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Local Reins on a Sprawling Land

In 1608 Captain John Smith described this land as 'such pleasant plaine, hils and fertile valleyes, and watered so conveniently with their sweete brooks and cristall springs, as if art itselfe had devised them.' But the land and bay are beset by acid rain and the runoff of farm pesticides, fertilizers, and hazardous waste. Here, marine life is hard pressed to overcome the vagaries of men who build cities, pave roads, and build bridges—and until recently paid little heed to a unique resource dying. Still, by most accounts, it is a land and shore of pleasant living for people great and small.

—Robert Grieser and Peter P. Baker, writing in the *Baltimore Sun*

In its mission to protect and restore the Chesapeake Bay in recent years, the Chesapeake Bay Program has focused its attention upstream, following the hundreds of tributaries and rivers that all lead back to the Bay. Nestled throughout the watershed are over 1,650 local communities, each represented by a local government body responsible for local planning and development issues. Decisions made by these local governments on land-use planning, water and sewer planning, construction, and other growth-related management processes have a direct and consequential impact on the health of the Bay.

Protecting a National Treasure

The Chesapeake Bay watershed, historically a gateway to America's Mid-Atlantic States, is a region of diverse cultures, serene, natural beauty, and strong economic growth, making it one of the fastest-growing regions in the nation. The watershed itself stretches through six states, reaching north of the Susquehanna River into central New York State, as

far west as West Virginia, and as far south as the mouth of the James River in Virginia. Hundreds of streams and rivers connect towns, municipalities, and boroughs to the Chesapeake Bay. Many of these communities are a short drive from at least one of the region's four large cities: Baltimore, Harrisburg, Richmond, and Washington.

The topography of the land and the economic opportunities born of a metropolis have attracted a diverse

and growing population. Many communities within the watershed have experienced the advantages of economic growth: attracting large industries that offer substantial employment, creating a growing business and residential tax base to support the local community, affording the extension of public sewer and water lines, and attracting a culturally diverse population. Now these communities—and specifically the local governments that have jurisdiction over these issues—must address the effects of rapid and often ill-conceived development patterns, including congested roads, costly public services, decline of open space, and deterioration of the local environment.

Role of Local Governments

Local governments are perhaps the most critical partners in efforts to protect small watershed resources. Defining zoning laws, designating land use, levying property taxes, and enforcing dumping laws falls under the authority of county councils, supervisors, or commissioners, as well as municipal leaders. These powerful local entities are also responsible for providing their communities with public services (e.g., trash pick-up, snow removal) and adequate schools. Local governments have long been concerned with infrastructure, from both public works and economic development points of view. Elected and appointed officials have the ulti-

mate responsibility for ensuring that a community's services meet the needs of its residents and for providing a competitive environment for business and industry.

In many cases, local governments build and maintain infrastructure. This is particularly true in the Chesapeake Bay region, with many major city centers in close proximity. Streets, transit systems, and waterworks are usually government responsibilities. Local governments build airports, shipping facilities, and convention centers. All of these affect not only the community's land, but also surrounding lands, creeks, rivers, and waterways.

In 1950, the Bay's watershed was home to 8.4 million residents. By 1990, this figure had grown to 14.7 million; by 2020, it is estimated that there will be 17.4 million people living in the watershed. By the mid-1970s, the Chesapeake Bay watershed and its communities were feeling the effects of this population explosion. Local governments were working around the clock planning to accommodate the growth. Now communities are experiencing exponential growth, with housing complexes, roads, shopping centers, and business and commercial complexes sprawling across the watershed, into what had once been open space, forests, and agricultural land.

A local government's land-use code should reflect the unique values, physical setting, and economic conditions of the community. While

regional policies help frame the context for local planning, cities and counties are in the best position to balance the needs and concerns of the citizens of those communities. Local governments have a strong commitment to use the tools they have to provide a sustained quality of life. For these communities to restore and maintain their part in the watershed, they must seek to create a balance of economic growth, quality of life, and environmental benefits. Only then can the communities and the region's natural treasures co-exist and flourish.

