

FINAL REPORT

Challenges of a Growing Maryland Balancing Land Use and Environmental Decisions

A Series of Workshops Sponsored by:
Maryland Department of the Environment
Maryland Department of Planning



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CENTER FOR ENVIRONMENTAL SCIENCE

BACKGROUND

Since its inception in 1984, Maryland has been a key participant in the Chesapeake Bay Program and has made numerous commitments that when fully met should lead to a restored Chesapeake Bay. While these commitments have ranged from protecting fish stocks to riparian forests, its main focus has been on restoring the Bay's water quality. The greatest challenge facing the Bay is the amount of nutrients (particularly nitrogen and phosphorous) that are entering the Bay from various watershed-based sources including waste water treatment plants, agricultural lands, vehicles, power plants, and urban lands. Once nutrients enter the Bay they cause excess algae blooms that reduce submerged aquatic vegetation beds and oxygen levels. Low oxygen levels have led to "dead zones" in large portions of the Bay's deep waters that animals must avoid or die. How and where people live and work in Maryland affect the total load of nutrients that enter the Bay and its tributaries as well as the ability to reduce those loads in an efficient and economically feasible manner. Therefore, sound land use decisions are paramount to the restoration of Chesapeake Bay.

Land use decisions in Maryland are overwhelmingly made by municipal and county governments, whereas many environmental regulations, such as water withdrawal and waste water delivered to the receiving waters, are made and enforced by the federal government and the State through the Maryland Department of the Environment. These regulations have direct and indirect incentives and impacts that affect land use decisions. This sometimes poses a conflict between local government growth plans and the influences and limitations that are placed upon those plans. In fact, there are a few examples in which MDE has asserted its authority in ways that resulted in moratoria that frustrate growth plans due to limited water supplies or because wastewater treatment plans were over their capacity and unable to meet permit limits.

Maryland's population is expected to continue to rise steadily over the next several decades. The Base Realignment and Closure (BRAC) recommendations recently adopted by Congress coupled with ongoing growth throughout the State will accelerate Maryland's continuing population increase and add to defense-related employment by approximately 40,000-60,000 new personnel over the next 2-6 years. This additional growth will primarily be in Central and Northeastern Maryland. Before BRAC, projections had Maryland's population increasing by more than 1 million new residents over the next 2-3 decades. To accommodate this population growth in a manner consistent with Smart Growth principles, Maryland municipalities and counties must plan carefully to ensure that their residents have the necessary public facilities and the environment suffers no undo harm.

Throughout the summer of 2005, Maryland Departments of the Environment and Planning made joint presentations to several groups including the Maryland Municipal League, Maryland Association of Counties, and Maryland Economic Development Association on the challenges of an expanding population and concomitant land use pose to the environment and to the quality of life. These presentations were considered an important step in opening the dialogue between the agencies and with the local communities. Along a separate track, the Tributary Strategy Steering Committee

recommended that the State agencies (particularly MDE and MDP) work closely together to ensure that growth plans are in keeping with the Tributary Strategy goals so that nutrient caps could be implemented once reductions are achieved.

After the success of the summer meetings, MDE and MDP decided to jointly hold four facilitated workshops, entitled *Challenges of a Growing Maryland: Balancing Land Use and Environmental Decisions*, to identify significant challenges and maximize solution-based communication that address how communities can effectively balance growth and environmental pressures.



ABOUT THE WORKSHOPS

During the late summer and early fall of 2005, MDE and MDP began planning a series of regional workshops that would solicit a dialogue among the participants focused on how Maryland can anticipate growth in a manner that minimizes the environmental impact. Each workshop (typified by the agenda in Appendix #1) consisted of the same four elements: welcoming remarks and presentations from the Secretaries of MDE and MDP; welcoming remarks from a local elected official and a Director of Planning and Zoning; break-out sessions in which two different growth scenarios under different environmental conditions (Appendix # 2) were presented and discussed; and a facilitated discussion and summary with all the participants.

While these workshops were open to the public, MDE/MDP specifically invited participants from local governments (specifically elected officials, planning staff, local economic development officers, and health officials), State agencies, Tributary Strategy Teams, developers, and environmental non-profit organizations. MDE/MDP initially anticipated 50 participants at each workshop, but the number of registrants ranged widely from 35 to 79. Based on the affiliation of the registrants, it is obvious that local government representatives were keenly interested in these workshops. It is estimated that more than half of all participants at each workshop attended the entire day including the group discussion and summary sessions.

