

# DNR at work

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Maryland Department of Natural Resources  
FY '98 annual report

December 1998

Under the leadership of Governor Parris N. Glendening, continuous quality improvement is championed at all levels of the Maryland Department of Natural Resources. Striving for quality is something that every DNR employee does every day.

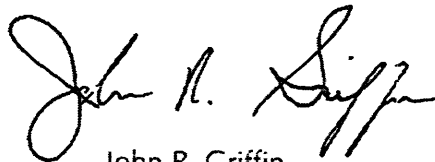
While this report represents our entire agency, it highlights only some of the many programs, teams and processes that demonstrate continuous quality improvement in action. Internally and externally, continuous quality improvement is integrated into every DNR unit – every team we establish, every program we manage, every project we undertake, and every service we provide.

Yet there also exists an intangible factor that is more difficult to measure. This factor has to do with the quality of our people, and the level of commitment and caring that staff members throughout our agency have for their work. We not only take pride in our work; we are also inspired by our mission, and the realization of each goal that supports it.

Every DNR employee understands that excellence in managing and preserving Maryland's living and natural resources is critical to every Maryland resident – affecting our quality of life, our economy, and our health and well-being. The reason we understand it so well is simple: we too are Maryland citizens.

This document was originally prepared and submitted as DNR's application for the 1998 Governor's Quality Achievement and Recognition Program. Upon its completion, we found we had created an in-depth look at many of our significant accomplishments for Fiscal Year 1998. Hence, with the addition of a financial summary, we have re-issued this document as our Annual Report for FY '98.

Staff members from across the department contributed information for inclusion. This report is dedicated to every DNR employee, with sincere thanks for their participation in this project, and for their ongoing commitment to excellence.



John R. Griffin  
Secretary

**THE MARYLAND DEPARTMENT OF  
NATURAL RESOURCES**

Parris N. Glendening  
Governor

Kathleen Kennedy Townsend  
Lieutenant Governor

John R. Griffin  
Secretary

Stanley K. Arthur  
Assistant Secretary

***The DNR 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 facilities and services of the Maryland Department of  
Natural Resources are available to all without regard to  
race, color, religion, sex, age, national origin or  
physical or mental disability.*

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# 1. LEADERSHIP

*We lead, not by dictating, but by enabling every member of DNR to heighten their aspirations for meaningful and fulfilling work in service to our citizens. We then remove any obstacles that stand in their way.*

DNR's leadership system works at multiple levels, encompassing the traditional executive staff and manager/employee relationships, and an innovative quality matrix team approach to managing areas that cross unit lines and disciplines.

## LEADERSHIP SYSTEM

Senior leaders provide effective leadership and quality improvement through continuous communication with partners, customers, staff and each other. Through a multi-tiered approach to management, every DNR manager has the opportunity to influence policy decisions and help drive effective performance at DNR.

DNR's **senior staff** is comprised of the secretary, deputy secretary, four assistant secretaries, six matrix team leaders, the public communications director and legislative officer; this group meets weekly to address departmental policy issues and bi-weekly with all unit directors. Information about policy decisions and issues discussed in senior staff meetings are transmitted through the department via each assistant secretary's weekly meeting with unit directors.

DNR's **internal communications** manager attends all senior staff meetings and provides all employees — via department-wide E-mail — a summary of issues discussed. These summaries, called "Links," ensure that every DNR employee is kept apprised of agency policy and projects, no matter what position they hold in the traditional chain of command. Matters deemed critical are also reported to the Governor.

## EXERCISING LEADERSHIP

Senior leaders exercise leadership throughout the agency, taking into account the needs and expectations of all key stakeholders by involving customers, partners and employees in decision-making processes.

**Pfiesteria:** One example can be found in the actions taken during several fish kills that took place last summer in three lower Eastern Shore waterways (which were ultimately blamed on a toxic micro-organism, *Pfiesteria*). When DNR scientists were unable to quickly identify the cause of the fish kills, and a link to human health problems was reported, Secretary Griffin, with the sup-

With the advent and continued growth of new technologies, like the Internet and E-mail, DNR's secretary is better able to contact DNR employees directly, on a regular basis. Following is an actual message from Secretary John Griffin to all DNR employees, which typifies regular correspondence from leadership:

To: DNR-All  
From: John R. Griffin  
Date: June 1, 1998  
Subject: What we're about..

*This time of year, as the world around us begins to slow down in anticipation of summer, we at DNR gear up for what is, for many of us, our busiest season. During the next few months, more people will visit our state forests and parks; more people will swim in and boat on our waterways; the possibility of recurring Pfiesteria outbreaks looms large.*

*So, as we prepare for summer and the hard work it inevitably brings, I thought it might be a good time for some mid-year reflection...about who we are, why we're here, what our purpose is, and how we hope to accomplish it.*

*Why are we here? Simply put, we are here to provide expert, quality services to our citizenry and our resources. Or, in the words of our mission statement, to "inspire" people to enjoy, live in harmony and protect our resources.*

*To define our purpose and how we hope to accomplish it, we can look to our Action Plan: the goals that help us steer our course and measure our progress, and the strategies for fiscal year 1999 and beyond that support them [see Section 2].*

*Our core values and operating principles not only help us define who we are, but also who we continuously strive to be.*

*As you reflect on our goals, our mission and our operating principles, I hope that you will also continue to ask yourself each day, how you can better serve the people — customers, stakeholders and colleagues — who are counting on you. One way to do this is to dust off the permission slip I issued to all employees a couple of years back (borrowed from Federal Education Secretary Dick Riley), and keep it where you can see it.*

*ask yourself:*

- is it good for my customers?*
- Is it legal and ethical?*
- Is it something I am willing to be accountable for?*
- Is it consistent with my agency's mission?*
- Am I using my time wisely?*
- Is the answer to all of these questions yes?*
- If so, don't ask permission, you already have it.*

*Just do it!*

*Welcome to the summer of 1998 — may it be healthy, happy & safe for all of us! And if I haven't said so lately, thank you for all you do every day, to make our agency the best that it can be.*

port of Governor Glendening, convened a two-day "colloquium," which brought together state officials from four agencies, (the Departments of Natural Resources, Environment, Agriculture and Health and Mental Hygiene), scientific experts from around the country, state and local legislators, and, perhaps most importantly, the watermen and residents whose livelihoods and health were threatened. In this manner, we were able to take into consideration the needs of all of our customers and stakeholders, as part of the problem-solving action. From this colloquium, a Technical Advisory Committee was formed to help investigate the cause of the fish kills, which also included members from all interested groups.

**Deer Management:** In another instance, when the department was faced with growing public concern about the state's over-population of deer and associated deer/human conflicts — deer/car collisions, crop and habitat damage, increased threat of lyme disease — leadership formed a special task force to develop Maryland's first comprehensive statewide deer management plan. The task force, which included hunters, farmers, and animal rights representatives along with officials from DNR and local governments, set forth a plan under which DNR held public meetings all across the state to involve citizens and stakeholders in the planning process.

The resulting statewide plan (currently being implemented) is an improvement over previous processes, as one of the first in the nation to comprehensively propose the use of diverse management techniques to address this problem across traditional county boundaries. Living Resource management processes are discussed further in section 6.

#### LEADERSHIP SYSTEMS OPERATIONS

In FY '96 when Secretary John Griffin took over the leadership of the agency, DNR's mission, vision, core values and overall goals were reexamined and revised, four regional teams and four of DNR's five quality matrix teams were established, and the department was restructured as part of a three-year budget reduction plan. DNR's original core values were developed using the quality techniques of mental imaging, brainstorming, multi-voting and pairwise ranking.

As part of our strategic planning and **Managing Maryland for Results** (MFR) processes, senior staff and unit directors now meet twice a year to reconfirm the agency's goals and objectives, define the strategies and activities that will best support them, measure progress and conduct gap analysis exercises. At this time, senior staff receive objective status reports for formal review to measure progress towards objectives and goals. The reports show the major accomplishments for the reporting period, any problems encountered or issues which need to be resolved, and next steps. Informally

during the year staff will provide, to the senior management staff at their bi-weekly meetings, presentations citing the progress of objectives. These evaluations provide management with the means to identify any problems with the objectives and make any necessary adjustments. Senior staff also meet monthly to address allocation of the department's current and future operating budgets.

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## The Core Values

- ❖ We want to be a beacon —a national model for natural resource management— involving citizens from every walk of life for the responsible enjoyment of our natural resources.
  - ❖ We live by this philosophy: Human beings are part of nature. We endeavor to harmonize human activity within the natural systems.
  - ❖ We want citizens to seek us out, because we know our business and are seen as friendly, helping hands. The best test of our effectiveness is when people come to us for help. In being responsive, we accept inconvenience as a way of life.
  - ❖ We organize in ways that focus people, resources and information on one central theme: getting the job done.
  - ❖ We do not let formal organizational hierarchies stand in our way.
  - ❖ We lead, not by dictating, but by enabling every member of DNR to heighten their aspirations for meaningful and fulfilling work in service to our citizens. We then remove any obstacles that stand in their way.
  - ❖ We are a learning organization: anticipating rather than reacting; taking well-calculated risks; remaining resilient, agile and open to change.
  - ❖ We are driven by quality consciousness, integrating services and collaborating to produce results that satisfy and delight our customers.
  - ❖ We are passionate about our work and respect each other.
-

## PUBLIC AGENCY RESPONSIBILITY AND CORPORATE CITIZENSHIP

Because every DNR project, program or service affects some portion of Maryland's population, DNR has "key communities" all across the state.

**Pfiesteria:** In order to fulfill its ethical responsibility to the citizens of Maryland, DNR senior staff, under the leadership of Governor Glendening, took a number of critical steps during last summer's Pfiesteria outbreaks. DNR instituted an aggressive fish and water quality monitoring program and established a satellite office in Shelltown, so that staff could operate on-site. And, in late August when a fish kill began in the Virginia waters of the Pocomoke Sound and moved into the mouth of the Pocomoke River, leadership made the decision to close the affected waterway for the Labor Day weekend, even in the face of potential economic ramifications.

### THE URBAN INITIATIVE

In FY '98, DNR recognized some key communities that were not receiving enough focus from the department. Although DNR had been involved in urban resource projects, (beginning with the Woodland Avenue project in 1996), leaders and staff agreed that we could do more. To address the unique social, economic and environmental issues facing Maryland's urban populations, a sixth quality matrix team, the **Urban Resources Coordinating Council** was established to develop strategies for creating recreational opportunities and stewardship policies through partnerships with local government and citizens, and to increase workforce sensitivity and commitment to urban problems.

The success of one project in the Park Heights community of Baltimore has expanded our customer base with citizens with whom we may not have otherwise been in contact. The article, *Nature in the City* [see page 7], excerpted from DNR's quarterly magazine and written by a DNR staff member, illustrates how DNR's urban initiatives not only embrace Continuous Quality Improvement, but also bring CQI techniques — focus group brainstorming, gap analysis, goal setting, benchmarking, strategic planning, and customer and stakeholder involvement in implementation — into the communities they serve.

By offering continued assistance to the community, we are able to monitor the project's success (in 1994, an earlier urban project was unsuccessful because we did not have the involvement of the community). Today, DNR is in the process of furthering its urban presence by developing an urban resources advisory board that will include community and church leaders and urban citizens.

## REACHING OUT TO THE COMMUNITY

Leadership encourages employees at every level to contribute to Maryland's communities through departmental activities and organized employee activities.

Charitable organizations that DNR works with each year include the Red Cross Blood Drive, Special Olympics, the United Way, the Juvenile Diabetes Foundation, and the adoption of area Christmas families.

