (MCC) provides opportunities for youth, ages 17-25, to perform environmental restoration and community service work while developing job training, life skills, service learning and academic enrichment. Upon completion of 1,700 hours of service, each participant receives an educational stipend of \$4,725 for further education, technical or vocational training or for reimbursement of student loans. The MCC 8-week summer program invites young people between the ages of 14-21, to perform conservation work while learning job skills and environmental education.
- ✓ Focusing on wildlife education and the state forest and park programs, the **Scales and Tales** program reached more than 2 million young people in FY '96. The program, which has achieved self-sufficiency through corporate, program and public donations, travels to schools, festivals and events in Maryland, Virginia, Delaware and the District of Columbia.
- ✓ In addition to its role as Maryland's ambassador vessel, the **Maryland Independence** is used as a "floating classroom." It is made available to education groups, especially those directly related to Chesapeake Bay study. In FY '96 the *Independence* provided a unique conservation education experience for both students and teachers.
- ✓ More than 1,200 educators attended workshops and received training on aquatic-related issues in FY '96, through **Project WET**, the Chesapeake Bay National Estuarine Research Reserve and Aquatic Resources Grants conferences. Speakers, programs, Internet pages, and \$60,000 in educator grants were also used to increase citizen knowledge, and advocate personal responsibility toward the Bay and the Environment.
- ✓ DNR's Regional Chesapeake Bay Program has developed a unique educational program, posting **Bay facts** at the Chesapeake Bay Bridge to promote public stewardship. The program's areas of focus also include management of black sea bass and blue crabs; fish passage; and habitat restoration -- including aquatic reefs, riparian forest buffers and wetlands.

- ✓ In FY '96, DNR's interpretive **Living History** programs reached thousands of school students across the State through classroom presentations and field trips, recreating historical figures and events.

PARTNERS IN STEWARDSHIP

- ✓ DNR depends on **volunteers** for constituency support and assistance in carrying out many programs. Acting as advisors and providing hands-on assistance, programs, such as hunter education and tree planting, rely almost entirely on volunteers support for implementation.
- ✓ A wide variety of DNR programs afford private businesses and individuals opportunity to support Maryland's Natural Resources. **TREE-Mendous Maryland** works with individuals, school groups, community associations and corporations to plant approximately 365,000 trees, shrubs, and seedlings throughout the state each year. DNR's **Wild Acres** program boasts more than 3,000 members -- citizens who are managing their own back yards in order to attract birds and other wildlife.
- ✓ In FY '96, a series of well-attended regional workshops was held, designed to survey and interpret current **Critical Area practice** for planners, engineers, consultants, environmentalists and developers. The workshops focussed on variance standards, preservation of forest-interior dwelling bird habitat, best management practices and compliance with the 10% rule for pollutant-load reduction.
- ✓ Through five new **curatorship agreements** negotiated in FY '96 the State of Maryland will receive donated goods and services from private parties for the restoration and maintenance of historically significant properties on public lands administered by DNR, representing a commitment of \$669,610. In FY '95, DNR received \$363,188 worth of goods and services through this curatorship program.

UPCOMING PROJECTS...

- ▲ A Landowner Stewardship Registry to connect private property landowners who want to plant buffers and create wetlands and wildlife habitat with organizations seeking sites for conservation.
- ▲ A pilot education project to provide extensive Bay training to volunteers who will enhance elementary school studies, teaching children about natural resource issues vital to the Bay, its tributary and its living resources.

THE LOCAL CONNECTION

TO ENCOURAGE DEVELOPMENT OF VIBRANT LOCAL COMMUNITIES IN BALANCE WITH NATURAL ECOSYSTEMS... DNR consistently demonstrates the interdependence between economic development and ecological health, by identifying protection and enhancement priorities, directing development, and promoting resource-based economies.