Workshop Registrants

Date	Location	Local Government	Other	Total Registrants
3 October	Howard Community College	24	11	35
18 October	Chesapeake College	55	24	79
1 November	College of Southern Maryland	24	11	35
15 November	Frederick Community College	47	24	71

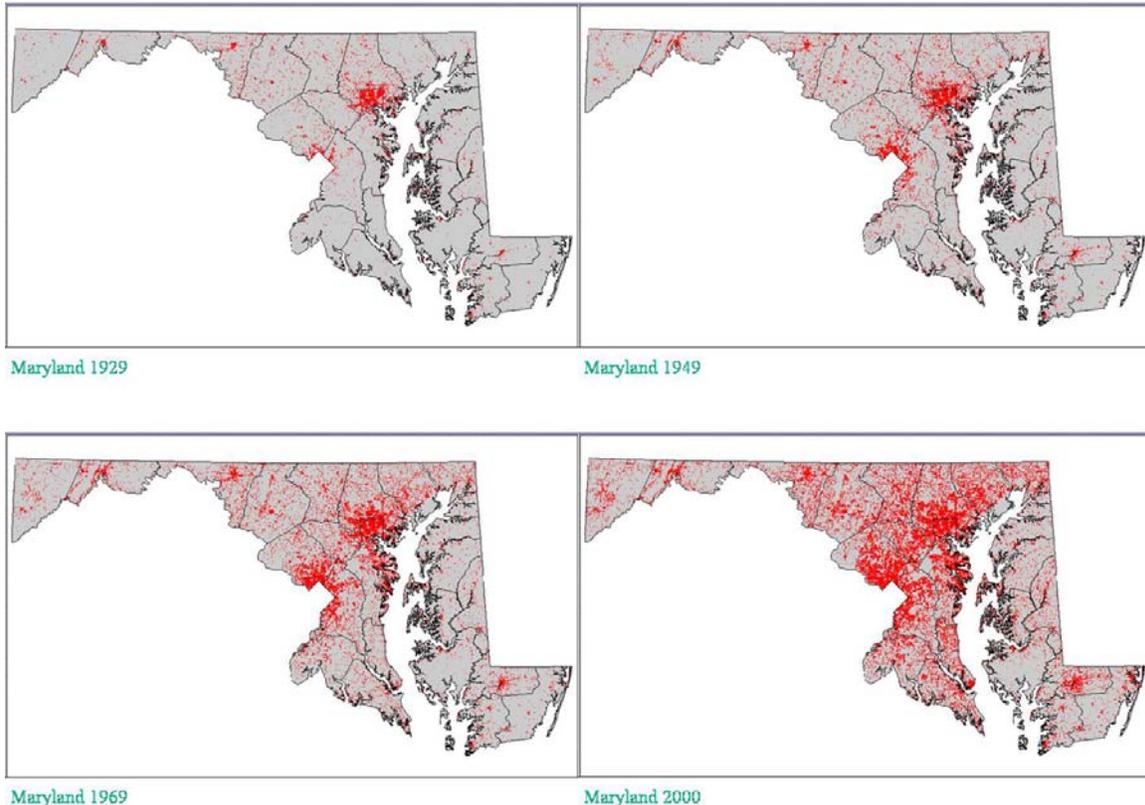
More than 60% of all registrants were from a municipality or county government. Appendix #3 lists all the registrants and their affiliations.

At each Workshop, the Secretaries of MDE and MDP gave opening presentations outlining the challenges that the State and local jurisdictions face while balancing community growth with environmental restoration and/or regulations, particularly in the area of water quality and water use. Secretary Philbrick of MDE discussed the challenges to the environment of rapid growth in areas where there are inadequate waste water treatment plants or inadequate water supplies for drinking and business uses, which become exacerbated under drought conditions. In addition, Maryland is a signatory of the Chesapeake Bay Program's *Chesapeake 2000 Agreement*, which has committed the State to reducing the amount of nutrients discharged to the Bay by 19.5 million pounds per year. To meet this goal, Maryland will implement its Tributary Strategies and Total Maximum Daily Loads (TMDLs) for impaired waters, which will require a great need for planning at the watershed level to enable growth to occur in the appropriate places. A greater use of inter-jurisdictional agreements to share facilities and resources may be necessary to meet the new standards.



Secretary Scott continued to reinforce the need for early planning to enable appropriate economic growth. She showed how and where parcels throughout the State were being developed from the 1920s to 2000 (a few examples are below). Local decisions determine where the growth will go, therefore it is incumbent on local officials to manage

the growth and decide what their community will look like 5, 10, 20 years from now. MDP's mission is to provide tools to manage growth such as the transfer of development rights (TDR) programs, development capacity models, guidelines for Adequate Public Facility Ordinances (APFO), as well as annexation policies. All these tools can be applied to assist local governments in making informed decisions about future growth areas. Local Comprehensive Plans and Water and Sewerage Plans need to recognize these issues and be consistent with each other and reflect the requirements and improvements that support economic growth, water use, and water quality.



As Maryland's population has grown over the years so have the number of building parcels (MDP Data)

In their closing statements, both Secretaries reiterated the point that to protect water quality and allow for growth all parties will have to apply good science and new technologies as an element toward integrating sound planning, design, and construction to adequately protect the environment. This needs to be accomplished through the efficient use of resources, recognizing potential staffing constraints, and in the development of new and better partnerships with local, state, federal governments, as well as with private entities and non-profit organizations.