### WITH A FOCUS ON YOUTH EDUCATION AND EMPLOYMENT, DNR PROGRAMS INCLUDE:

- ❖ *My Summer Vocation* provides summer jobs for underprivileged and at-risk youth in the Hagerstown area.
- ❖ Children accustomed to an urban environment learn about natural resources and experience camping during the 10-week Camp Holiday program.
- ❖ Germantown Elementary has, for the second year, been adopted by DNR as part of the Adopt-a-School program through which students participate in tours, special projects and conservation events. A butterfly garden planted by DNR employees and the school's PTA is now being enjoyed and maintained by kindergarten and 1st graders.
- ❖ This year, DNR employees contributed over 400 new and gently used books for needy children, as part of Governor Glendening's Reading Across Maryland Initiative.
- ❖ Area children and visitors are now enjoying the Recycled Playground at Tuckahoe State Park thanks, in large part, to DNR employee volunteers.
- ❖ Three schools have freshly painted classrooms through the cooperative efforts of DNR employees and Gettysburg College alumni.
- ❖ Young people from the Brooklyn Police Athletic League see the Orioles, courtesy of DNR's employees.
- ❖ In cooperation with community leaders, DNR employees developed an educational packet to make a middle school a magnet school for environmental studies.
- ❖ Young people receive a \$4,500 college stipend and valuable job skills as part of the Maryland Conservation Corps Program.

## THE RURAL LEGACY PROGRAM

As late as 1995, Maryland was losing nearly 30,000 acres annually to sprawl development, with a projected loss of up to 500,000 acres of valuable countryside by 2020. To address this issue, DNR leadership devised an innovative program to double land conservation opportunities in Maryland over a five-year period. Now a national model against which other states are benchmarking, the Rural Legacy Program allows local governments and land trusts to apply competitively for state funds that, through the purchase of voluntary conservation easements, will conserve large contiguous blocks of forest, farm land and open space.

This program, which was conceived in 1996 and adopted by the 1997 General Assembly as part of Governor Glendening's Smart Growth Initiative, is currently in its first stage of implementation. By leveraging existing state funds targeted for land conservation through DNR's popular Program Open Space, leadership was able to improve the land conservation process, enhance productivity of the funds being utilized, and expand future opportunities by approximately 200,000 acres over 15 years.

With DNR leadership at the helm, representatives from the Maryland Department of Agriculture, the Maryland Office of Planning, business and environmental organizations, local land trusts and local governments were brought into the process as members of the Technical Committee that developed application and distribution policy and procedures. In this case, quality, performance and process improvement can be measured in customer satisfaction, dollars and acres, with Rural Legacy providing nearly \$30 million (preserving more than 13,000 acres) in addition to Program Open Space funding for FY '98 and FY '99. Results are discussed further in Section 7.

# Saving Maryland's Countryside

GOV. GLENDENING'S latest moves to save precious Maryland countryside from bulldozers may be his longest-lasting achievement. With relatively little state money but with an eye on the high cost of ill-directed growth, he is mustering support to guide development away from valuable open spaces and into established areas. The estimated bounty: the protection of 200,000 acres over 15 years.

The program hinges on using land conservation grants to buy development rights from individual landowner-applicants. It has attracted 23 proposals, many allied with private land trusts and conservation groups, from 20 of Maryland's 23 counties. An 11-member advisory committee, headed by Peter G. Brown, a professor of public policy at the University of Maryland, se-

lected the sites, putting a premium on large blocks of land. Other considerations included historic and cultural value, the degree of threat of development and the extent to which applicants would help pay.

The idea is to concentrate on large areas rather than scattered tracts and to buy development right rather than the land outright. Protecting these lands and directing growth into existing populated areas is a moneysaver: Scattershot development spreads pollution, threatens farming, wildlife and forestry and contributes to commercial decay in older locales.

Growth will continue to be fact of life in the state, but Maryland can be a national leader in guarding its natural resources against unpoliced development.

The Washington Post — June 7, 1998

# Nature in the City

by Ethel Locks

In stark contrast to nearby Pimlico Racetrack, Druid Hill Park, and the Baltimore Zoo, three of Baltimore's most popular tourist attractions, lies the 3300 block of Woodland Avenue. Located in the city's Lower Park Heights Community, it is a neighborhood that personifies many of the negative stereotypes typically portrayed of city life: poverty, drugs, high unemployment, a high incidence of crime and

the need of the Park Heights community, that's what DNR's Urban Spaces Team set out to discover.

When DNR professionals Daryl Anthony, George Hill, Pam Kelly, Charles Wright and I signed on to this project, we were excited by the opportunities it presented — the prospect of giving DNR a positive presence in an urban community, and, perhaps, to teach our less fortunate, but none-the-less fellow Marylanders, something about our state's natural resources. Little did we know that we would walk away, having learned some important lessons about life and about ourselves.

Clearly, this was an unusual project for us, and one that would require a unique approach. In order to understand their needs and interests, we met with the community members several times — defining tasks, targeting goals, establishing time lines, and identifying the city, state and federal partners who could provide resources for the project.

Next we conducted a workshop, on-site, among neighborhood elementary and middle school students to create designs for the park's future. Ultimately, the four designs with the most practical elements were combined to form one final draft concept plan, which would be used to secure grants to improve the park.

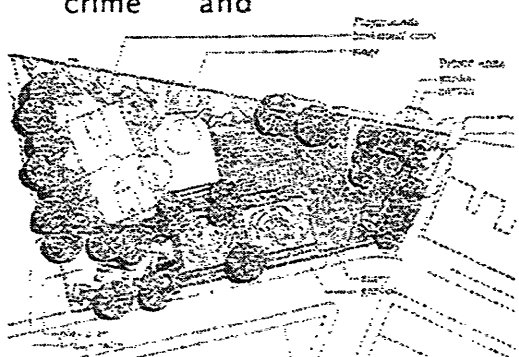
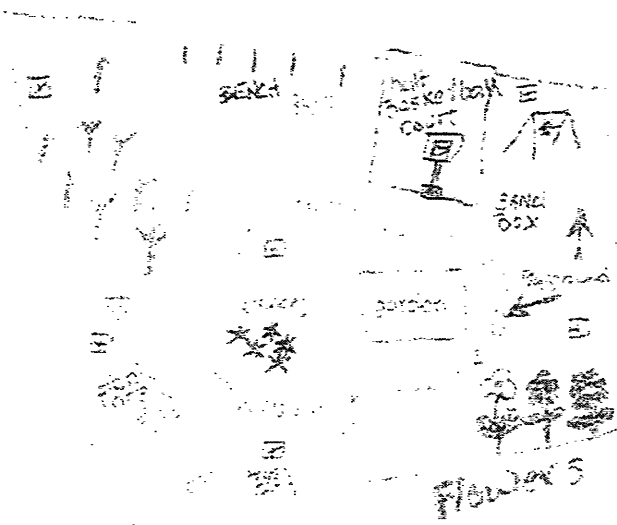
On site, as we proceeded with the park's development, the fenced vacant lot served to "screen" the more objectionable elements of city life. Yet, while we felt somewhat safer behind our wire walls, we were still able to observe, up-close and personal, the

life of this segment of the city, the people and the activities the children of this neighborhood see every day of their lives.

Occupied homes in various states of disrepair. Boarded-up houses, possibly relegated to the homeless. Abandoned properties being used as drug houses. Young girls, mothers themselves, tethered to baby strollers, while simultaneously trying to hold on to older, more-spirited and energetic youngsters. Cruising the avenue, cars of every make ferrying both black and white customers, each systematically intercepted by strangers lobbying for their dollars. Police cars in groups of three, four or five — lights flashing, sirens blaring, making frequent appearances even in daylight hours to scatter those loitering on the street corners.

Not long after our arrival, it became apparent that our presence intrigued community residents. They were fascinated by our work. With all of the excitement of the sounds and activities of the city — something many of our team members were less than familiar with — young and old members of the community gravitated to the site, and to us. They were grateful for what would be a change in their community's environment, and, as the hours in which we worked side-by-side mounted, they shared their personal stories of struggle and survival, of the sheer determination it took for them to maintain a normal life in these less than ideal surroundings.

The first phase of the project en-



single-parent households.

Enter "Mama" Jean Yahudah, community leader and the backbone of the Park Heights revitalization project. Her goal was two-fold: To not only jumpstart her neighbors into action to provide safe play areas for the community's youngsters, but also to look at other, innovative ways to improve their surroundings and therefore their lives. And, in her efforts to turn a spoiled vacant lot into a community park, she did just that.

So how, one might ask, does the Department of Natural Resources — a state government agency responsible for managing Maryland's waterways, wildlife and public lands — fit in to this equation? Responding to



tailed a park cleanup. We enlisted the aid of community, city and state volunteer forces to remove debris and garbage, and over the course of three working sessions in the hot sun, these allied forces readied the park for improvements.

After cleanup came the improvement phase. With the assistance of community workers and donations from both the city and our own agency, we planted ten trees, ornamental plants and vegetable gardens, and installed three picnic tables. At the end of this day's work, children, adults, volunteers and community activists all marveled at the result of our cooperative effort. What had been an overgrown, junky lot, now offered quiet repose from the surrounding hustle and bustle — a place to harvest vegetables, enjoy the gardens, or simply sit at a picnic table under a shady spot.

From the beginning, we at DNR viewed this as a win-win situation. We could use this opportunity to spread our message to non-traditional users, while the community would gain an aesthetically pleasing park. The completion of the Park Heights project marked the true beginning of our Urban Spaces Team. Our work in this community set in motion a myriad of exciting new possibilities for expanding our influence within Baltimore and in other urban centers

across the state. This and other similar efforts would enable what had always been considered non-traditional users of DNR's services to better understand our expertise and capabilities, while offering them an opportunity to partner with us.

Again, it is important to remember that DNR's contribution to this inner-city revitalization project was just one part of a comprehensive plan to help residents revitalize their community and change their lives — a plan that would, with contributions from the public and private sectors, help citizens build on the positive aspects of their community and remove the elements of despair.

But for us, the members of DNR's Urban Spaces Team, it did more than that. The Woodland Avenue Project reaffirmed for us the basic goodness in people, and their inherent desire to improve their condition in life. It also validated our belief that we, as members of the human race, are more alike than we are different, and that the protection of the environment is one of the common threads that holds us together. ❖

*As Eastern Region Chief for Land and Water Conservation, Ethel Locks' responsibilities include public lands planning and providing technical assistance to local governments.*



## DNR connects with urban communities

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

In the Lower Park Heights Community, the involvement of the team members did not end with the park project. In follow-up activities, approximately 20 neighborhood young people participated in the Echo Lake Trail program, a ropes course designed to build self-esteem and teamwork. With Jean Yahudah again at the helm, a number of community youths joined Governor Parris N. Glendening last year by participating in Maryland's annual Bay Bridge Walk. And the Urban Resources Council is currently working to develop on-site environmental educational opportunities, including a visit by the regional forester to help identify the trees on the lot.

In the words of "Menia" Jean Yahudah, "For our neighborhood, working with the Department of Natural Resources has brought new and rewarding experiences. Our young people were able to articulate what they wanted to see by participating in a workshop and to have the experience of traveling to Echo Lake. This experience took them outside the neighborhood and they participated in a team-building exercise."

"This whole project helped us to look at our short term and long term goals for the lot. We also involved more youths and adults that did not participate before in our project." ❖

# 2. STRATEGIC PLANNING

*We live by this philosophy:  
Human beings are part of nature.  
We endeavor to harmonize human activity  
within the natural systems.*

DNR's strategic planning process has been developed over the last 13 years; continuous improvement of the process involves all levels of employees, anticipates customer and stakeholder needs, and includes unique methods of evaluating and measuring data. Yet, along with our best efforts to operate proactively in aligning plans, processes, activities and time cycles, we also recognize and appreciate the unpredictability of our natural elements. Therefore, our strategic plans remain flexible at all times, and DNR employees are empowered at every level (under appropriate guidelines) to react to the changing needs of our resources and our customers.

## STRATEGIC PLANNING DEVELOPMENT PROCESS

All DNR programs and services correspond with one or more of six priority areas (goals), originally established in FY '85 and last revised in FY '96. Two other goals are dedicated solely to the quality of the workforce and agency operations. In creating DNR's annual **Action Plan**, senior staff and managers consider a wide variety of factors — environmental assessments, economic indicators, gap analyses, the needs and desires of our customers and stakeholders — to determine which programs, strategies and processes will help best accomplish our mission. While this process often requires making difficult choices, it ensures that DNR activities reflect the needs of Maryland's natural resources and its citizens.

DNR's Action Plan is shared with employees through a variety of mechanisms on a regular basis. E-mails and memoranda to all staff, and internal and external newsletters continuously remind employees of the agency's goals and objectives. Additionally, at the beginning of each fiscal year, all employees are required to tie their personal performance objectives to the Department-wide goals and the programs that support them. Managers monitor employee progress on an ongoing basis and evaluate performance via the Performance Planning Evaluation quarterly. Results are discussed in Section 7.