INNOVATIONS FOR PEOPLE

- ✓ To elevate DNR's presence in urban communities -- to be viewed as a neighbor, a role model for youth, and a source of long-term assistance in enriching quality of life -- implementation of the Central Regional Team's **Revitalizing Baltimore** project established a field office; began offering educational materials and programs; restored a vacant lot in Park Heights; and developed a Management Plan for the Gwynns Falls watershed.
- ✓ Since FY '89, the **Help Our State Today** Program (HOST) has provided education, training and employment to citizens who complete deferred maintenance projects in Maryland State Forests and Parks. In Allegany County, skilled laborers are employed in an economically depressed area; in Anne Arundel County, individuals with disabilities, disadvantaged juveniles, and seniors make up the crew. More than 160 projects-- building renovations, landscaping, handicapped accessibility improvements, and erosion control projects-- have been completed realizing an estimated savings of \$600,000.
- ✓ DNR's **Drug Free Trail Program** and **Echo Lake Ropes and Initiative Course**, which emphasize a drug-free message and personal growth and responsibility, reached nearly 1,400 young people in FY '96. With discontinuation of its federal grant, the ropes' course is being sustained, in part, by income generated by marketing the program to adults.

TECHNICAL ASSISTANCE

- ✓ Digital data sets depicting areas of potential concern for sensitive species are now widely available to local governments and federal and State regulatory and resource agencies. These **Sensitive Species Project Review Areas** save both time and money, allowing users to identify potential conflicts with rare, threatened and endangered species and other sensitive natural resources in the earliest stages of project planning in order to protect resource integrity.

- ✓ MERLIN, the **Maryland Environmental Resources and Land Information Networks**, “magically” provides information critical to making informed land use decisions. An electronic atlas that provides maps, photos and data, it is a tool that makes environmental decision-making more precise and arms environmental decision makers with the latest computer technology.
- ✓ **Community Technical Assistance** provided by Resource Planning resulted in completion of two feasibility studies in Garret County for an Adventure Sports Complex. In Hancock, Maryland, construction funds for the Western Maryland Rail-Trail were coordinated and matched with the town's Community Block Grant proposal to promote urban revitalization.

COMMUNITY PARTNERSHIPS

In addition to contributing millions of dollars to counties and townships for much-needed park and recreational facility creation and refurbishing, DNR's **Program Open Space** funds projects that reach the “heart” of Maryland's Communities.

- ✓ In cooperation with Anne Arundel County and the town of Highland Beach, the FY '96 acquisition of **Frederick Douglass' summer home** preserved a cultural and historical landmark in Maryland's first African-American township.
- ✓ Maryland's **Civil War Battlefield Protection Plan** is recognized as the most accomplished in the nation, with more than 75% of all owners contacted having donated or sold easements to the State (or negotiating to do so). These acquisitions have preserved additional sites totaling: 2,904 acres surrounding the **Antietam National Battlefield** ; 670 acres at the **South Mountain Battlefield area (Fox's Gap)** ; and the historic village of **Burkittsville (Crampton's Gap)** .
- ✓ A \$1,015,000 POS grant to acquire 115 mainland acres adjacent to **Assateague State Park** (on the mainland) has significantly reduced the size of a planned development adjacent to the State and National Parks, from 59 residential lots and a 27-hole golf course to 9 residential lots and an 18-hole golf course.

REGULATORY COOPERATION

- ✓ The economic and competitive viability of the Port of Baltimore relies on the maintenance of adequate **shipping channels**. To address the Port's critical dredging needs for the next 20 years, the DNR joined other State, Federal, local and private agencies to select potential sites for an artificial island and open water disposal sites. Environmental Review staff is also working with the State Highway Administration, studying the plans for the Inter-County Connector (ICC) and the U.S. 301 upgrade projects, to ensure natural resources receive appropriate consideration and protection.

- ✓ To assist communities and streamline the permitting process, in FY '96 the **Critical Area Commission**: approved a two-year trial of Baltimore County's proposal to designate a portion of heavily developed shoreline as a Buffer Management Area; developed legislation to address perceived inconsistencies in application of impervious surface limits usage; and approved a Growth Allocation Policy amendment which allows local government to propose the redesignation of existing commercial, industrial and institutional uses in certain areas.