SUMMARY OF WORKSHOP DISCUSSIONS

The final hour and a half of every Workshop was reserved for a group discussion in which several key topics were discussed. Participants were asked to define the issues and identify potential solutions and recommendations that could be enacted or that have been successfully implemented in their local jurisdictions.

General Perceptions

Below are several “general perceptions” that permeated the Workshops. Some of these led to specific recommendations while others are simply noted here for the record.

- 1) Due to a general lack of connection between land use planning and the protection and restoration of water quality in the past, participants embraced the concept of strengthening the relationship between MDE and MDP as an important step in understanding the dynamics between growth planning and environmental regulation and stewardship
- 2) Annexation is currently highly active in many Maryland municipalities under existing legal frameworks. While a county can assert the “Five Year Rule” it has only rarely been applied. Nevertheless, annexations are often a source of extended county - municipal conflict due to service delivery and fiscal disagreements. (*NOTE: “Five Year Rule” refers to the right of a county to delay municipal rezoning for five years if that zoning is substantially different from the County’s prior zoning.*)
- 3) Comprehensive Plans are currently intended to serve as generalized guides for development and are not as strong a growth management tool as they could be.
- 4) “Long-term” planning often lasts as long as the current local political administration.
- 5) Open space throughout the State has been greatly diminished and the rural character of many regions has been significantly altered.
- 6) The State should assist local governments in taking a regional approach to development activities, especially when resources for public facilities are considered.
- 7) School capacity is lagging well behind growth of existing municipalities and non-municipal communities. A mismatch exists as county government controls schools yet growth is often occurring within municipalities. There is a growing need for coordination between county governments, school boards, and the Comprehensive Planning process. (*Facilitators Note: This topic is outside of the purview of these workshops, but it is obviously a significant concern as it was repeatedly voiced throughout each of the sessions.*)

Key Issues and Participant Recommendations

The key issues that came up at every Workshop fell into the following four general categories: 1) inter-jurisdictional relationships, particularly as these relate to shared facilities and their funding, 2) the importance of Comprehensive and Water and Sewerage Plans, 3) public participation in growth management issues, and 4) technical and agency assistance. These are summarized below with a brief description of the Workshop

discussion followed by recommendations from the participants. (*NOTE: Participants raised many other issues indirectly related to MDP and MDE such as school capacity, roads, and public safety. While there are some references to these issues, they are not the intended focus of this effort.*)

Inter-jurisdictional Relationships

Workshop Discussion: It was recognized by the workshop participants that inter-jurisdictional agreements can facilitate achievement of community goals. There are often significant savings through “economies of scale” in building and maintaining large facilities. At the staff level, communication between jurisdictions is generally smooth, regardless of political tensions. However, inter-jurisdictional agreements can take years to negotiate, often over various election cycles. In addition, TMDLs, still a relatively new concept, are expected to have significant implications for local governments and their stakeholders, requiring additional outreach efforts on the part of the State.

Recommendations from Workshop Participants

- 1) The State should encourage, in ways consistent with local Comprehensive Plans, regional incentives for:
 - a. Long-term waste water treatment planning;
 - b. Storm-water management;
 - c. Long-term water supply planning.
- 2) Staff should facilitate inter-jurisdictional agreements on several key topics regarding shared facilities such as:
 - a. State staff could serve as neutral facilitators and/or serve as a conduit for additional information needs which are critical in supporting the inter-jurisdictional agreements.
 - b. The agencies can provide modest funding to support neutral third party facilitators that can assist the jurisdictions.
- 3) Several local governments have successfully built trust between jurisdictions by:
 - a. Holding joint public sessions of their legislative/executive bodies around key issues.
 - b. Attending meetings of other key jurisdictions whenever it's possible/practical, even when not on the agenda.
- 4) Only a limited number of attendees recognized that TMDLs may act to limit growth if wastewater treatment plants are not upgraded or built and/or sufficient tradeoffs with non-point source loads are not accomplished. In certain areas of the State, inter-jurisdictional agreements will be one of the only ways to allow future growth, therefore local representatives need to be able to effectively negotiate agreement terms for their jurisdictions.
 - a. MDE should finalize “Maryland’s TMDL Implementation Guidance for Local Governments.”
 - b. MDE should continue TMDL outreach efforts since many local governments need to better understand how TMDLs will restore and

protect local waterways and how they may impact future State permit decisions that are needed to accommodate desired growth.

Comprehensive and Water and Sewerage Plans

Workshop Discussion: In many jurisdictions (particularly smaller ones) county and municipal Comprehensive Plans are out of sync with County Water and Sewerage Plans that, in turn, are also out of sync with local election cycles. This is because the process often takes a long time to complete and the Plans are often outdated soon thereafter. These Plans need to be integrated better with each other and completed faster. In addition, current Comprehensive and Water and Sewerage Plans do not necessarily reflect Maryland's anticipated rate of growth. The federal Base Realignment and Closure (BRAC) decisions are driving an additional wave of growth as parts of Maryland are likely to receive tens of thousands of new defense-related "high tech" jobs over the next 2-4 years. Altogether, more than 1.1 million new residents are projected by 2030 due to growth in both defense and non-defense sectors of Maryland's economy.