## MANAGING MARYLAND FOR RESULTS (MFR)

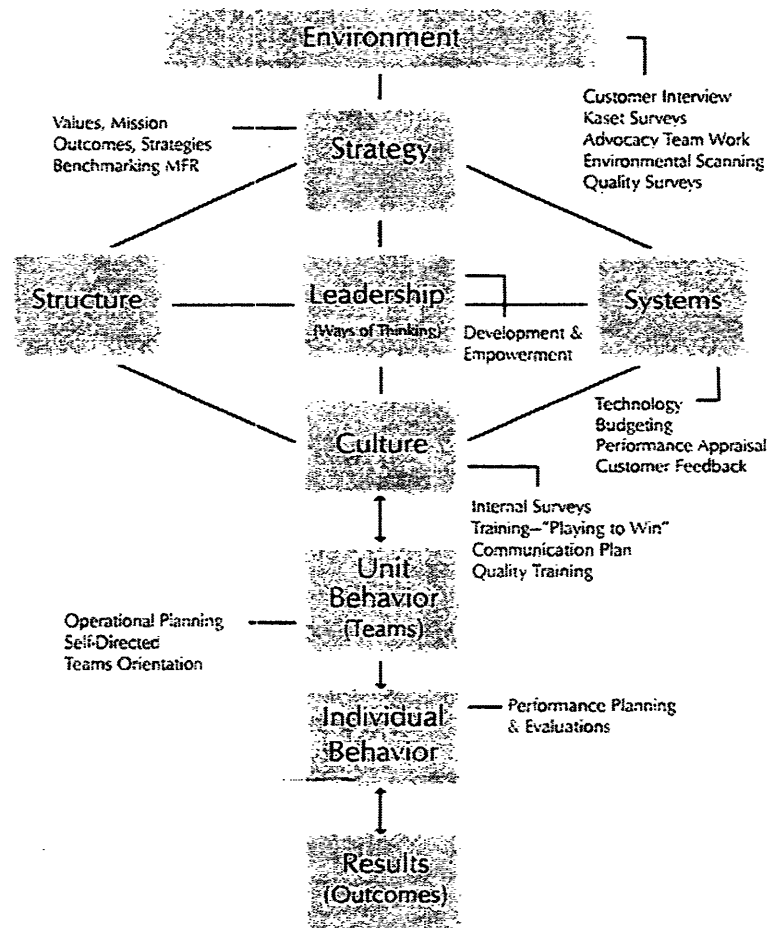
DNR has embraced Managing Maryland for Results as part of its Continuous Quality Improvement process.

When leadership wanted to share the state's Managing Maryland for Results initiative with DNR employees, they held a three-day retreat with 150 key employees — including unit directors, program managers and matrix team members. The retreat featured a step-by-step workshop on the MFR process, as well as breakout sessions on DNR's Integrated Natural Resource Assessment (INRA) [see Section 4], strategic planning for FY 2000, development of issue areas, and budget priorities. One result of the meeting was the formation of an MFR steering committee, which continues to coordinate the department-wide MFR process.

## AGENCY STRATEGY IMPLEMENTATION

Management meets twice a year to review overall agency performance, reaffirm agency goals (or establish new ones if necessary), and designate supporting strategies for the months ahead. Managers and supervisors then work with employees, aligning unit goals and individual objectives with the agency's overall goals. In addition, focus groups from all levels of employees use input from customers and advisory groups to conduct environmental scanning exercises to identify current and anticipate future outside factors and trends that affect departmental activities. In this manner, the action plan is adjusted to address changing environmental factors or customer demands.

## ORGANIZATIONAL INNOVATION & QUALITY IMPROVEMENT FRAMEWORK



To implement the Managing Maryland for Results (MFR) goals and objectives, a unit director or matrix team leader is assigned responsibility for each objective. An MFR Objective Status Report, indicating major accomplishments and identifying problems, is submitted twice a year to the senior staff. These evaluations provide leadership with the means to identify problems with the objectives and make any necessary adjustments.

For FY '99, MFR will be tracked using a custom database system which was developed in-house. This will provide current measuring of progress on the performance measures towards goals, and be readily available for all staff to review. The system provides the mission, vision, goals, objectives, and performance measures based on inputs, outputs, efficiency, outcome and quality, and allows the user to see how each of these terms is defined in the

Managing for Results process. The system presents the data in the form of an outline (or inverted "tree") and will allow users to navigate through the various levels of information by narrowing the focus of available records based upon previously selected entities. In this way, the most current progress on each of the measures will be available to all employees.

Using this system, DNR Managers will be able to navigate through their data in a logical and meaningful way without having to be concerned with cumbersome numbering schemes, hard-copy revisions or data format issues. Because the information itself will be contained in standard database tables, the Department will have the ability to analyze, re-use, reformat, and report on the data using standard off-the-shelf software as well as incorporate the data into existing data-sets (for example, the budget file).

## DNR ACTION PLAN FOR FY '99 & BEYOND

**#1 Support a vital and life sustaining Chesapeake Bay and its tributaries.** Maryland's recent experience with *Pfiesteria* has again demonstrated the inextricable links between our land, water, economy and each other. Protecting Maryland's waterways from pollutants remains the most critical factor in improving the health of the Bay. Supporting programs include: Stream ReLeaf and Tributary Strategies.

**#2 Strengthen animal, fish and plant populations, and promote healthy, diverse ecosystems.** As we increase our understanding of the "web of life" — that which connects plants, animals and people — we are learning how to better conserve the natural functions and relationships that support a healthy ecosystem. Supporting programs include: Statewide Ecological Health Assessment, Biodiversity Conservation and Oyster Restoration.

**#3 Foster a natural resources stewardship ethic for all Marylanders.** To increase understanding of and support for natural resource conservation, DNR needs to "get the word out" to more people, more often. Supporting programs include: Staff Education & Training, External Communications Plan and Educational Programs for the Public.

**#4 Encourage development of vibrant local communities in balance with natural ecosystems.** As Marylanders increasingly recognize the connection between healthy communities and healthy ecosystems, DNR offers extensive education and technical assistance to communities and local governments striving to live in harmony with their environment. Supporting programs include: Urban Natural Resources Initiative and Land-use Technical Assistance.

**#5 Create an integrated, self-sustaining network of public lands and open space that contributes to local economies.** With the largest single land estate in Maryland — some 375,000 acres — DNR's management activities and acquisitions promote ecological health, contribute to local economies, and support Governor Glendening's Smart Growth Initiative. Supporting programs include: Land and Water Improvements, Rural Legacy Program and Ecosystem-Based Planning on Public Lands.

**#6 Promote enjoyment of diverse outdoor recreational opportunities for citizens and visitors.** Encouraging citizens to enjoy fun and educational experiences in Maryland's great outdoors fosters the individual commitment to conservation that will help protect our resources for the future. Supporting programs include: Public Lands User Survey, Trail Stewardship Programs and Ecotourism Projects.

**#7 Champion a diverse, well supported, cooperative workforce to serve the people of Maryland.** Providing DNR employees with the necessary training, tools and support they need to do their best ensures successful implementation of programs and exemplary customer service. Supporting programs include: Department-wide Growth Training, Cultural Diversity Promotion and the Performance, Planning and Evaluation Process.

**#8 Ensure efficient and effective operations.** Promoting responsible government programs, the wise expenditure of public funds and outstanding customer service affords Marylanders the greatest possible return for their natural resources investment (1 percent of the state's annual budget). Supporting programs include: Enhanced Strategic Planning, Tracking Accomplishments and Administrative Support.

# 3. CUSTOMER FOCUS

*We want citizens to seek us out, because we know our business and are seen as friendly, helping hands. The best test of our effectiveness is when people come to us for help. In being responsive, we accept inconvenience as a way of life.*

DNR is dedicated to meeting the changing needs and dynamics of our customers, stakeholders and Maryland's natural resources. Since every Maryland resident and visitor is a potential DNR customer (many of whom have disparate interests), we use several methods to identify customer groups and their needs, and to ensure they receive the highest quality service. While we cannot always satisfy the many different needs of Maryland's citizens, we work hard to keep the public informed about our activities, and to let them know that their voices are being heard.

## CUSTOMER KNOWLEDGE

DNR consistently relies on customer feedback and support to achieve program goals. Cultivation of customer relationships, and ultimately engaging them in our mission is the focus of the **Advocacy Team** (a quality matrix team). Through assessment and other strategies this team makes recommendations on how to foster 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.

Under a **pilot survey** orchestrated by the Advocacy Team, visitors to the DNR's 1997 State Fair exhibit area were asked to share their knowledge and perceptions about DNR's services and mission, as well as ideas on how the agency can better communicate with the general public. Overall, the public was surprisingly familiar with and in support of the department's mission: 56 percent of those polled were most familiar with state parks and the Natural Resources Police; 44 percent felt that newsletters, exhibits and working in the schools were effective public education and outreach mediums.

The department's new **external communications plan** (currently being implemented by the Public Communications Office) places increased emphasis on conducting more regular surveys to gauge public knowledge and attitudes about DNR and natural resource issues. A survey of visitors to state parks is being piloted this summer, via hard copy forms and our Internet web site.

Still in the planning stage is an annual public attitudes survey exploring public perceptions about the department; public knowledge of DNR's responsibilities and services; and public knowledge and attitudes about natural resource-related issues and priorities. Quarterly posting of a natural resource issue question on the Internet, the results of which will be posted and distributed within the department, begins August 1.

## PUBLIC MEETINGS

At public hearings and **public meetings** held on a variety of issues, leadership and managers come face to face with the people they serve, to learn first-hand the concerns of DNR's customers and stakeholders.

With last summer's outbreaks of *Pfiesteria* on the lower Eastern Shore, Secretary Griffin held a public meeting, which was attended by hundreds of people, to share information and address public concerns. Over the past year, DNR's actions in dealing with the outbreaks and citizen concerns, have been commended, especially compared with similar activities in other states. According to leading *Pfiesteria* expert, Dr. JoAnn Burkholder, "Folks in Maryland should be proud of the agency's strong proactive approach in helping to identify problems for fish health in this river and for working toward strengthening the Pocomoke fishery."

During the development of the **Deer Management Plan** (currently being implemented), managers held public meetings across the state in order to better understand the unique problems overpopulation was causing in different areas — farmers were suffering severe crop damage; a dangerously high number of deer/auto collisions in suburban areas; concern about damage to the biodiversity of flora and fauna on public lands.

While conducting DNR's **Integrated Natural Resources Assessment** (INRA) [see Section 4], a diagnostic tool for assessing comparative data, statewide public meetings were held to ascertain whether or not DNR's priority issue areas matched those of our customers. This information was then factored into DNR's Action Plan.

## CUSTOMER SATISFACTION & RELATIONSHIP ENHANCEMENT

Since Maryland's living and natural resources impact the health, quality of life and economy of our citizens, and because DNR has no competitors per se, there is no margin for error when it comes to quality service.

Some DNR quality processes designed to enhance customer relationships include: establishment of field offices, regional offices and service centers around the state; a continuously updated Internet presence; availability of toll-free telephone numbers; publication of a new quarterly magazine; installation of a new telephone system at headquarters; and uniforms for law enforcement personnel.

DNR staff members who have regular public contact — either in person or by phone — are trained at every level to handle complaints for fast resolution or referral to supervisors. Developed as part of our CQI process, written complaints — by electronic or regular mail — are logged (with a fluorescent cover page denoting urgency) and responded to within two weeks.

#### QUALITY SERVICE THROUGH TEAMWORK

At DNR, employees at all levels continuously evaluate our processes to facilitate quality customer service. One exciting innovation in customer service is being implemented by DNR's four regional teams [see Section 6-11]. By integrating services that were traditionally isolated by function, these teams are enhancing customer satisfaction and relationships.