OUTLOOK FOR TOMORROW...

- ▲ Expansion of the involvement of Maryland's urban-dwellers (80% of the State's population) in natural resources planning and management efforts and addressing the unique issues recreation, employment, educational and safety issues challenging those communities through the **Urban Spaces Team**.

THE PUBLIC LANDS

TO CREATE AN INTEGRATED AND SELF-SUSTAINING NETWORK OF PUBLIC LANDS AND OPEN SPACE WHICH CONTRIBUTES TO LOCAL ECONOMIES... DNR's strategic land plan reflects the shared goals of communities, government and the private sector, placing an emphasis on land acquisition and protection strategies that encourage growth management, waterway and ecosystem protection.

INNOVATIONS IN LAND MANAGEMENT

- ✓ DNR's **Strategic Plan for Recreation and Conservation** was completed in FY '96 to improve management effectiveness in the many activities associated with the role of land steward. Using a public involvement process, DNR's entire land management system was examined to prioritize future actions including land acquisition, planning and development for public use and resource protection.
- ✓ DNR's Eastern Regional Team has devised a two-part draft land unit plan for the **Sassafras River NRMA** (formerly Bloomfield Farms) that responds to the site's intrinsic natural features: the site design arranges the physical relationship of landscape types and recreational facilities, and the management strategy sets guidelines for resource management and recreational use.
- ✓ After a comprehensive inventory identifying public land areas suitable for designation to the State **Wildlands Preservation System**, the General Assembly in its 1996 session added 17 sites to the system, increasing the acres of Maryland wilderness to be preserved in its natural state by 21,000 acres.
- ✓ Under a unique pilot project, a number of the State's **Wildlife Management Areas** were transferred to the State Forest and Park Service to unify public lands management and protection within the Department. Currently, the State Forest and Park Service manages 249,066 acres.

PARTNERS IN ACQUISITION

- ✓ The acquisition and interim use plan of the historic 3400-acre **Woodmont Rod & Gun Club Property** in Washington County will provide outstanding opportunities for habitat protection, natural resource management, and outdoor recreation. Hunting seasons, programs, and public access have already been established and DNR is exploring the potential for a public-private partnership to facilitate management of the site. Previously managed as a private hunting preserve, the site's historically significant lodge has hosted several U.S. Presidents.

- ✓ Through a partnership with Ducks Unlimited, DNR acquired the only “**Delta**” in Maryland. The 130-acre Sennett Property at the Days Cove Section of Gunpowder Falls State Park also provides important nesting habitat for the Bald Eagle.
- ✓ A \$4.5 million partnership with Prince George’s County, the City of Bowie, the General Assembly and several conservation organizations funded acquisition of the remaining 515 acres of the **Belt Woods Home Farm**. This purchase will add 109 acres to the existing Belt Woods Natural Environmental Area, a National Landmark believed to be one of the oldest uncut tracts of forest on the East Coast.
- ✓ In all, \$ 9,770,509 in Program Open Space State Side funding protected 4,163 acres at established Public Lands Management areas in FY ‘96, including: an **inholding** at **Janes Island State Park** that will provide an on-site conference center to be used in conjunction with adjacent cabins for meetings, family reunions and environmental educational functions; and a 589-acre parcel in Garrett County, which provides three and one-half miles of frontage on the **Youghiogheny**, Maryland’s only designated “wild river.”
- ✓ In direct assistance to local governments, DNR secured funding for 622 acres of local parkland and more than 200 recreation area development projects in FY ‘96. This **Program Open Space** Local Side funding supports the efforts of our local partners to expand Greenways, buffer tributaries, create new community-based recreation facilities, public pools, ballfields and hiker-biker trails.
- ✓ Another recipient of Program Open Space funding, **The Lower Susquehanna Heritage Greenway** is proving to be an economic, recreation and natural resource boon to all who adjoin its path. Through a phenomenal bi-county partnership the greenway connects Harford and Cecil counties and the towns of Port Deposit, Perryville, Havre de Grace, Susquehanna State Park, PECO Energy Company (Conowingo Dam) the Arundel Corporation, and more.