The Chesapeake Bay Program Initiative

Since its inception, the Chesapeake Bay Program has addressed the effects of pollution on the Bay. In recent years, the Bay Program has turned its attention to sources of pollution, looking upstream into the watershed. By addressing these sources, the Bay Program has focused on local governments as the key to the management of land use in the watershed. Actions taken in the last decade address a broad array of issues having significant impact on local governments. These actions, as stated in a Bay Program directive, include the preparation of:

- "Population Growth and Development Policies and Guidelines" (1989), which identified educational materials, technical assistance, and financial support

available to local governments to encourage them to apply the guidelines.

- Tributary-specific nutrient reduction strategies. Called for in the 1992 amendments to the Chesapeake Bay Agreement, these strategies expressed a need for local government participation to meet the targets. The inclusion of a nutrient cap underscored the need for local government involvement as the primary managers of land use in the watershed.
- The "Riparian Forest Buffer Directive" (1994), which recognized the authority of local governments to apply or modify existing land-use management measures to protect streamside forests from the adverse impacts of development or other activities.
- The "Chesapeake Bay Basin-wide Toxics Reduction and Prevention Strategy" (1994), which aims to get all state and local governments to voluntarily reduce the use and generation of potentially toxic chemicals at their facilities by the year 2000.

In 1995, the Chesapeake Bay Program formalized its support for local government participation through a directive on the Local Government Partnership Initiative. Signed by the six members of the Chesapeake Executive Council, the directive called for a "Local Gov-

ernment Participation Action Plan.” Now in place, the plan identified financial and technical opportunities available to local governments. It recommended changes to the Bay Program so as to better engage local governments, and also sought new partners for the Program. Several publications were written to provide local governments with the technical resources they need to be effective Bay partners. These publications addressed land management concerns: countering sprawl, protecting wetlands, and preventing pollution.

Identifying Local Government Needs

Through the directive and the Local Government Participation Action Plan, the Bay Program established a formal plan to engage local

governments in the protection and restoration of the Chesapeake Bay. The challenge is to address the realities that face local governments as they foster their communities’ growth and development. As part of the action plan, direct contact was made with over 300 local government officials and staffers. The task force found that local governments “are committed to enhancing the quality of life of their communities and are willing to increase their role in the Chesapeake Bay effort by protecting local streams, enhancing land use management techniques, and improving infrastructure.” The task force chose three themes where local community goals and Bay Program goals could be effectively coordinated.

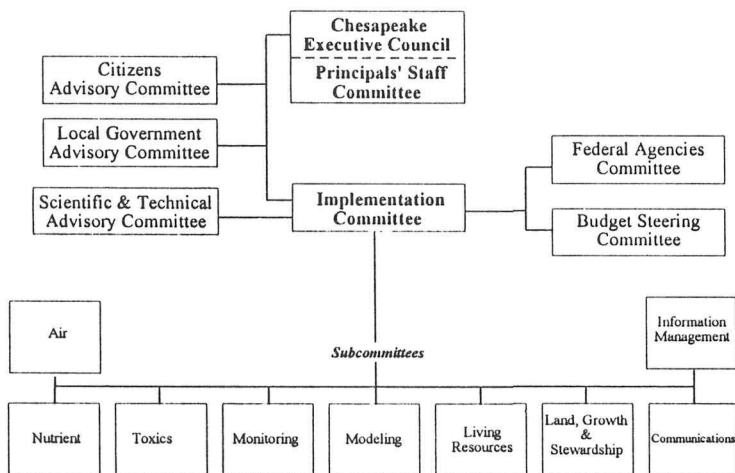


Figure 11. Much of the work of the Chesapeake Bay Program is done through different committees and work groups.

- ***Land management and stewardship.*** Reduce resource consumption and costly sprawl patterns of development by encouraging the revitalization of existing communities and promoting sustainable development patterns. Protect agricultural and forested lands to conserve the countryside and protect water quality and wildlife habitat.
- ***Stream corridor protection and restoration.*** Establish measures to preserve and conserve stream corridors. Coordinate and support efforts to protect, enhance, and restore wetlands and forest buffers important to water quality and fish and wildlife habitat.
- ***Infrastructure improvements.*** Upgrade sewage treatment plant facilities with nutrient removal technologies. Upgrade, maintain, and inspect the stormwater management infrastructure. Encourage the proper use and periodic maintenance of septic systems. Operate recycling, household hazardous-waste collection, small-business pollution prevention, and solid-waste management programs.