*For the past 20 years, DNR wildlife and forestry experts have (separately) provided technical assistance to the owner of the 6,000-acre Chino Farms in Queen Anne's County. Now, for the first time, DNR's Eastern Regional Team is being given the opportunity to do a comprehensive assessment of resource management practices on the property. The owner's goal (and DNR's challenge) is to conserve the property — for wildlife and forestry management, soil and water conservation, and agricultural practices — while also generating revenues.*

*By bringing together resource professionals from across DNR, the Eastern Regional Team is considering a number of possibilities including: designating part of the property as an Ecotourism stop, encouraging use of the area for research and monitoring efforts, conducting tours in conjunction with Washington College seminars, offering private hunting trips, and applying for rural legacy designation.*

**COIN:** New in support of quality service to Maryland's citizens is the Customer Oriented Information Network (COIN). Begun as a concept more than four years ago, this year's computerization of hunting and fishing licenses sales, and boat titling and registration, supports DNR's quality initiative by increasing overall efficiency in licensing and registration services, COIN will create an always-current data base of the largest sector of DNR customers. Results are explored in Section 7.

#### OUTREACH

Customer outreach materials and information are critical in the agency's efforts to raise the level of awareness and support among the general public, and DNR's Public Communications Office (PCO) and Advocacy Team play key roles in coordinating efforts to communicate key priorities and messages to traditional customers, new audiences, and the general public.

In January, the department introduced a new quarterly magazine, *The Natural Resource*. Here, information about pressing natural resource management issues and recreation opportunities is presented in a journalistic

style, providing an introspective view of the Department's mission. The magazine's cover was used for this report, and an article is reprinted on page 7.

PCO continues to work with units in an ongoing advisory role to develop and implement media and public relations strategies designed specifically for priority projects, including targeted employee training on crisis management, public advocacy, customer service and media contact. To increase public involvement in DNR programs, PCO plans to work with DNR units to improve the volunteer experience at DNR, by establishing a volunteer recognition and awards program; organizing training for volunteer coordinators; and providing assistance in publicizing volunteer opportunities.

Other customer service projects under development include: a **department-wide service brochure**; improving the quality and audience targeting of **displays and exhibits**; refinement of **DNR's Speakers Bureau**, to proactively schedule speakers for targeted audiences; continued utilization of mainstream news and specialty media outlets, to promote and educate the public about DNR policies, services and benefits; and exploring opportunities to partner with the real estate industry to include DNR information in existing marketing packages that target corporate and residential buyers.

DNR's **Internet** site continues to evolve in response to environmental issues and customer feedback. New content in FY '98 includes: Pfiesteria/Fish Health Information; Applications/Forms Center; Information Resources Center; Bookstore; Customer Service Page for on-line assistance; and DNR's striped bass survey [Section 4]. Also new, media partners tied to our web site, and development of a privacy policy to protect customers. Focus areas for FY '99 include: making DNR's web site more interactive to improve appeal to young people; and training unit staff to update and create their own pages. Results are explored in Section 7.

In 1997, when DNR created the **Chesapeake Bay Game**, we were unprepared for its phenomenal success. The game— given out for free at the Bay Bridge toll booth upon request — turns traveling into a fun, educational experience for the whole family, challenging players to identify Bay related things (e.g. wetlands, osprey nest, storm drains, etc.) and offering other activities to kids about the Bay. Last summer, we received 275,000 requests for the game at the toll facilities, and 25,000 additional requests from teachers, parents and legislators (resulting in an additional printing of 100,000 to meet customer demand). Honored as one of the top 100 innovative government programs in the nation by Harvard University, we built upon our success for 1998 by: developing a new Bay Game with different sites and different activities; and developing a **Maryland Mountain Game** for kids traveling through western Maryland.

## STEWARDSHIP & VOLUNTEERISM

To increase understanding of and support for natural resource conservation, DNR needs to get its message out to more people, more often. To that end, DNR is negotiating a formal contract with Maryland Public Television's *Outdoors Maryland* program that will allow us to develop at least 10 story ideas per television season and increases our overall recognition as a program sponsor.

Coordinating DNR education efforts, the **Conservation Education Council** (yet another quality matrix team) promotes a stewardship ethic in Marylanders by providing programs, information and materials on natural resources. PCO plans to assist the Conservation Education Council in updating and creating new public education materials and enhancing distribution via the Internet and DNR's Information Resource Center.

## PARTNERSHIPS

In the face of ever-shrinking budgets and resources, **partnerships** are key to providing quality service to DNR customers. In addition to funding, partners provide us with labor, materials, technical assistance, and professional and scientific expertise that would not otherwise be available. Some of our partners include:

Chesapeake Bay Executive Council • Statewide Tributary Teams • U.S. Fish & Wildlife Service • Army Corps of Engineers • Maryland Department of the Environment • Maryland Department of Agriculture • state legislators • local and county officials • advisory groups • volunteers • resource-based industry associations

Through an exciting new partnership with the U.S. Department of Agriculture, Maryland became the first state in the country to receive funding under the federal **Conservation Reserve Enhancement Program (CREP)**. While other states are using our application as a model, we are using these funds to increase service to landowners. CREP results are explored in section 7.

## INTERNAL CUSTOMERS

At DNR, every employee is recognized as an internal customer, and is served at many different levels. Defined administrative services — procurement, budget allocation and management, human resource training and services, computer systems management, and internal audit and review — are provided by four management service units. At the next level, quality contacts coordinate special services — every unit within DNR has its own personnel contact, parking coordinator, fiscal officer, data processing contact, risk management contact, vehicle contact, etc. These contacts meet on a regular basis with their counterparts in other units and the overall agency coordinators to ensure information and services reach all of our internal customers.

Another level of internal support is resource to resource — i.e., resource assessment staff evaluating water quality and collaborating with fisheries service personnel to best manage the fishery resource. Finally, each supporting staff member provides service to management, and, through advising, providing direction and evaluating performance, managers provide services to support staff. Working to change the culture for DNR's employees is the Council on Quality and Organizational Improvement [Section 5].

Internal and external customers are served by the regional teams, the Ecosystem Management Council, the Disability Advisory Committee and the Public Communications Office.

## BUILDING A RESPECTFUL & TRUSTING RELATIONSHIP WITH THE PUBLIC

For many DNR employees, management of controversial issues and crisis situations is an ongoing responsibility. From park managers dealing with opposition to a deer hunt to fisheries scientists battling *Pfiesteria*, every issue is different, often in the media spotlight and almost never easy to handle. How well employees manage these controversies, however, has a significant impact on the public's perception of the agency's credibility and DNR's effectiveness in achieving its mission.

To address this issue, DNR's Advocacy Team has developed an in-house workshop (based on professional training sponsored by the U.S. Fish & Wildlife Service) on the art and science of building a respectful and trusting relationship with the public. DNR staff members are exposed to the principles, techniques and approaches that are the basis of constructive public involvement and communication. These strategies, developed by recognized experts in the fields of crisis management and public consent-building — can turn fierce opponents into constructive critics and gain the confidence of the general public in crisis situations.

A recent success story involved the resolution of a conflict between DNR officials and the mountain biking community regarding restricted trail use at Patapsco River Valley State Park. Recognizing a serious conflict with this important user group, DNR officials called a special one-on-one meeting. Using public consent-building techniques, DNR officials were able to reach a reasonable compromise with the mountain bike leaders and earn their consent for trail restrictions. The president of the largest mountain biking group was quoted in the regional cycling publication, stating, "The folks who manage the park are friends who dedicate their careers to preserving these beautiful areas for all users, and they are special friends to off-road cyclists...."

In a society of divergent values, providing DNR employees with the tools to effectively build public trust, consent and support through honest communication and involvement is central to achieving the Department's mission.

# 4. INFORMATION & ANALYSIS

*We are a learning organization: anticipating rather than reacting; taking well-calculated risks; remaining resilient, agile and open to change.*

At DNR, much work is directed toward gathering and analyzing data, and organizing and presenting the information derived to support quality environmental protection and resource management decision making (some data-gathering is mandated by law or regional agreement). Science is developing at a rapid pace in the environmental and natural resources arenas, where public interest is also strong. Assembling relevant information to resolve pressing public policy issues, while "the facts" are often unclear or changing, is a demanding enterprise.

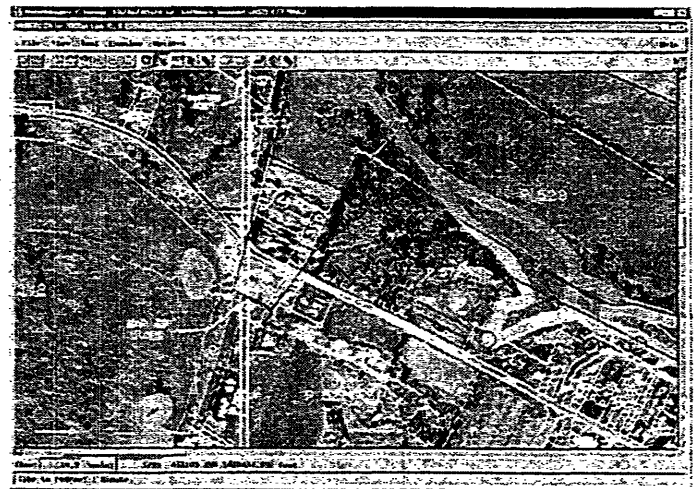
## SELECTION & USE OF INFORMATION & DATA

DNR conducts a good deal of direct **environmental monitoring** (i.e., of water quality parameters, fishery stocks and forest health), and relies on remotely-sensed data gathered via satellite imagery (i.e., of wetlands or forest cover). DNR also obtains data from aerial photography, sometimes contracted through educational institutions, as in the case of submerged aquatic vegetation acreage. Much of this data is mapped into the Department's **Geographic Information System (GIS)**, which is available to all DNR units, and its partners in local governments, other state agencies and the federal government. (Before this system was developed data was more difficult to gather and compile, and therefore, to evaluate.)

Published data from census information, research reports and the like are often reformatted into a common geographic framework, such as watersheds, which allows the data to be incorporated into the GIS and manipulated to produce and analyze multiple types of new information on the state of Maryland's environment. The **Integrated Natural Resources Assessment (INRA)** compiles this information to determine programmatic indicators — i.e., what areas would most benefit from restoration activities like riparian forest buffer planting and what areas have the highest natural values which should be protected. From the INRA-generated indicators, DNR is able to establish performance goals for each of the DNR priority areas (see Section 2), as well as to select locations and ecosystems on which to concentrate to derive the greatest environmental impact for our budgetary dollar.

In an INRA-related effort, DNR has been involved in a partnership with the Maryland Department of the Environment (MDE) and the US Environmental Protection Agency (EPA) in deriving indicators from the wealth of gathered information which help us measure the performance of existing programs with respect to priority issues. Both the indicators and the priority issues were evaluated through two series of public meetings in 1997 (with our customers and stakeholders) and will be re-evaluated regularly as part of the continuing **Environmental Performance Partnership Agreement (EnPA)** with MDE and EPA.

DNR's **MERLIN** system (part of the overall GIS) is an electronic atlas comprising base maps with a variety of thematic data layers including parcel ownership. By interacting with the system, employees make decisions on permit review, grant applications, property acquisitions, site management plans and review of local comprehensive plans. Currently available across DNR's local network, the system is also made available to other state agencies, and will be available via the Internet by March 1999.



The above illustration shows a typical map image with parcel boundaries and several thematic layers including National Historic Register, Inventory of Historic Properties, 100- and 500-year Floodplain, Wetlands and Agricultural Easement.

## SELECTION & USE OF COMPARATIVE DATA & INFORMATION

Through our EnPA participation, we can assess the entire state for the status of nearly 30 ecosystem health indicators. Progress over time can be easily demonstrated, and for most indicators included in EnPA, benchmarks have been established.

To help target specific management activities to the areas most in need, these indicators allow comparison of one smaller area (i.e., watershed) with others, on a statewide or regional basis. The following figure represents a comparative assessment of all the watersheds in the state, according to the percent of streams without forest buffers, an indicator suggesting high priority for restoration activities.



## ANALYSIS & REVIEW OF AGENCY PERFORMANCE

As part of the strategic programs identified above, as well as under the MFR process, specific DNR programs and projects, and often those of other state agencies, are aligned with the environmental outcomes reflected in the maps and tabular indicators. Because issues addressed cut across departmental administrative lines, experts from each unit must be brought into a common framework to examine differing perspectives in their totality. The development and application of common environmental indicators for use in all of these exercises, supported and measured by data from multiple units, provide the common elements.