LAND CONSERVATION THROUGH EASEMENTS

- ✓ In FY ‘96, the **Maryland Environmental Trust** accepted conservation easements on 36 properties, 32 of which were donated as charitable gifts, bringing the to-date total of protected acres to 54,196, protecting 111 miles of shoreline. With assistance from the Local Land Trust Program, local land trusts accepted nine easement donations jointly with MET on 1,289 acres; and \$28,000 in Janice Hollmann grants to 14 local land trusts for operating expenses.

- ✓ In cooperation with Program Open Space, MET completed a purchased easement as an overall protection plan on the **Sotterley Plantation** in St. Mary's County, which was entered in the National Register of Historic Places.
- ✓ DNR received federal approval to participate in the **Forest Legacy Program** (FLP) which targets the use of conservation easements to protect important forest lands. Areas in Anne Arundel, Calvert, Cecil, Charles, Harford, Queen Anne's and Worcester counties have been designated for inclusion in the program, and with \$250,000 from the U. S. Forest Service, initial work on easement preparations and negotiations for seven properties totaling 1,358 acres of forest land is underway.

EXPLORING THE FUTURE...

- ▲ Through reallocation of existing state funds, an opportunity to **triple traditional land conservation efforts** and limit the adverse impact of sprawl on agricultural lands, and natural and cultural resources.

THE GREAT OUTDOORS

TO PROMOTE ENJOYMENT OF DIVERSE OUTDOOR RECREATIONAL OPPORTUNITIES FOR MARYLAND'S CITIZENS AND VISITORS... DNR educates users to enhance their appreciation of natural systems, implements low-cost methods for improving existing facilities; and enlists public and private sector partners to create or improve recreational opportunities.

INNOVATIONS IN PROGRAMING

- ✓ The first **Becoming an Outdoors Woman** workshop was held in Maryland in FY '96, providing 100 women the opportunity to experience outdoor activities like fly fishing, canoeing, hiking and bird watching.
- ✓ DNR's **Outdoor Adventures Program** enhances family relationships by offering more than 200 trips through Maryland's public lands and waterways which feature hiking, backpacking, canoeing, rock climbing, camping and bicycling.
- ✓ In FY '96, 75 tours of the **Helen Avalynne Tawes Garden** were given to more than 1,000 visitors; and programs enjoyed by 1,200 participants included week-long sessions of the popular Natural Resources Club for children and several noontime concerts.
- ✓ The private sector is working with DNR to rescue educational and recreational programs hard hit by federal funding cuts. In FY '96, a partnership with Baltimore City Schools and the Chesapeake Health Plan Foundation, enabled 100 at-risk public school students to attend the week-long residential "**Outdoor Discovery Camp**," which helps young people develop outdoor skills, an outdoor ethic, and increased self-esteem.

INCREASING ACCESS & OPPORTUNITY

- ✓ In FY '96, nearly 870,000 anglers participated in **recreational fishing** in tidewater areas of Maryland, while more than 200,000 fished in non-tidal waters. The newly-restored striped bass fishery produced a harvest of more than 2 million pounds for 260,000 anglers in a 153-day season. Other good catches included weakfish, flounder, croaker, spot and bluefish. Recreational anglers also participated in voluntary surveys, providing important information on fishing success and supplementing harvest estimates.
- ✓ To provide additional **hunting opportunities** for recreation and as a resource management technique, new areas were opened to deer hunting on a permit basis at Elk Neck, Sandy Point, Morgan Run and Patapsco Valley State Parks. These facilities offered expanded bow hunting opportunities while managed hunts were conducted at Fort Frederick, Fair Hill, Gunpowder and Seneca Creek State Parks. Deal Island Wildlife Management Area continues to receive heavy pressure for hunting waterfowl necessitating an evaluation of a permitting process.