As part of the action plan, the "Bay Partner Communities" program was established. Now in its second year, this program recognizes those local governments which have demonstrated a commitment to restore and protect watershed resources. Communities participating

have several categories representing general themes of the program. Benchmarks for each category encourage local governments to consider how their actions contribute to the health of the Bay. Local governments are recognized by the Bay Program based on the number of benchmarks they achieve. Categories include: Development that Works; Preventing Pollution; Conserving and Preserving Living Resources; Valuing Trees and Forests; Conserving the Countryside / Revitalizing Communities; and Community Participation.

A Small Watersheds Grants Program was established as well. This program supports community watershed protection and restoration activities. By encouraging local government involvement in Bay restoration strategies, and promoting the exchange of lessons learned, local governments become a true partner in the effort to save the Bay.

Maryland:

Preserving the Land

Local governments face different pressures depending on their communities' proximity to cities, major waterways, and roads. The Chesapeake Bay watershed is home to seven of the nation's top ten counties that preserve farmland. All seven are in Maryland. Montgomery County, located just northwest Washington, D.C., is a national example of deliberate, careful land management. Generations of residents have treas-

ured the county's farmlands. Although many of the county's towns are within 35 miles of the heart of D.C., for decades county executives and council members, planning boards, and Maryland's governors have worked to preserve the land from development. In fact, Montgomery County has the most acres under legal protection of any urban county in the nation—over 93,000 acres in 1997, nearly one-third of the county.

Much of the preserved land is protected through carefully managed growth patterns. Officials have created a balance, conserving rural areas to be used as a cultural resource and designating higher-density housing where public facilities and public services can support it. When the county began to feel the pressure of population growth, local officials moved to steer development to designated growth areas. Public services, public water and sewer lines, wide paved roads, and recreational facilities were not extended beyond designated limits, thus encouraging growth to remain where such facilities are provided.

The elected officials put in place a number of programs that allowed buying easements or placing restrictions on thousands of acres. Montgomery County also installed a program to sell land or development rights, preserving over 40,000 acres. The county court system also worked to support the concept of stewardship by supporting broad

local authority to set up programs that protect the community as a whole.

Many in the regional development community believe that Montgomery County, and other counties with similar attitudes, cannot continue to prevent development beyond designated borders. As the population increases, there will be a greater demand for roads and facilities to support the people. Local municipalities faced with economic challenges see a higher tax revenue from communities within the designated growth areas. Farmers are already having a difficult time making enough money to live off the land, preferring instead to sell it to the highest bidder. Developers can offer a quick cash layout—an attractive benefit for a community facing economic hardship. They also may entice a community by providing a plan that designates a percentage of the land for recreational purposes, and include large, open space areas attractive to residents. Developers may offer to build the town a community building, or pay for extended infrastructure, incorporating the cost of extending water and sewer lines.

It should be recognized that the goals Montgomery County have tried to meet do more than protect more the county's treasured lands. Careful management of growth areas allows for natural buffers, barriers, and filters to absorb the effects of human presence. This in turn prevents pollution from running into the Bay

through the watershed.

Pennsylvania: Protecting a Way of Life

The commonwealth of Pennsylvania has a different local government structure, made up of counties, boroughs, cities, and townships. While the counties may have a larger funding base and can provide local communities with development plans and models, transportation routes, and suggested stormwater systems, they do not have direct authority over implementation. The individual cities, townships, and boroughs have control over land use and zoning.

For decades, Lancaster County—located in the southeast corner of Pennsylvania between two of its major cities, Harrisburg and Philadelphia—has been characterized by strong Amish communities, broad agricultural lands, and charming villages, boroughs, and towns. The Lancaster County Board of Commissioners and the County Planning Commission became concerned by the tremendous growth in population as people moved from the nearby urban centers. Increased development was converting the county's extensive agricultural land. Quaint towns and villages were becoming overcrowded, industrialized, unsafe, and unattractive. In response, they developed a program to encourage local governments within the county to consider options for "Livable Communities." Bringing together elected officials, business

leaders, community members, and county staff, they created a comprehensive plan which provided the county and its communities with a vision for the future.