As a step in developing the first EnPA, an internal survey was administered to obtain a self-assessment of individual programs' and projects' strengths, weaknesses and most significant accomplishments. Project leaders were also asked what additional information would be most useful in evaluating their performance and progress toward goals. DNR managers incorporated the most important of these, particularly where they crossed individual unit lines, into the EnPA work plan.

The Department's ability to call on its information and analysis capabilities, regardless of the units involved, and apply them to real world problems were clearly dem-

onstrated in the rapid and comprehensive response to last summer's *Pfiesteria* outbreaks. Less visible but no less critical to furthering the Department's mission and goals has been the ability to assemble professionals from a number of units into a quality matrix team, the Ecosystem Council, to develop an ecosystem-based management plan. In both of these examples, with each participant providing data from his or her own area of expertise for the overall plan and related issues, DNR's data-sharing and quality teamwork initiatives ensure that a wealth and variety of information is brought to bear on specific problems, in specific geographic locations.

## ECOSYSTEM BENCHMARKING

With assistance from Chesapeake and Coastal Watershed Services staff, the Ecosystem Council is working with other DNR units to develop an Integrated Natural Resource Management Strategy to broaden, ecosystem-based management philosophy and policy. The Council designed a national survey to determine how other states were addressing the need to shift toward a more integrated and holistic approach to resource management. This approach, often referred to as ecosystem-based management, is increasingly viewed as a vast improvement over single-species management and a necessary component to growth management initiatives. It takes into account the conditions and needs of individual natural resources, the demand for consumption and use of the resources, and the impacts on the entire ecosystem that result from a single action or a set of actions.

The survey was designed to determine which states have adopted official, statewide ecosystem management programs and policies; how state agencies are organized to achieve ecosystem management objectives; how states protect land, determine priority areas for restoration and conservation, and provide monitoring and assessments; and the level of staff training and public outreach conducted. Survey results and follow-up activities are discussed in Section 7.

In their continuing quest to keep Maryland at the forefront of ecosystem management DNR's Ecosystem Council members organized a national conference on the Conservation of Biological Diversity: a key to the restoration of the Chesapeake Bay ecosystem and beyond.... This assembly of great thinkers was historic because of what it exemplified: commitment to an ecosystem approach to managing natural resources in the Chesapeake Bay region, and recognition of biodiversity conservation as a critical component of ecosystem-based management.



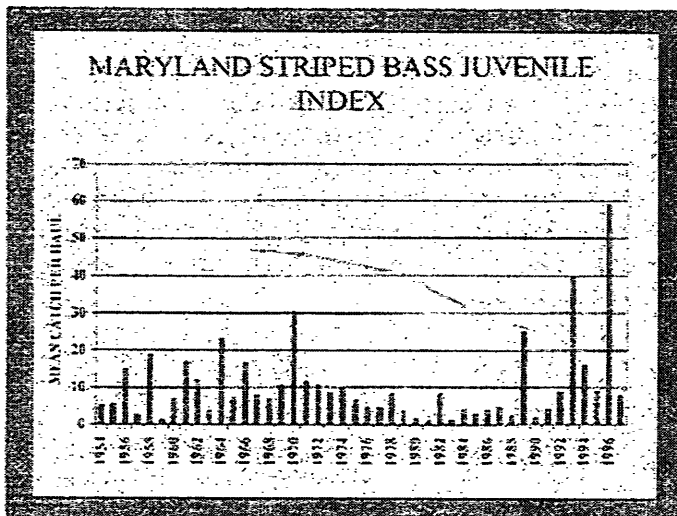
**Secretary John Griffin on biodiversity conservation:**

*If we agree that, to restore and sustain ecosystem health and productivity [ecosystem management], we must focus on the whole interconnected community of living things [biological diversity], it follows that conserving for biological diversity also means careful management of the environment with which living organisms interact.*

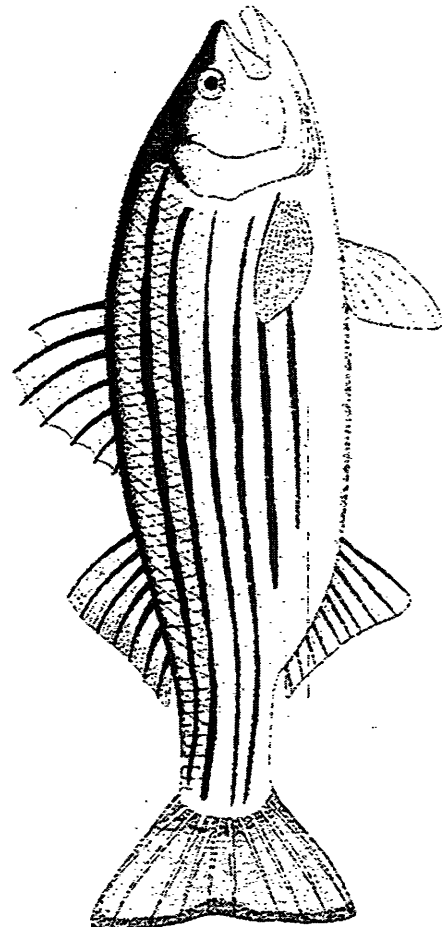
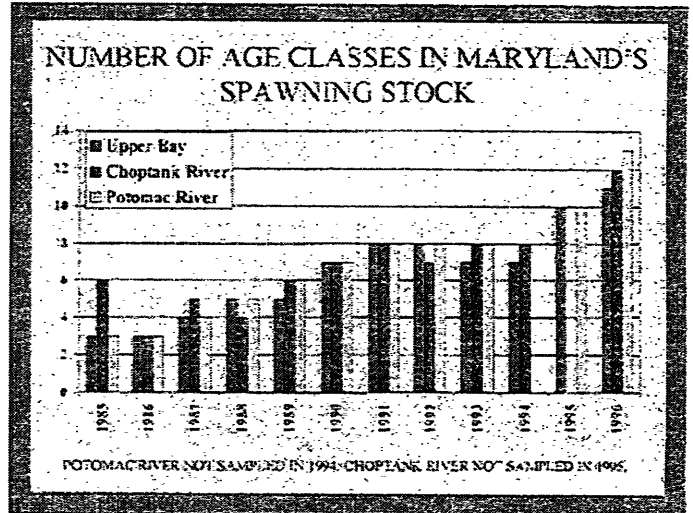
*One key lies in envisioning resource management challenges on multiple scales—considering watersheds, landscapes and regions, as well as individual properties, micro-habitats and genetic variances. Another lies in managing for sustainability over very, very long periods of time, not just for immediate results. Finally, to ensure that the conservation ethic is instilled in and shared by individuals, communities and institutions, we must consciously, consistently make it a top priority—locally, regionally and globally.*

In the works since last summer, DNR's new Ecosystem Management Assessment Program (EMAP) will create an education program for land managers, and develop assessment and certification criteria for DNR-managed lands and projects. Focusing on operations, maintenance & construction, the program will provide site assessments and quality recommendations for water and energy conservation, recycling, nutrient management, development & redevelopment, green building, and buffering and landscaping enhancements. EMAP will allow DNR managers and planners, and our project partners, to identify and apply the best current technologies that are both environmentally and economically friendly.

At DNR, collection of living resource data, i.e., information on fishery populations, is also critical to our mission. DNR has set the standard for best practices in fisheries management. DNR's Maryland Striped Bass Juvenile Index is one of the longest running, comprehensive data sets for use in fishery management in the world. Not only is it used by Maryland fishery managers, but also by all other Federal and Atlantic coastal state fishery managers for managing the most economically valuable fin fishery in the United States, the Atlantic coast striped bass.



**Number of Age Classes in Maryland's Striped Bass Spawning Stock :** The information in this graph is derived from the collection of copious quantities of data involving age (from scale samples) and length of migratory striped bass spawning in Maryland's Chesapeake Bay. This data is used by fishery managers to quantify the contribution of many generations of striped bass to Atlantic Coast populations by aging fish as old as 30 years!



# 5. HUMAN RESOURCE DEVELOPMENT

*We do not let formal organizational hierarchies stand in our way. We are passionate about our work and respect each other.*

DNR is a relatively small agency, considering the vast resources for which we are stewards, and the myriad programs we initiate and manage. Employees include fish and wildlife biologists, foresters, boat captains and mates, radio mechanics, firefighters, park rangers, carpenters, park technicians, park managers, and natural resource police officers among others.

Every DNR employee must contribute positively to the agency's mission. By linking our strategic planning process (MFR) to our quality principles — empowerment, customer service and continuous improvement of processes and results — and to every employee's performance, this is accomplished.

## WORK SYSTEMS STRATEGIC PLANNING

DNR's strategic planning process defines programs that support each of the Department's eight goals, which are assigned to units or matrix teams. In strategic planning, objectives are defined to support DNR's eight goals. Semi-annual objective status reports identify problems or issues that are opportunities for continuous improvement. New Jersey benchmarked against DNR's system and DNR is improving the system to incorporate MFR.

## EMPLOYEE PERFORMANCE, PLANNING & EVALUATION

DNR's Performance, Planning and Evaluation system (PPE), in use since 1994, improves each year. In 1997, the number of ratings increased and in 1998, behavioral elements were added. The PPE includes a discussion about job satisfaction, training needs and accomplishments, and requires the employee and supervisor to establish annual goals. These goals are derived from those defined in the strategic planning process, ensuring every employee's work supports the department's Action Plan (see Section 2). Employees and supervisors meet quarterly to measure progress.

Employees are given freedom and flexibility in how they accomplish goals. They have permission not to ask permission, and a culture that supports results through

collaboration. Self-directed, cross functional teams are everywhere: quality matrix teams accomplish broad organizational goals; regional teams streamline customer services; committee members improve processes and results in areas such as safety, parking, information systems, and finance. Skill-based teams contribute to search and rescue, western Maryland's black bear response, the horseshoe crab survey and the like. Unencumbered by organizational structure, teams are thriving and customer needs are being met better and more quickly.

## RAPID RESPONSE

The nature of DNR's work demands flexibility and rapid response. Law enforcement officers from two agencies (the State Forest and Park Service, and the Natural Resources Police) respond to emergencies that may be life threatening on both land and water.

DNR's handling of last year's Pfiesteria outbreaks epitomizes the responsiveness, strength, flexibility, dedication and leadership required of an agency under fire. Employees from across DNR immediately mobilized — at headquarters and in the field — to lead the State's efforts. Results are discussed in Section 7.

## EMPLOYEE RECOGNITION

To recognize performance, DNR uses all options permitted in the State Personnel Management system. DNR also promotes from within whenever possible, and offers Career Development Workshops and a Career Resource Center to help employees prepare for promotion.

DNR's recognition program, created in 1991 by a team of employees representing different units, illustrates the principals of CQI. The team determined that nominations would come from coworkers or supervisors, designed a nomination form, and established the criteria, which includes operational performance goals and indicators to evaluate and improve performance. This program has expanded to include employee of the year, health and safety awards, and teams of the quarter and year. The process has undergone five quality improvements, this year adding an interview with the supervisor.

To recognize the accomplishments of employees and teams of the month, the secretary and senior staff host a formal luncheon (in the executive conference room), at which honorees receive plaques and monetary awards. All nominees are also invited to the annual Employee of the Year luncheon.

Today, DNR's recognition program receives consistent praise from employees and has been used by other state agencies and other states as a benchmark of excellence.



*DNR's Recognition Team*

#### EMPLOYEE EDUCATION, TRAINING AND DEVELOPMENT

Within DNR, all training, leadership, and development programs reflect the Department's core values. Programs are designed to empower and equip employees to create the future of the agency and not be satisfied by merely responding to daily demands. Our core values challenge us to be a learning organization where employees are comfortable taking risks, and where people, resources and information are focused on producing results that exceed all expectations. To meet this formidable challenge, employees must be knowledgeable about the latest developments in their fields. At DNR, continuous learning is a key ingredient of CQI. Education, training and development results are discussed in Section 7.

#### LEADERSHIP DEVELOPMENT

We believe that every individual has the potential for leadership, and that in an environment where employees are comfortable taking risks and learning from their mistakes, great things can be accomplished. DNR fosters an environment where ideas are exchanged and innovation and continuous improvement are encouraged.