- ✓ DNR's state **forests and parks** hosted more than 10,000,000 visitors in FY '96, providing day-use recreational opportunities, educational programs for young and old, and overnight facilities.
- ✓ DNR completes approximately 50 projects each year to maintain, upgrade and improve public access to and safety of **facilities on DNR's public lands**. In FY '96: several major projects benefitting people with disabilities were completed, including construction of a fish platform at Morgan Run and an access ramp at the Smith Island Visitors Center; at Pocomoke River State Park a new camping/visitor center was built and paid for by the Eastern Shore Builders Association, valued at \$80,000; and at Gunpowder Falls State Park, a new headquarters office building which includes a museum about the Jerusalem Mill was completed through a public/private partnership.
- ✓ A leader in the use of the Internet as a cost-effective communications tool, DNR expanded service to the public in FY '96, creating 87 on-line public lands brochures and accessibility content; and launching an on-line service center for license agent locations and license applications. In addition to savings realized on the delivery of existing services, the use of sponsorships raised more than \$5,000 to further enhance the **emerging technologies** work of the department. By the end of the fiscal year the DNR Internet site was receiving several thousand hits a day.

IMPROVING WATERWAYS

- ✓ In FY '96, severe winter storms sent tons of **debris** into the Chesapeake Bay and its tributaries. DNR's coordination of the resulting statewide effort to address related navigational hazards resulted in establishment of a "debris hotline;" distribution of warning signage; provision of grants and technical assistance to local governments; and removal of more than 600 tons of debris from the bay.
- ✓ Generated by boating registration fees, in FY '96 DNR's Waterway Improvement Fund provided more than \$4.2 million in assistance to the public and private sector for creek dredging and channel passage maintenance; pier and boat ramp construction, extensions and repairs; marine sanitation and pump-out facilities; and bulkheads and breakwaters.

PROMOTING PUBLIC SAFETY

- ✓ Through **safety education** programs in FY '96, the Natural Resources Police awarded 6,226 Hunter Safety Instruction Certificates, and provided safe boating instruction to 4,703 participants. To address the sharp increase in **Personal Watercraft** (PWC) use, the NRP expanded education and awareness programs to include "jet ski" or "wave runner" operation and developed enforcement strategies for addressing PWC-related complaints, injuries, and fatalities. With additional bow hunting and muzzleloader classes, DNR continues to set the standard for similar programs across the country.

MORE UNIQUE PARTNERSHIPS

- ✓ As part of the public growing need for participation in creation, maintenance and access, the **Trail Workshop** program was created. In its first official year more than 400 individuals donated thousands of hours to help preserve the forests and parks. The **Trail Stewardship Program** was created to provide persons interested in supporting trails in state forests and parks an opportunity to support trail improvements through a minimal \$5 donation.

- ✓ Committed to promoting the message of positive stewardship of our forests and parks, private sector partners donated more than \$320,000 in FY '96 to the **SFPS Corporate Partnership** Program. Since the program's inception, local, national and international companies have helped sponsor informational brochures and videos, supply purchases, building repairs and a nature center. A diverse group of **individual "benefactors"** also join DNR in its mission to protect and preserve SFPS projects and programs.

- ✓ Legislation passed in 1996 authorized DNR to adopt boating regulations for **Jennings Randolph Lake** in conjunction with the State of West Virginia. The bill allows the two states concurrent jurisdiction for this unique lake to ensure safe boating by promulgating age limits, noise limits and safety requirements for personal watercraft and other vessels.

- ✓ Through participation in the Marine Industry Economic Task Force, DNR worked in concert with boat dealers, boat repair shop owners, boat show managers, yacht club members and tourism officials to develop new ideas for stimulating Maryland's **boating economy**.

IN THE WORKS...

- ▲ A **statewide reservations system** to coordinate use of camping sites, cabins and pavilions in State forests and parks across the state.

- ▲ A partnership with the Department of Business and Economic Development to develop **Eco-tourism** projects throughout the state.

- ▲ Implementation of the **Customer Oriented Information Network (COIN)** to improve customer service by streamline boat registration and the sale of sport hunting and fishing licenses.