Through organized events such as the Livable Communities Forum and Workshop, the community as a whole could learn about innovative solutions to local development and growth. By looking closely at the elements of livable communities—multi-purpose interconnected streets, town centers, mixed-use developments, agricultural buffers, and lot size—alternatives for a more sustainable community were created.

Local government officials now have development options to take into consideration as they face future growth projects. Changes to land-development regulations and zoning laws can make a tremendous difference in the character of the community. For example, a community zoned for mixed-use buildings, with walkways and alleyways and on-street parking, puts the needs of residents ahead of those of cars. Agricultural buffers, wildlife cover, and forests provide for more natural and effective stormwater management and groundwater recharge.

Fragmented government is cited as a major obstacle to protection and sustainable use of natural resources. In Pennsylvania, the authority for action and implementation lies at the municipality level, not at the county level as in Virginia and Maryland. So in Pennsylvania municipalities within

counties must work together. An example of how this can be done comes from Centre County. In 1997 a commission of 14 municipalities in the county was created to establish a long-range vision for the Spring Creek watershed, a natural resource shared by all them all. The goal is to advance projects that protect the natural resources and enhance the quality of life within the watershed. The municipalities are represented on the commission by one elected official from the member townships and boroughs. What is unique about this commission is that it is a coordinated, watershed-wide, multi-jurisdictional effort. As one of its priorities, the Spring Creek Commission has initiated a stormwater management plan to minimize the impact of additional stormwater resulting from development in the 14 municipalities. Funding for this plan was made available through the Pennsylvania Department of Environmental Resources. The commission is now looking at designing a plan to deal with water quality issues.

Virginia:

Restoring the Watershed

Another example of how local governments can take action to preserve their environment comes from Prince William County in northern Virginia. Like the two examples above, Prince William County is located close to a major city, lying just south of Washington, D.C., and has also experienced tremendous popu-

lation growth. In 1950, it had a population of 50,000; now its residents exceed 270,000. The area is particularly attractive to large businesses and industries, people looking for inexpensive houses, and developers of discount shopping centers seeking easy access to the urban area, space to build, and established transportation routes.

Residential and commercial development were seriously affecting the county's wetlands and stream habitats. Reacting to the decline of healthy watersheds and degradation of environmentally sensitive lands, Prince William County officials developed an environmentally sensitive watershed-wide stormwater management plan. Bringing together the experience of federal, state, and local partners, the officials worked to reduce and prevent pollution and improve water quality standards, specifically in three adjacent watersheds that drain into the Potomac River and eventually into Chesapeake Bay.

By restoring riparian buffers and stream channels, the county is able to begin rehabilitating vital habitat and water quality. To do this, the county has had to address four major tasks: drainage, water quality, erosion, and flooding. By considering the effects of development on sensitive lands, the county can install measures to prevent future development from negatively affecting watersheds.

Like all environmental initiatives, there is no such thing as a one-time fix. Stormwater management must be

carried out on a continual basis. To ensure funding for the plan, county residents are taxed based on the amount of impervious surface area their property has. By using an alternative funding approach, Prince William County has created a successful, sustainable activity.

Initiating Local Government

Action: The Center for Chesapeake Communities

The communities highlighted above are of course just a small fraction of the number of local governments in the Bay region that are facing growth and development pressures. The Local Government Participation Action Plan, in making its recommendation to the Bay Program, stated that local governments required focused financial and technical pro-

grams to enhance their capacity to restore the Bay. To do this, the Local Government Advisory Committee, one of three advisory committees of the Bay Program, was directed to investigate the establishment of a non-profit organization which would provide local governments with a clearinghouse of technical information to support watershed initiatives. The non-profit would also try to expand the pool of money currently available to local governments by seeking private and public funding, in addition to Bay Program money. After assessing local government needs, the Center for Chesapeake Communities (CCC) was established in August of 1997.