Recommendations from Workshop Participants

- 1) MDP should review the standards by which local governments develop Comprehensive and Water and Sewerage Plans, including:
 - a. Developing guidance documents;
 - b. Ensure equal compliance among the jurisdictions;
 - c. Encourage capital and operational financial planning;
 - d. Provide training to newly elected officials regarding the importance of planning;
 - e. Carry out early, well-timed outreach regarding the role TMDLs play in the planning process.

- 2) Comprehensive Plans need to give adequate guidance for wastewater treatment to effectively guide Water and Sewerage Plans.
 - a. Formally integrate TMDLs as well as Tributary Strategy Plans into the next cycle of local Comprehensive and Water and Sewerage Plans.
 - b. Ensure that municipal plans are accurately reflected in County Comprehensive and Water and Sewerage Plans, encouraging municipal participation in the process.

- 3) Comprehensive Plans are currently structured to be planning tools and are not necessarily adhered to when specific individual development proposals arise. There can be challenges at the local level regarding the timing of events not under local control (e.g., BRAC, construction of a new state roadway). Also, scale is an important factor – County comprehensive plans are broad-brush "visions" of County land use intended to lend support to local zoning. Smaller scale plans (sometimes called "small area" or "sector" plans) may be needed to make the link between a publicly-adopted plan and the outcome of development proposal review.
 - a. MDP should consider ways to strengthen the local Comprehensive Planning process.

- b. Local government leaders should recognize the importance of using the comprehensive planning process to educate their citizenry about specific environmental constraints. These constraints need to be considered when determining the feasibility of attaining desired local goals regarding growth and environmental protection.
- 4) There is great interest in the new MDP growth and parcel projections among Maryland's local governments. MDP should provide a mechanism to get this information to local officials quickly, providing outreach assistance as requested.
- 5) A few participants suggested that it is time for MDP to look at models that other states have used to assert greater authority over growth management. An updated survey of other states' growth management programs may provide compelling insights.
- 6) Increased funding is required to encourage open space programs – be they TDRs, PDRs, POS, or Rural Legacy programs with support from the State, local governments, or private sector.
- 7) Many jurisdictions may need to develop strategies for point source-to-non-point source trading and pollutant load “offsets” in support of TMDL requirements. This is best addressed at the comprehensive planning stage rather than later in the process. Not doing so can have negative consequences for development proposals that otherwise meet local approval, but then become doomed to failure as the result of State permitting requirements. MDE can assist local jurisdictions by providing aggressive outreach regarding the interplay between TMDLs and permitting.

Public Participation on Growth Issues

Workshop Discussion: Community advisory committees, such as those that develop the Comprehensive Plan, are not necessarily consensus building. Some interest groups may purposefully stay out of the process and impart a minority opinion only at the final stages where they may feel that they have a disproportionate influence upon the political decision making process. It is difficult to get the public involved early in the planning process and to keep them involved throughout its entirety.

Recommendations from the Workshop Participants

- 1) It is recognized that public input and meetings are an important aspect of the community planning process, but more can be done to receive this input.
 - a. A few jurisdictions use local access cable to get public input in planning and zoning board activities. This has increased public participation.
 - b. Ensure that adequate time has been given to the public to give their input on changes to planning and/or zoning documents.
- 2) Some jurisdictions should consider holding charettes on growth issues between a wide range of community leaders, as recently occurred in Howard County regarding Columbia's future. This may be particularly important for communities

that have significantly different views regarding growth among its local constituents and that are characterized by tension between local citizenry and real property stakeholders whose own concerns may or may not be locally based.

- 3) Citizen polling can be a useful tool that can help the dialogue and lead to an understanding of the community's views and concerns. A well-articulated community vision is often critical to communicating to prospective developers and holders of real property what it would take to win local approval. If the vision accurately captures critical state concerns, the future development review process can be expected to go much smoother than if these concerns are left unaddressed.

Technical and Agency Assistance

Workshop Discussion: Participants recognize that determining where and how a community should grow to minimize the environmental impacts is a complicated task that requires citizen input, technical expertise, and adherence to State laws, regulations and guidelines. Many environmental factors requiring technical expertise, such as drinking water and waste water capacity, effects on storm water systems, wetlands delineation, etc, need to be considered prior to approval of any new development. As a community grows it not only changes its own character but also impacts surrounding jurisdictions in ways that are not always clear or quantifiable at the outset.