To unleash this potential, in 1995 DNR made a commitment to offer every employee Play to Win training, a four-day experiential leadership and empowerment program of which CQI is a key component.

In addition to Playing to Win, DNR's many development opportunities for senior staff include: St. John's College Great Books program; the University of Maryland Government Executive Institute; the John F. Kennedy School of Government at Harvard University; and Johns Hopkins University's Executive Leadership Program for Police Officers.

#### STAFF DEVELOPMENT

In 1998, DNR offered 48 classes in management and supervisory skills, 19 classes in professional development, 18 hands-on computer skills courses and three classes in personal development during the regular work day. Each incorporates the CQI principles.

#### EDUCATION

Training is delivered through a variety of methods: seminars, formal classes, experiential programs, study groups, professional meetings, field trips, brown bag lunch meetings, hands-on computer training, formal and informal mentoring, and rotational assignments within DNR and other state or federal agencies.

Training is delivered through college level instructors, outside consultants, the agency's training department, other DNR employees, video and audiotapes, and DNR's computer lab, career resource center and information resource center. Programs are designed for all employees: technical, scientific, administrative, management and law enforcement. Programs are developed internally, and in cooperation with outside partners like the University of Maryland. Because DNR employees have many different and specific areas of expertise, technical training and education are coordinated mostly within the units. Technical training classes for 1998 included wetlands identification, Pfiesteria, silvics, and search and rescue.

One exciting educational initiative just launched was developed by the Ecosystem Council in cooperation with the University of Maryland. The Certificate in Ecosystem Studies program will provide DNR employees with an opportunity to experience formal education in a broad range of disciplines from an ecosystem management perspective. Credit, non-credit and scholarship options are available. Those who complete the two-semester course will receive a Certificate in Ecosystem Studies.

Other significant accomplishments for FY '98 include: a 3-day national biodiversity conference developed by the Ecosystem Council; DNR's respirator training program, which was selected by a consortium of state agencies — the Departments of the Environment, Agriculture and Health and Mental Hygiene, and the University of Maryland — to be the model for all state employees involved with Pfiesteria monitoring; and two of DNR's largest units added an employee whose sole function is technical training.

The knowledge and skills gained through training are reinforced on the job in many ways. DNR's team-based culture encourages employees to welcome new experiences, take risks and commit to continuous learning. PPE quarterly meetings are invaluable for reinforcing skills and information learned, and identifying and

quickly responding to training needs. In-house courses include summary sheets and detailed packets of information for employees to review. Most important, employees who share a training experience reinforce each other as they use newly acquired skills.

In 1998, DNR began a revision of the Employee Orientation process, piloting two versions (measuring the effectiveness of each), and researching other states' practices in search of benchmarks where the Intranet (an internal "Internet" site) is utilized.

Education, training, growth and development programs reflect DNR's commitment to CQI. The topics selected, location of training, material covered and training providers are all evaluated systematically and consistently for effectiveness. In 1998, our process of continually seeking feedback — by tracking MFR goals and through surveys, evaluations, PPEs and solicited and unsolicited comments — led to innumerable improvements in the quality of our training programs. We anticipate many future improvements as we continue on our endless pursuit for quality excellence.

#### EMPLOYEE WELL-BEING & SATISFACTION

One of DNR's overall goals is "to champion a diverse, well supported, cooperative work force." Teams partner with the human resource service unit to implement the many programs, procedures and policies that promote continuous improvement in employee health, well-being and satisfaction.

The Council on Quality and Organizational Improvement, a quality matrix team, works to help change DNR's culture from a traditional top down hierarchy to a participatory organization that engages and rewards every employee. The Council works with leadership and staff to obtain measurable improvement in quality of service, productivity and all issues that impact employee morale, satisfaction and safety. The process used to establish annual goals is based on defined visions for employees, leadership and the working environment.

Council goals for 1998 included measuring both employee satisfaction and the effectiveness of internal communications, accomplished through surveys; evaluating DNR's recognition programs, accomplished through researching current theory and best practices; advising and monitoring the effectiveness of DNR's newly trained facilitators for the Play to Win program, accomplished through review of evaluations, observation and interviews; and reviewing customer-service training and practices, accomplished through a partnership with the Advocacy team.

DNR's Health and Safety Team has a more narrow focus, spearheading preventive programs such as a semi-annual Wellness Fair, complete with medical screenings, health club vendors and health food samples; weight

loss classes; personal safety, CPR and stress management training; quarterly blood drives; and special needs such as lyme disease prevention.

This team also reviews accident, illness and injury records, concluding that, in 1998, while many employees were in high risk jobs, most injuries were minor and preventable. The team's defined priorities are to establish accountability at all levels, to investigate the root cause of accidents, and to change employee attitudes and behavior. The team defined strategies and an action plan — including a brochure, training and a safety survey — that will be implemented in 1999; results will be measured monthly.

DNR also establishes ad hoc teams to address specific issues relating to employee well-being. In 1998, a team led by senior staff (which included partners from DGS and IWIF) addressed employees' ergonomic concerns, resulting in workplace air and water testing, and heating/air conditioning system improvements.

Other DNR activities and programs that enhance the working environment include agency- and unit-sponsored social and recreational events, and enjoyable and meaningful volunteer experiences. In 1998, programs included: Bring Your Child to Work Day; four programs to improve cultural sharing during black history month; a St. Patrick's Day celebration; and a day camp offering children an in-depth view of their parents' work.

To champion a diverse workforce, DNR actively recruits minorities. Accomplishments include a summer internship program, a ranger recruit program, an NRP hiring plan. DNR's fair practice officer is the 1998 president of the Minorities in Natural Resources Committee of the Southeast Association of Fish and Wildlife Agencies.

Career counseling and a development program are offered, complete with a Myers-Briggs Assessment and Strong Interest Inventory. Tuition reimbursement, release time for education, flexible work hours, job sharing, job rotation, and telecommuting are available. The Tawes complex (headquarters) houses a beautiful garden that offers garden lunchtime concerts during the summer.

Senior staff encourage and motivate employees to reach full potential, advocating participation in available programs; maintaining open dialogues regarding employees' personal goals; and, through the PPE and other discussions, responding to employee surveys with actions, explanations, defined strategies and priorities that champion employees.

Employee well-being, satisfaction and motivation are key elements of DNR's goal of a diverse, well supported and cooperative workforce. These results are measured and tracked along with other business goals through the MFR process.

# 6. PROCESS MANAGEMENT

*We organize in ways that focus people, resources and information on one central theme: getting the job done.*

At DNR, quality process management is dictated by a number of different factors. State laws and regulations, government policies, employee input, technological and scientific advancements, and customer, stakeholder and resource needs are all part of the formula.

## PRODUCT & SERVICE PROCESSES

Products and services are designed and modified both proactively — to keep a resource healthy, a facility productive, customers better served — and reactively, in response to a resource threat, the advent of new technology, or customer needs.

## REGIONAL TEAMS

For the purposes of natural resource management, the state is divided into four "regions" — eastern, southern, central and western — which locate wildlife, fishery, land and water managers where they can deal directly with the customers and resources they serve.

Coordination and cooperation of units on a regional basis are an effective way to incorporate an interdisciplinary approach in day-to-day processes and operations. DNR's four regional teams bring together resource professionals from across the department to work across disciplines, fostering a better understanding of the Department's goals, priorities and key policy issues, and improved working relationships among units.

## SUPPORT PROCESSES

**Project Review:** To review or not to review? That is the question currently being addressed by the Southern Region Team, which is in the final stages of producing a set of Statewide Project Review Recommendations. The working list includes about 200 activities — everything from conducting archeological surveys to baptisms in waterways to Winter Lights Festivals — with an indication of whether or not each activity needs to be reviewed before being permitted. (FYI, surveys and festivals do, baptisms do not.)

The Stream ReLeaf Implementation Plan, developed late last year in conjunction with partners from around the state, proposes a watershed approach to local planning for buffer restoration and conservation, which is coordinated with ongoing watershed-based efforts, in order to reach Governor Glendening's goal of reforesting 600 miles of Maryland streamsides by the year 2010. Process results are discussed in Section 7.

## THE LAND MANAGEMENT PROCESS: MOXLEY FARM

Moxley Farm is a 170+/- acre property in Frederick County that is part of the Monacacy Natural Resources Management Area (NRMA). It sits on the banks of the Monacacy River, and is separated from other parts of the NRMA by the river and intervening private farmland. The farm, which currently consists of agricultural fields, open fields used for pasture, a stock pond, and associated farm buildings, has been developed and managed as a working family farm, producing dairy products and grain. Fields are separated by hedge rows and immature wooded tracts of varying width, and there is a narrow wooded buffer along the river. One permanent tributary stream drains the property, including the farm pond, and several ephemeral streams fed by seepage wetlands are also present. No rare or protected species are known to be present.

When the farm was vacated by its most recent tenant, DNR's planning process called for review and evaluation of the property. Upon review, DNR's historical and cultural resource manager recommended that the portion of the property containing buildings and 20 acres of associated farmland be incorporated into a curatorship. Subsequently, the Central Region Public Lands sub-committee evaluated current management practices and recommended planting of 56.7 acres of riparian forest buffer to correct, in varying degrees, existing problems — i.e., bank erosion; pastured animals accessing wetlands, the farm pond, and the permanent stream; excessive nutrient loading, etc. — or to prevent anticipated future problems. Plantings were implemented this spring, using Frederick County Forest mitigation funds (\$28,000) and a grant from American Forests (\$9,000). As a result, the Chesapeake Bay will receive a net benefit from the improved riparian area and the reduced sediment and nutrient loading. This site will soon be a model for state-of-the-art conservation, including best management practices, riparian forest buffers and the Conservation Reserve Enhancement Program. Financial results are discussed in section 7.

## DEER MANAGEMENT: PROCESS, PLANNING & IMPLEMENTATION

*Developed to address problems associated with Maryland's rapidly expanding deer populations, changing demographics (urbanizing populations), and associated land use patterns (see Section 1), Maryland's first comprehensive, statewide deer management plan is indicative of the processes involved in living resource management.*

*The first step in the process, a random public survey, gathered information on customer needs, expectations and attitudes, and data on crop damage, deer/auto collisions, etc. In response to survey results, a special Deer Management Task Force was established, and public meetings were held, involving more than 3,900 citizens across the state. A thorough evaluation of public input and land management indicators, resulted in creation of Maryland's statewide deer management plan.*

*Once the overall plan was created, several more steps were required to facilitate implementation. These included research of non-traditional management techniques and experimental applications, like use of highway reflectors and somewhat controversial contraceptive methods.*

*Next, an ad hoc Deer Damage Committee was established to rebuild DNR's Deer Damage Permit process by addressing a number of specific elements: giving landowners reasonable and accessible avenues to reduce damage from deer to a tolerable level; advancing the goals of the new plan; generating consensus among the most directly affected stakeholder groups; and generating new efficiencies for the permit process, making it manageable given limited availability of necessary manpower and financial resources. In a critical early benchmarking step, the committee solicited input from all other states for use in crafting a range of superior potential solutions to be recommended for action.*

*In an ongoing process, public land resource management teams work with local advisory committees to continue research, follow-up surveys and monitoring.*

### SUPPLIER & PARTNERING PROCESSES

**Construction Management Process:** At DNR, Capital Construction, In-House Construction and Physical Plant Management projects are placed on a time line (using Microsoft Project software) that predicts the project schedule from preliminary inspection to plan development, to plan review and revision, to bidding and awarding the project to a contractor, to initiating construction, to monitoring construction and finally to completing construction. The time line is used to keep the

project on schedule, identify key milestone components that the project manager should monitor, and ultimately, to identify any elements of the process that may be consistently resulting in project delays. Performance measures applied are: number of projects completed; number of projects completed on time; and identification and management of elements of process that cause delays.