THE WORKFORCE

TO CHAMPION A DIVERSE, WELL SUPPORTED, COOPERATIVE WORKFORCE TO SERVE THE PEOPLE OF MARYLAND... DNR provides training and education, promotes cultural and professional diversity, empowers employees, and provides essential tools and support to develop more participatory leadership styles.

INNOVATIONS IN ORGANIZATION

- ✓ As part of a three-year plan to reduce its budget, while continuing to provide exemplary service to its customers DNR underwent a major **reorganization** in FY '96. The process included a redefined mission, redirected goals, an internal restructuring, realignment of resources and identification of the seven outcomes (and accompanying strategies) most critical to the mission. To better align DNR's staffing and funding resources in support of its outcomes, management identified DNR's 15 core services and stopped or consolidated a number of DNR programs.
- ✓ As part of DNR's reorganization, five Matrix Teams were created to enhance department-wide collaboration. These teams are dedicated to working with and support all DNR employees to develop innovative and constructive recommendations that support: DNR collaborative efforts with citizens; an increase in the use of participatory leadership methods; improved internal and external communications; increased coordination across unit lines; personal and career development; and creation of educational materials, displays and programs. In FY '96, a department-wide employee survey identifying improvement areas for leadership and staff was a catalyst for accelerating efforts to improve internal support and communications.
- ✓ A management training program was completed by the executive staff and all DNR unit directors.

RECRUITMENT AND DIVERSITY

- ✓ Demonstrating its commitment to diversity, DNR received the **Diversity in Natural Resources Achievement Award** in FY '96 at the Southeastern Association of Fish and Wildlife Agencies Conference for outstanding outreach, recruitment and hiring strategies.
- ✓ By FY '96, its fourth year, DNR's **Internship Program** more than doubled the number of students receiving on-the-job training from its original nine to 22.
- ✓ DNR's implementation of the first **statewide walk-in testing process** tested a total of 1301 applicants in one day at six locations.

- ✓ Development and implementation of the **Factor Evaluation System** for all Biological Classifications evaluates positions for classification purposes for approximately 200 positions.
- ✓ The **External Quality Survey and Analysis** was continued supporting efforts to improve service to external and internal customers.
- ✓ DNR **Minority Business Enterprise (MBE)** participation increased to 13.9 % during FY '96.

EMERGING TECHNOLOGIES

- ✓ Through a coordinated effort by Management Services personnel and other unit staff, 20 additional satellite locations began using the State's **Advanced Purchasing and Inventory Control System** in FY '96.
- ✓ Full Implementation of the new **Financial Management Information System** -- which will be used by all state agencies for accounting and procurement -- allows DNR to better monitor revenues as well as expenses.
- ✓ A total redesign of DNR's **local area network** at Tawes added fiber optic technology and divided the existing large segment for more than 700 users into 16 smaller, more manageable groups. The new design will increase speed, improve performance and position DNR for future connectivity to the Maryland Electronic Capital. The Maryland's Environmental Resources and Land Information Network (MERLIN) was also installed on the network.
- ✓ Communications were improved by providing **E-mail and Internet** access to approximately 800 employees at 50 DNR locations throughout the state.

REACHING OUT

- ✓ In FY '96, 43,685 volunteers performed over 500,000 hours of community service that ultimately preserve, protect and enhance Maryland's natural resources.

LOOKING AHEAD...

- ▲ Installation of an **INTRANET** system to afford access to information across units.
- ▲ Establishment of an **information resource library**.

THE FINANCIAL PICTURE

With less than one percent of the State's operating budget, DNR has a significant impact on Maryland's economy. Each year...

- ✓ **Recreational and Commercial fishing** contribute more than \$600 million;
- ✓ **Hunting and wildlife appreciation** activities contribute more than \$560 million;
- ✓ **Recreational use of forests and parks** generates more than \$300 million and 6,000 jobs; and
- ✓ **Maryland's boating industry** is valued at more than \$1.1 billion dollars annually....

...all of which contribute to improving the **quality of life** of Maryland's citizens.

Operating Budget

Fiscal Years 93-96