Recommendations from the Workshop Participants

- 1) Maintain and strengthen regional MDP field offices particularly where staff can assist smaller jurisdictions and facilitate input from other agencies and jurisdictions. To accomplish needed outreach in an efficient and timely manner, field offices should make more use of innovative technology, such as interactive video networking, webcasts, and teleconferencing.
- 2) There is a general lack of understanding of the "State allocation" of water availability versus the "real allocation" that some communities must adhere to. As source water has become one of the limiting factors affecting some communities' ability to grow, the State should develop guidelines regarding water re-use, recycling, and conservation programs. To that end the State appointed an "Advisory Committee on the Management and Protection of the State's Water Resources" which has recommended that:
 - a. MDE should continue to develop the Coastal Plain Water Supply Initiative, , that should make these allocations clearer.
 - b. MDE should complete an assessment of the State's water resources by completing demand/supply studies for each significant watershed or aquifer.
 - c. Upstream communities can have an impact on source water systems downstream which must be considered by the relevant planning agencies when considering future growth plans.
- 3) Some jurisdictions have recently enacted Adequate Public Facilities Ordinances (APFO), while many other jurisdictions are considering them, but are requesting

further guidance from the State. MDP is developing an “APFO Model and Guidelines Document” and this should be pursued and distributed as soon as practical.

- 4) It was reported that local jurisdictions may interpret State septic regulations as they are related to local health ordinances differently amongst jurisdictions. MDE should maintain its monthly meetings with the County Health Directors and review these regulations to ensure the public safety and equity among jurisdictions.
- 5) MDE should designate a point person or office (“MDE Growth Liaison”) to work directly with MDP and jurisdictions on growth issues and assist them with the many MDE divisions.
- 6) MDE should seek increases in State funding to increase the number of staff that enforce sediment and erosion control programs.
- 7) MDE should continue to provide training to the private sector for the design and implementation of new storm-water regulations.
- 8) Jurisdictions want better access to agency experts who can provide technical assistance so that each jurisdiction need not hire their own consultants. There is wide recognition of the talent pool that the State has. (*Facilitators Note: this may cause an inherent conflict because the regulating agency may ultimately be reviewing plans its own staff had developed.*) For fiscal reasons it is often difficult for local jurisdictions to hire appropriate consulting services in the following areas:
 - a. Environmental impact statement for waste water treatment plants;
 - b. Storm water management;
 - c. Planning for protection and viability of living resources
 - d. Water source availability models;
 - e. Assistance with GIS for smaller jurisdictions that may have significant staff limitations.

CONCLUSIONS

The Maryland Departments of Planning and Environment participated in a series of successful workshops that were well attended by local government officials, state agency staff, Tributary Strategy Team members, the development and environmental communities as well as private citizens. All participants embraced the development of a strong coordinated relationship between MDE and MDP, recognizing that by working together these two agencies can provide the necessary advice and oversight to local communities as they grapple with environmental concerns associated with expanding populations and land use change.

Now that MDP and MDE have jointly received the attention of the local governments it is important to build upon the dialogue. An obvious next step is to discuss the Workshop recommendations with Maryland Municipal League, Maryland Association of Counties, Maryland Economic Development Association, and the Tributary Strategy Steering Committee. In addition, MDE and MDP staff should make joint appearances and presentations at relevant local meetings particularly when explaining how environmental concerns need to be incorporated into various plans, such as Comprehensive and Water and Sewerage Plans.

The establishment of Total Maximum Daily Loads is a new regulatory requirement that the State must use if a body of water has been determined to have an impairment. The need to be within proscribed TMDLs, particularly those associated to nitrogen and phosphorous loads, will be implemented largely through point source controls such as waste water treatment plants. Therefore, it is particularly important that MDE and MDP embark on this newfound relationship to work with local communities in explaining how TMDLs can be incorporated in a way that allows for future community growth. MDE has developed a draft report entitled “Maryland’s TMDL Implementation Guidance for Local Governments” which could lead to another series of workshops based on educating local governments of their TMDLs while continuing the dialogue on the best ways to implement them.

Many of the recommendations provided in this report require additional discussion between MDE and MDP with smaller groups of local government officials and/or stakeholders to determine if they can be implemented. It would be wise for these discussions to take place as soon as practicable while the momentum still exists. Other recommendations require significant increases in State staff, funds, or both, which may require Governor and/or legislative approval. Still other recommendations can be implemented as soon as practicable for they are already set to move forward or require only modest adjustments.

Appendix #1
Typical Workshop Agenda

**Challenges of a Growing Maryland: Balancing Land Use and Environmental
Decisions**

Frederick Community College
November 15, 2005

8:30 – 9:00	Registration
9:00 – 9:30	Welcome Remarks MDE Secretary Kendl Philbrick MDP Secretary Audrey Scott
9:30 - 9:40	Local Welcoming Remarks John L. Thompson, Jr., President Frederick County Commissioners Michael Thompson, Director Washington County, Planning and Community Development
9:45 – 10:10	Introduction of Workshop Program David A. Nemazie, University of Maryland Center for Environmental Science Explanation of Breakout Sessions
10:10 – 10:20	Bayville Scenario Jim Noonan, MDP
10:20 – 10:40	Break
10:40 - 11:40	Breakout Session
11:40 - 12:30	LUNCH/BREAK
12:30 - 12:40	Piedmont Scenario Bob Summers, MDE
12:40 - 1:40	Breakout Session
1:40 – 2:00	Break
2:00 - 2:45	Breakout Session Reports
2:45 – 4:00	Discussion

Appendix #2 Scenarios

Town of Piedmont Development Scenario

Scenario:

The Town of Piedmont is a 200-year old town with a population of 2,500 people in the Maryland Piedmont. Piedmont encompasses 1000 acres in a watershed of 5,000 acres. At one time, the town had industries including a fireworks factory, a dairy, and a quarry. All are now out of business, but there is a small but thriving Main Street with a hardware store, café, book store, health food store, furniture store, electronics/movie rental store, and several doctors and attorneys offices.