**Physical Plant Inventory Process:** Physical Plant Management is responsible for the inventory of over 1,800 buildings, 600 miles of roadways, 14,000 parking spaces, hundreds of miles of water, sewer and electric lines, and various accessory structures such as bridges, antennas, fuel systems, dams, piers, bulkheads, and boardwalks. The inventory includes an assessment of many features, for example, buildings are inventoried for 32 distinct features (i.e., exterior walls, windows, floors, gutters, electric service, roof, etc.). For each feature, the age and condition are noted. The information is kept in a central database in Engineering and Construction; life spans are predicted for each feature, and the computer program prints out a list of features that are at, or near the end of their predicted life span. This list is used in conjunction with field inspection to develop the Critical Maintenance List for each fiscal year, which is submitted to DGS for review and approval and then becomes part of our budget submission. Performance measures applied are: number of facilities which can be funded for maintenance each year; comparison of funding availability to needs based on facility age and condition; and ability to complete high priority maintenance needs in a timely manner.

**Teaming with Wildlife (TWW),** a national wildlife diversity conservation funding initiative, promises to yield substantial funding to state fish and wildlife agencies to conserve the country's biological diversity. In a national effort, Maryland developed a model TWW coalition which now has more than 80 interest groups represented. DNR has entered into a Memorandum of Understanding with the coalition, to guide non-game wildlife decision making, future expenditure of funds, etc.

The current chair of the Northeast Association of Fish and Wildlife Agencies' Non-game Wildlife Technical Committee, DNR's biodiversity conservation manager, will be attending a national meeting of state agencies to develop a model organizational structure for the administration of the new funding source. He has been invited to speak about Maryland's programs for conserving wildlife diversity, and the innovative programmatic structuring that Maryland has employed to efficiently administer similar programs.

# 7. PERFORMANCE RESULTS

*We are driven by quality consciousness, integrating services and collaborating to produce results that satisfy and delight our customers.*

## CUSTOMER SATISFACTION RESULTS

- ✓ In its first year, the Rural Legacy Program attracted proposals from 20 of Maryland's 23 counties, totaling \$125 million and 53,000 acres.
- ✓ In order to respond to several hundred requests for Bay-related classroom presentations annually (previously unmet), a new program, Teaching Environmental Awareness in Maryland (T.E.A.M. DNR), trains volunteers to deliver presentations to students (highlighting individual responsibility in keeping the Bay clean). In its first four months, T.E.A.M. DNR delivered presentations to 42 classrooms in three counties and Baltimore City, reaching more than 1,200 students.
- ✓ Although 4% more boaters used Maryland's waterways, fewer people lost their lives in boating accidents during FY '98 than in any other recorded year. This represents a 60% decrease in the average number of yearly fatalities recorded over the past seven years.
- ✓ During FY '98, approximately 525 volunteer Hunter Safety Instructors worked 5,375 volunteer hours teaching the mandatory Hunter Safety course at 215 locations throughout the state, training 7,059 students with proper hunter ethics and safety, saving the state nearly \$80,000 in salary expenses.
- ✓ Still another model for other states is DNR's Pfiesteria hotline, which is now open to the public seven days a week, 24 hours a day.
- ✓ DNR employee activities during last summer's Pfiesteria outbreaks resulted in Fisheries, Resource Assessment and Public Communications staff working on Pfiesteria full-time, reorganizing resources, and extending work hours, days and weeks to ensure DNR customers continued to be well-served.
- ✓ DNR's Internet team continues to expand service to customers. 1998 improvements included an on-line fishing survey, access to Amazon.com and direct access to managers through E-mail.

- ✓ Implementation of DNR's new SMART program in FY '98 has given 100% of DNR executive staff members, unit directors and fiscal officers computer access to budget and management reports.
- ✓ Internal customer satisfaction guided the design of training and development programs. In 1998:
  - Within six months of a formal training needs assessment, training was provided for 92% of topics ranked most important.
  - Evaluations (completed for 100% of training classes) resulted in publication of a monthly training calendar and training hotline.
  - Course registrations led to additional computer, CPR and stress management training.
  - Employee suggestions resulted in more field classes, and a Play to Win day program, schedule changes and course redesign.
  - Supervisors' questions resulted in MS22 training, customized for each unit, attended by 93% of all supervisors.
- ✓ In FY '98, 133 DNR employees received Internet training in-house.

## FINANCIAL RESOURCE RESULTS

- ✓ In FY '98, the first full year of operation for the Natural Resources Police Reserve Officer Program, volunteers worked 12,633 hours, resulting in improved service to our customers and savings of approximately \$187,000 in salary expenses.
- ✓ In FY '98, DNR's new Rural Legacy Program earmarked \$29 million for land conservation in Maryland.
- ✓ With DNR's licensing agents paying electronically every two weeks through the new COIN system, (as opposed to manually under the old system), the state has more immediate access to more than \$9 million each year.
- ✓ Maryland's Conservation Reserve Enhancement Program, the first in the country, was approved in FY '98, designating an estimated additional \$200 million for the state over the next 10 to 15 years, part of which will support Stream ReLeaf goals.
- ✓ Resource management on Moxley Farms tripled annual revenue from \$35 per acre for the traditional agricultural lease to \$110 per acre under the Conservation Reserve Enhancement Program.
- ✓ In FY '98, approximately 45,000 volunteers performed more than 510,000 hours of community service providing the state with nearly \$3 million in free labor.

- ✓ Through the Internet, we are providing improved customer service with financial savings. Examples include:
  - DNR's weekly fishing report saved \$13,000 a year and is distributed to 7,000 people, versus 800 using the paper format three years ago.
  - Parks and lands brochures are viewed more than 36,000 times each month, at an estimated annual cost savings, of \$60,000 annually.
  - Forms and service information available online resulted in more than \$2,000 in revenue for FY '98.
  - Internet sponsorships in FY '98 resulted in the department receiving more than \$3,000 of revenue and product.

## HUMAN RESOURCE RESULTS

- ✓ In the Quality Council's workforce survey, 60% of respondents rated the quality of employee experience as a four or five on a 5-point scale, with five being superior; 60% rated the department's success in continuous improvement of customer service a four or five; 43% said that communication from Office of the Secretary improved since the 1996 survey.
- ✓ The time to process a reclass action was reduced 44% over 1997 due to improved processes.
- ✓ Grievances and EEO complaints were reduced 26% and 71% respectively due to improved communications and training.
- ✓ Continuous quality improvement principles are incorporated into 100% of training classes.
- ✓ Training evaluations measuring delivery effectiveness and customer satisfaction averaged 4.4 on a 5-point scale.
- ✓ 75% of employees attended technical training classes.
- ✓ 18% of the graduates of the University of Maryland's Government Executive Institute are DNR employees. DNR employees represent 2% of State workers.
- ✓ Through improved recruitment procedures, 46% of Rangers and 52% of police officers hired since 1994 are minorities.
- ✓ The number of DNR interns tripled since the program began in 1993 and 70% have been minorities.
- ✓ In FY '98, DNR received the SEAFWA Diversity in Natural Resources Award in recognition of diversity leadership and achievements.

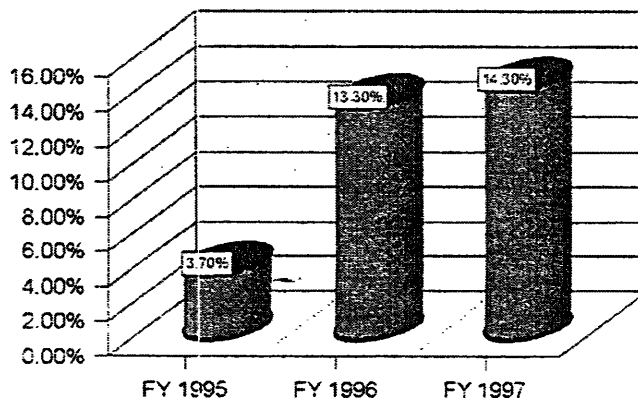
- ✓ Wellness Fair attendance has risen 8 to 10% each year for the past three years.
- ✓ In 1998, training internal facilitators to lead Play to Win training, resulted in a 50% increase in number of employees receiving training, and a 65% reduction in costs, without compromising quality.
- ✓ In 1998, there were 147 nominations for DNR's 27 recognition awards, a 19% increase over 1997.
- ✓ In FY '98: 12 senior staff members completed a third session of St John's College Great Books program; two graduated from the University of Maryland Government Executive Institute; and five executives attended the John F. Kennedy School of Government at Harvard University.

- ✓ Staff development numbers: 4,717 hours of in-service training were participated in by 1,580 employees. In 1997, 13 programs were offered and in 1998, 98 were offered, an increase of 753%. More than 40 sessions were in regional locations, an increase of 1000%.
- ✓ Approximately 440 natural resource professionals attended DNR's biodiversity conference, approximately 37% of which were DNR employees.
- ✓ Service tenure pins (which include DNR logo and years of service) are awarded to employees at five year increments, at annual, statewide luncheons hosted by the secretary and senior staff. More than 42% of employees have 15 or more years of service, and 35 employees have more than 30 years.

## SUPPLIER & PARTNER RESULTS

- ✓ In FY '97 and '98 DNR efforts to improve Minority Business Enterprise participation resulted in participation levels of: FY '95 - 3.7% - FY 96 - 13.3% - FY 97-14.3%

MBE Participation



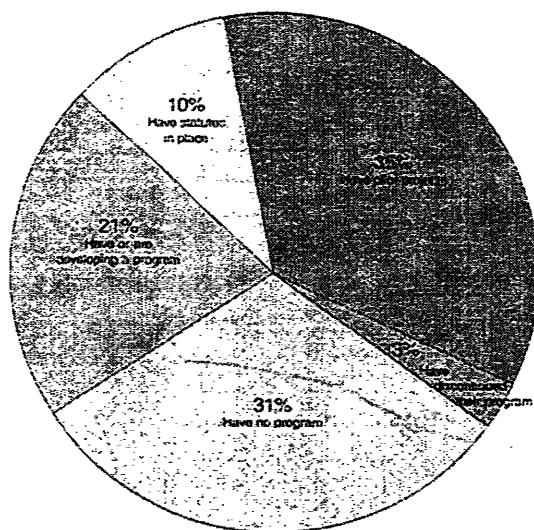


- ✓ 30% of proposed corporate credit card recipients have been trained; training will be completed by year end. Card use allows prompt payment of vendors, and translates into an estimated savings of \$816,000 to DNR on transaction processing.
- ✓ The Bay Link program pulled together 10 partner organizations, managers of 29 separate pieces of property around the Chesapeake Bay and its tributaries, to promote ecotourism and foster greater understanding of the Bay and its watershed. Kicked off by the Governor in June 1998 the program has distributed a map-based brochure to many locations frequented by visitors.
- ✓ Working with the Department of General Services, DNR in 1998 was able to design a preferred approach to handling storm water from the Tawes Building parking lot, helping us better practice what we preach and demonstrate more environmentally friendly methods. Construction is expected in fiscal year 1999.

#### PROGRAMMATIC ACCOMPLISHMENT/RESULTS

- ✓ In it's first year, the Rural Legacy Program designated 13,474 acres of land for preservation.
- ✓ The Ecosystem Council's national survey results showed that Maryland is one of nine states engaged in a shift to ecosystem-based management. Several initiatives are underway or have been recently completed.