The CCC works on two tracks. First, it provides local governments with funding, specifically making

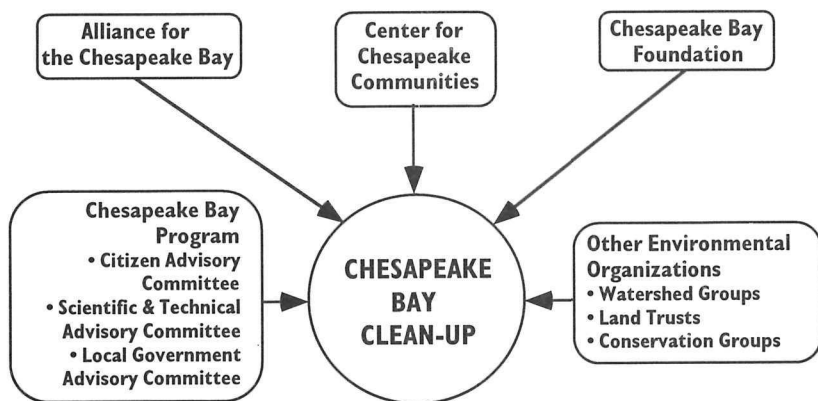


Figure 12. Citizen involvement is a key ingredient in the Chesapeake Bay Program.

available small watershed grants for projects to protect and restore the environment. Initial funding was made available by monies appropriated by the U.S. Congress. It is expected that funding for another round of grants will be made available in 1999. The CCC is working to match these federal dollars with alternative funding.

The second track is to provide technical assistance that encourages and enables local governments to implement sustainable development. Sustainable communities incorporate local economic realities and needs with the desire to offer residents a high quality of life while remaining sensitive to the environment. Incorporating all three requires local governments to consider their communities' use of land and development; preserve important historic, cultural, and natural resources; adopt pollution prevention measures; achieve a balance between growth and resource use which will permit high standards of living; enhance the quality of renewable resources; and strive for maximum recycling of depletable resources.

To encourage communities to move toward sustainability, the CCC will provide:

- A clearinghouse of successful models, tools, and funding strategies pertaining to storm-water management, site planning, pollution prevention, etc.;
- Financial assistance for innovative projects that protect local

natural resources and enhance the quality of life in the Bay watershed;

- Topic-specific training sessions where local government officials learn the latest environmentally sensitive land-use and protection techniques and how to implement them;
- A network of local government peers and organizations who can share expertise on successful resource protection; and
- A broader link to technical expertise through the creation of partnerships with natural resource, finance, and planning experts.

The concept of sustainable communities has an international following. Major think tanks such as the World Resources Institute and the Sustainable Development Research Institute, and such international non-profits as the International Council for Local Environmental Initiatives and Global Environmental Options, are developing strategies to initiate sustainable living. President Clinton established the President's Council on Sustainable Development to seek new approaches to achieve the nation's economic, environment and equity goals. The U.S. Department of Energy has also created an education program to provide information to communities on the significant benefits of working toward a sustainable community. The U.S. Environmental Protection Agency encour-

ages sustainable development by directing funding to related projects and by establishing special programs to promote the development of green communities. Joining this revolution, the CCC, with the support of the Bay Program, aims to build a network of government and non-government entities to promote sustainable development in the watershed by specifically urging local governments to implement sustainable practices.

The restoration and sustained protection of the Chesapeake Bay will require the synergistic efforts of all 1,653 local governments in the watershed. The Bay Program has created a growing awareness and the formal structure of support to provide local governments the tools they need to protect their local environment and, ultimately, the Bay. Con-

tinued outreach, communication, and coordination of efforts will make a significant difference in the health of our nation's largest estuary.

Local governments are critical partners in the effort to protect local natural resources and the Chesapeake Bay. These locally elected and accountable bodies of government manage the authorities that affect water quality and habitat. Additionally, local governments are in the unique position to nurture community and private business efforts to protect stream systems and prevent pollution. Clearly, the role local governments play is pivotal to protecting the environment, improving local economies, and preserving the quality of life in communities around the Bay.

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