Water Supply: The town, with 1,200 water connections, primarily residential, is completely dependent on groundwater from eight wells located within the town for its drinking water supply, and has a water appropriation and use permit for 320,000 gallons per day (gpd) of average daily use. The average daily usage is currently 270,000 gpd. The droughts of 2001 and 2002 required water rationing. However, the bountiful rainfall in the last three years has led the town to believe its water supply is adequate. However, recent tests have shown that four of the eight wells have levels of perchlorate ranging from 1 to 30 parts per billion. There is no EPA maximum contaminant level for perchlorate. Hilltown, about four miles away, has a large surface reservoir that supplies the town's needs and once supplied a nearby military base, now shut down.

Wastewater Treatment: The 300,000 gpd capacity wastewater treatment plant (WWTP) treats to a total nitrogen concentration of 18 milligrams per liter, in compliance with the current permit. It is not performing at BNR. The current flow is 280,000 gpd. It is well operated and in compliance with permit limits. The WWTP discharges to Robert Run, a perennial stream impaired for nutrients. A TMDL has been prepared for the stream. Piedmont is the only WWTP and point source in the subwatershed. The WWTP has a wasteload allocation of 16,400 lbs Total Nitrogen per year. The non-point source allocation is 10,000 lbs per year, for a Total Nitrogen TMDL of 26,400 lbs per year for the watershed. Hilltown spray-irrigates its treated wastewater effluent.

Watershed Characteristics: The rest of the watershed is half forested (2000 acres) and half (2000 acres) in dairy farms. Of the ten dairy farms in the watershed, only five have installed the recommended best management practices to protect the water quality in Robert's Run.

Development Proposal: Recently, the town was approached by a landowner/homebuilder wanting 300 acres to be annexed into the town to build a total of 900 new single-family homes, to accommodate families moving from more congested urban areas to the east to the more rural western part of the State. The developer is promising to pay for the expansion to the wastewater treatment plant to serve the new homes. The developer has also offered to build a new elementary school, estimated at \$1.5 million and library, estimated at \$1 million, for the town. The build-out would

occur over a period of five years. The developer is asking for residential zoning with a density of 3.0 units per acre on the property.

The property targeted for the development includes the headwaters of an unnamed tributary to Robert Run. The 300 acres is 50% forested, 30% farmed acreage and the remainder is abandoned agricultural acreage that the farmer had stopped trying to farm about 15 years ago because it is too wet. The developer has expressed a willingness to implement environmentally sensitive site designs.

At full build-out, the development will **add** the following demands to the water and wastewater systems:

337,500 gpd water, to meet peak demand (900 edu X 250 gpd/edu X 1.5 peaking factor)

225,000 gpd wastewater capacity (900 X 250 gpd)

At 18 mg/l this wastewater will increase the TN loadings by 12,329 lbs/year.

Stakeholders: The council decided to hold a town meeting to present the idea of the development to the community. It is a new council and none of the council members has any experience with the development process. Expected to be in attendance are parents, teachers, the small but well-established and educated business community, other town citizens, a representative of the County Commissioners, one local and two Statewide environmentalists, and a group of about 12 county residents adjacent to the property proposed for development. Those expected are equally divided on the development proposal.

ISSUES/QUESTIONS:

Approach: What is the most logical approach to evaluating, assessing and making decisions regarding this development proposal?

1. Assess the political receptivity of the citizens based on what they know about the development proposal
2. Undertake a comprehensive study of water and wastewater impacts, at the town's expense, to see if the town can accommodate the development
3. Ask the developer to provide a report prepared by their consultants to address the concerns of the town and its citizens
4. Have the developer work to win over the citizens first, then come to the town for permission to proceed

Planning Considerations: What are the main planning issues relating to the size and density of the proposed community? What legal steps must be followed to bring the proposed development into the town? Is the density acceptable as proposed? Are there issues other than water and wastewater that need to be considered?

Water Supply Discussion: Can the existing water system handle the ultimate build-out of the new homes? What new facilities may be needed to handle the additional capacity? What steps are involved in seeking an expansion of water supplies? What special concerns does Piedmont face re. its water supply? How can the quality and quantity of groundwater be protected? What studies and other information are needed to evaluate an expansion of the water supply, storage and treatment system if needed? What alternate sources of water might be explored?

Wastewater Discussion: Will the stream system be able to handle the additional loading resulting from the proposed development? Who determines this? What are alternate ways to treat, dispose of or offset the additional loading?

What planning, design and construction techniques can be used to minimize the non-point source impacts of the proposed development and enable the watershed to meet the TMDL limitations?