National Survey of States with  
Ecosystem Based Management Programs & Policies



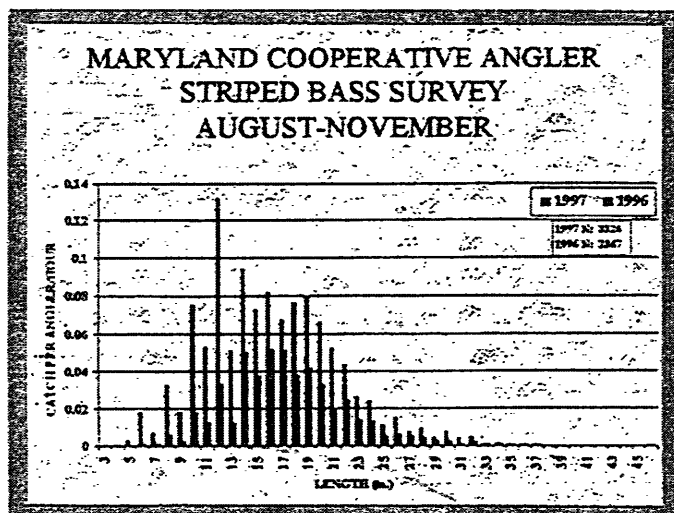
- ✓ DNR engineers and environmental specialists developed an analytical methodology for combining multiple geo-referenced indicators for use in the Unified Watershed Assessment called for under the Federal Clean Water Action Plan. The methodology will also be of use in other applications of the Integrated Natural Resource Assessment and the Department's efforts to implement ecosystem-based management.
- ✓ As part of an interagency team, DNR completed Maryland's first Environmental Performance Partnership Agreement with the Maryland Department of Environment and EPA. The Agreement, which is considered a national model, will be updated annually to guide the State's cooperative efforts with the Federal government for more effective environmental management.
- ✓ DNR's watershed restoration team completed 10 projects, including stream restorations, wetland creation and habitat creation.
- ✓ In FY '98 Program Open Space stateside funding in the amount of \$8,457,345 was targeted to acquire land or establish or upgrade facilities on 3,773 acres.
- ✓ A major emphasis of the Chesapeake Bay Program is the reestablishment of forested riparian buffers on 600 miles of streams by the year 2010. During 1998, DNR completed a GIS project for targeting areas to receive emphasis in riparian reforestation efforts to ensure the most effective use of available resources to achieve broad environmental objectives.
- ✓ In FY '98, DNR planted 65 miles of riparian forest buffers under the Stream ReLeaf program, a 35% increase over last year (for a total of 107 miles toward Governor Glendening's goal of 600 miles by 2010).
- ✓ Within Maryland, DNR acts as the lead for the Tributary Strategies Program - a framework to bring the Chesapeake Bay Program goals to reduce nutrients by 40% by the year 2000 to every stream and river that drain into the Bay. By creating a new working relationship among federal, state and local governments, businesses, the agricultural community and citizens, Maryland's 10 watershed-based Tributary Teams are working together to improve water quality and enhance habitat for living resources in each of the state's major Bay watersheds.

The teams are helping to promote new technologies and practices to reduce nutrient pollution; guide State policies to reflect local concerns and priorities for water quality; and educate local communities about actions that can be taken to protect and restore watersheds. In 1998, for example, the Teams have:

- arranged a pilot project to evaluate the effectiveness of aerial seeding cover crops - an agricultural best management practice to reduce nitrogen leaking into groundwater;
- held workshops for developers, contractors, landowners, homeowners, and lawn care companies on designs and practices that reduce nutrient pollution;
- helped win federal support for the State's \$200 million Conservation Reserve Enhancement Program, which provides funds for landowners to establish riparian buffers and other conservation measures.

### MARYLAND COOPERATIVE ANGLER STRIPED BASS SURVEY—AUGUST TO NOVEMBER

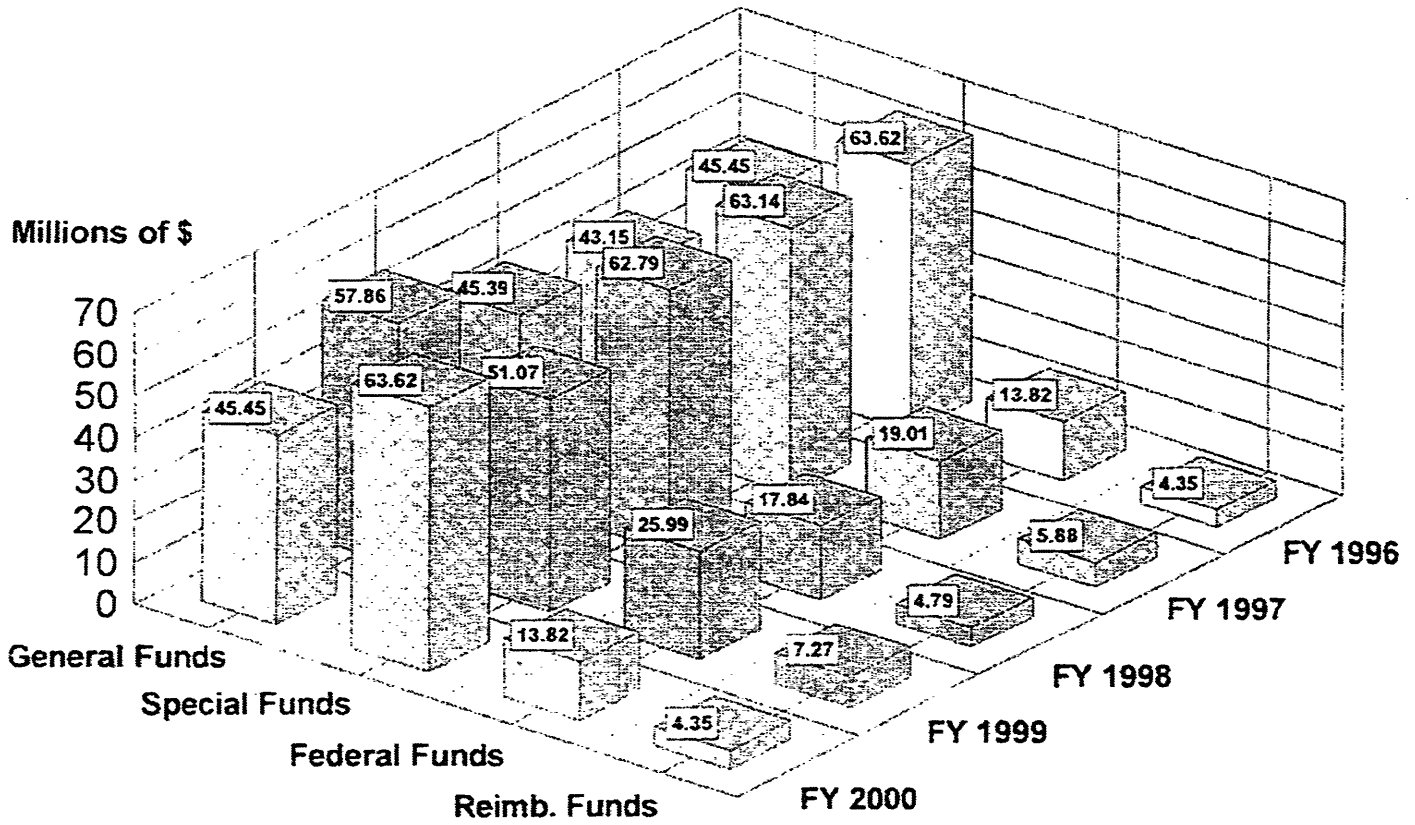
In technologically state-of-the-art-fashion, Maryland's own recreational fishermen transmit length data from their striped bass catches, from their home computers across the Internet to DNR's Web server. This allows DNR to accumulate large quantities of quality information in a more cost efficient manner, and has increased customer response. The information portrayed in the graph maps the growth of different year classes of striped bass as they age, which strongly correlates to the Juvenile Index results (See Section 4.3), giving fishery managers yet another tool to manage the United States most valuable fin fishery.



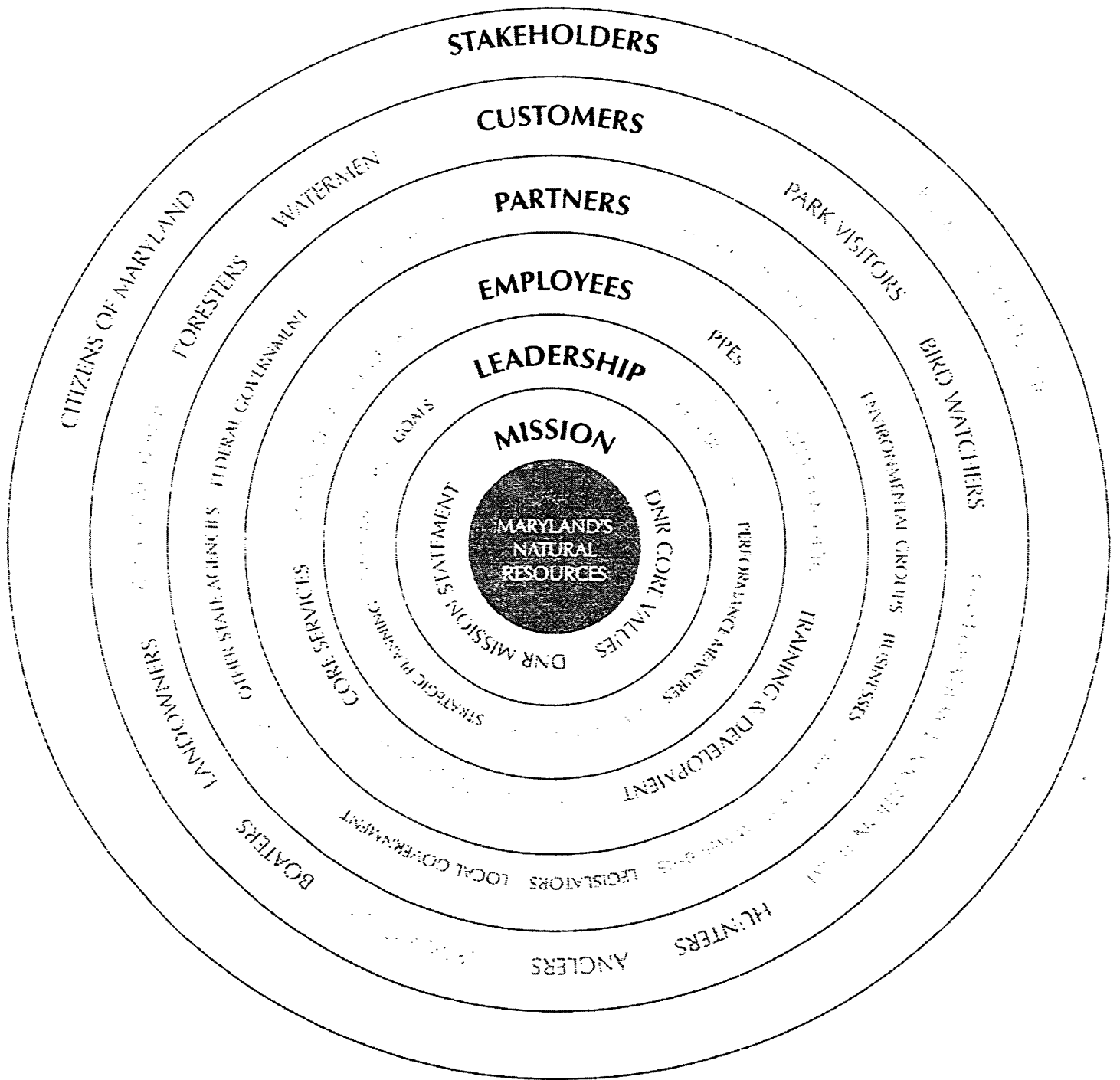
- ✓ Submerged Aquatic Vegetation has increased by 5,000 acres, or 15%, between 1996 and 1997.
- ✓ Nitrogen loads decreased from 82.7 million pounds to 65.7 million pounds between 1985 and 1996 (modeled results).
- ✓ Phosphorus loads decreased from 5.92 million pounds to 4.01 million pounds between 1985 and 1996 (modeled results).
- ✓ 238 miles of streams have been opened to fish passage as result of 42 projects between 1995 and 1997.
- ✓ In 1998, oyster restoration efforts by DNR, combined with outside efforts funded by DNR, are resulting in approximately 1.07 billion young oysters planted in the Bay, compared with 150 million in 1997.
- ✓ DNR employee activities during last summer's Pfiesteria outbreaks resulted in:
  - DNR took the lead in organizing and directing an inter-agency, intrastate team to investigate Pfiesteria, and in forming an expert, scientific advisory group.
  - Dozens of DNR employees have incorporated Pfiesteria-related response and monitoring activities into their jobs and PPEs.
  - To foster CQI, Pfiesteria, fish, and water quality monitoring were expanded to include potentially vulnerable rivers; channels of communication were expanded to increase public information services; and extra training for field personnel was implemented.
- ✓ Examples of Internet-related programmatic accomplishments include:
  - More than one-half million hits to DNR's web site per month, a 57.5% increase from last year.
  - DNR's home page, updated weekly, was viewed 78,462 times in June.
  - The New Media Partnership program resulted in more than 250 web sites linking directly to content within DNR's site, including newspapers, radio stations, businesses, organizations and personal web sites.

# Operating Budget

*Fiscal Years 1996 - 2000*



# DNR'S QUALITY CIRCLE



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R/SZ