Are there any regional options to address this new development proposal?

Reference Guide

1. Map of watershed, and location of town and other features.
2. 250 gallons per day per household for water usage and for wastewater treatment calculations.
3. Groundwater recharge rate = 300 gallons per day per acre (includes allowance to maintain nearby stream base flow and impervious surface in the town)
4. Total Nitrogen in the WWTP effluent = $18 \text{ mg/l} \times 0.30 \text{ mgd} \times 365 \times 8.34 \text{ lbs/gal} = 16,438$ say 16,400 lbs./year TN loading. This is their current loading to the receiving water.
5. The loading cap for the WWTP plant if it expands will be 6100 lbs/yr. This is the equivalent of a 0.5 mgd WWTP operating at 4 mg/l Total Nitrogen.

BAYVILLE GROWTH AND ENVIRONMENTAL PROTECTION SCENARIO

Scenario

Bayville is a town of about 3000 people (1490 dwelling units) on Maryland's Coastal Plain. It has an historic downtown core that is experiencing a moderate renaissance surrounded by single family development at densities approaching 4 units per acre. For many years development growth has been occurring in greenfields surrounding the municipality, but not within the municipality. In response to Smart Growth initiatives the Town has been encouraging mixed use and higher density residential development. These efforts, combined with a growing slow growth attitude county-wide, have started to show results in the Town.

The Town's current Comprehensive plan calls for moderate redevelopment with a focus on re-connecting the downtown with the perceived amenities of the waterfront. The Town has done little to coordinate with the surrounding county regarding potential annexation areas, except along the waterfront along Heron Creek. Bayville's sewer system has adequate capacity for moderate redevelopment within the Town, but would need substantial upgrades to accommodate new development of any significant size. In addition the Town is concerned about the costs and timing of meeting new State nutrient reduction goals and remedying environmental impairments in Heron Creek.

In the past year, several development proposals have been presented to the Town's Mayor and Commissioners.

Developer 1: Proposed a re-use of an old cannery site, but has been delayed due to financial difficulties. The development would involve commercial space on the first floor and up to 40 dwelling units on the second and third floors. There was some local opposition focused on parking and traffic issues, but more importantly there were also concerns by the developer regarding on-site storm-water management requirements since existing structures for the vacant site would be totally inadequate under new regulations. The Chamber of Commerce and local environmentalists favor. The PTA is wary of impacts on school and developers assertion that it is targeted to an older population.

Developer 2: Proposed a mixed use development immediately outside of the Town limits. This development would have up to 1,000 dwelling units at eventual build-out. This is in the area shown by the Plan for eventual annexation. The proposal requires a variety of actions, including Critical Areas growth allocation, annexation by Bayville, and would have impacts on a small, but environmentally sensitive stream separating the development from the rest of the Town. The Chamber of Commerce favors the development. The local PTA, the County Commissioners and community groups oppose based on concerns about schools and traffic impacts. Some environmental opposition exists.

Developer 3: Proposed a substantial annexation area south of Town. This developer is proposing a typical suburban development of up to 500 units, but does require water and sewer service to build at the densities he envisions (2.5 units per acre).

This development has never been envisioned as an area to be annexed by either the Town or the County. The Chamber of Commerce favors the development. The local PTA, the County Commissioners and community groups oppose based on concerns about schools and traffic impacts.

Combined, the three development proposals, if they were built, would more than double the existing size and population of Bayville. The Town Commissioners have considered adopting an Adequate Public facilities Ordinance, but are unfamiliar with the administrative and legal requirements for using the tool. The Town historically does not have the administrative capacity to deal with many of these issues.

Stakeholders

The developers of the two residential proposals are represented by attorneys. The third developer is the owner of the cannery building. The local community association has expressed concern over all of the proposals and has not expressed a preference for any of them. The local Chamber of Commerce favors the economic benefits of the proposed growth. Representatives of the County Commissioners, the local environmental groups, and the PTA are opposed to the proposals.

Issues/Questions

The Town must address a number of issues:

Can the Town really accommodate the scale of development being proposed? Do the economics and demographics of each development proposal make sense?

What are the options for paying for the expanded capacity of the Town's treatment plant? Should the Town build sufficient capacity for one or more proposal, or all of them?

Can they continue to discharge to Heron Creek or is a new treatment approach required?

How can the Town Plan calling for supporting mixed use / traditional neighborhood development be implemented in the context of both Critical Area and stream impact issues?

How will the Town open lines of communication with the County Commissioners regarding amendments to the Water and Sewer Plan and Critical Area growth allocation?

What are the regulatory issues that need to be addressed by the State and local government to address growth issues in the Town?

“Cheat” Sheets

Existing and proposed zoning maps for the Town and surrounding annexation areas.

Nutrient limits and caps at the Wastewater Treatment Plant.

Maps showing delineation of floodplain areas, Critical Area boundary, and stream buffers.

Summary of land uses in the Town.

Appendix #3

Workshop Registrants

Howard Community College

3 October 2005

Chris Biggs, Staff for Senator Nancy Jacobs
Ronald Bowen, DPW Anne Arundel County
Karl D. Brendle, Director, City of Laurel, Department of Comm. Planning & Business
George Cardwell, Planning Administrator, AA County Office of Planning & Zoning
James Caldwell, Director, Department of Environmental Protection, Montgomery County
Bob Colison , Peer Wallace
Meo Curtis, Vice-Chair. Patuxent River Commission
Marianne DeFatta, Planner, City of Laurel Department of Comm. Planning & Business
Ginger Ellis, Anne Arundel County Department of Health
Fred Falkner, Harford County Dept of Environmental Health
George M. Faber, Real Estate Services Group, Maryland Department of Transportation
Delegate Barbara Frush, District 21
Josh Heltzer, Point Up, LLC
James Irvin, Howard County Department of Public Works
Jeanne Joiner, Carroll County Department of Planning
Cecilla Lammers, Prince Georges County Planning Department
John Leocha, Water and Sewer Master Plan Admin, AA County
Kathleen Lewis, Baltimore County Department of Economic Development
Sheree Lima, Carroll County Department of Health
Eileen McLellan, Policy Director, Eastern Shore Land Conservancy
Elaine Murphy, City Administrator, Hyattsville
Mirza Nazir Baig, Maryland National park & Planning Commission, Montgomery Co.
Brian O'Malley, Planner, Carroll County Comprehensive Planning Bureau
Tara Penders, Baltimore City Department of Planning
Marilyn Sappington, Eldersburg
Frank Schaeffer, Carroll County Department of Health
Matthew Simmont, Manager, Carroll County Comprehensive Planning Bureau
Jim Slater, Environmental Compliance Officer, Carroll County Dept of Planning
Kerry Topovski, Director of Environmental Health, AA County Dept of Health
Leonard Walinski, Harford County Dept of Environmental Health
Bob Weber, Howard County Department of Health
Harry Womack, Salisbury University
Kendra Wright, Planner, City of Laurel Dept. of Community Planning & Business
Charles Zeleski, Carroll County Department of Health

Chesapeake Community College

18 October 2005

Samuel D. Arbuckle
Hon. Anna Marie Angolia, Chair/Commissioner, Town of Cottage City
Paige Bethke, Town of Easton
Hon. Betty J. Ballas, Mayor, Town of Federalsburg
Mike Billek, Tributary Strategy Team, Eastern Shore

Richard J. Boyce, Elkton
Mindie Burgoyne, DBED, Reg. Dev. Eastern Shore
Ed Cairns, Town of Elkton
Matheu J. Carter, Director, Cecil Co. DPW
Charles Cawley, Caroline Co. Commission
Jay Charland, Assateague Coastkeeper, Assateague Coastal Trust, Inc.
Jack Cole, President, Caroline Co. Commission
Sen. Richard Colburn, Senator
Joe Derbyshire, Director of Utilities, Town of Fruitland
Don English, Town Council, Town of Trappe
Terry Fearins Administrator Town of Denton
Bill Forlifer, Dorchester
Susan T. Ford, Attorney – Council, Baradel, Kosmerl & Nolan, P.A
Marty Gangemi, Caroline Co. Commission
Patricia Garrett, Manager, Town of Chesapeake City
Scott Getchell, Superintendent of Public Works, Town of Denton
Robert Greenlee, Commercial Land Appraiser, The Greenlee Group
Conway Gregory, Councilman, Town of Denton
John Groutt, President, Wicomico Environmental Trust
Mark Guns, Cecil Co. Commissioner
Ron Guns, Asst. Secretary, DNR
Frank V. Hall, Town Planner, Town of Trappe
Edgar Harrison, Chair, Planning Commission
Ron Hartman, Community Activist, (ARCA) Cecil
Steve Hershey, Asst. Secretary, DNR
Wayne Holt, Supervisor of Facilities, Cecil Co. Schools
Hon. Brad Horsey, Mayor, Denton
Joan Jullett, Town of Betterton
Joan Kean, Somerset Co.
Mitch Keiler, Commissioner, Queentown
Phyllis Kilby, Cecil Co. Commissioner
Mike Koval, Queen Anne’s Commissioner
Bill Laws, Economic Dev. Commission, Worcester College
Roger Layton, Vice President, Caroline Co. Commission
Tammy Ledley, DBED
Cheryl Lewis, Town Council Pres, Town of Trappe
Lindsey Lieterman, Coastal Management, DNR
Charles D. MacLeod, Attorney, Funk & Bolton, P.A
George E. Mayer, Director of Grants Administration Dept., Town of Federalsburg
Shelly McDonald, Town Administrator, Town of Cecilton
Dr. Keith Menchey, Asst. Secretary, Dept. of Agriculture
Jeanne Minner, Director of Planning, Town of Elkton
Robert Mitchell, Worcester Co. Environmental Health
Ann Morse, Talbot Co. Health Dept
Jim Mullin, Representing Del. Michael Smigel
John Nickerson, DHMH Queen Anne’s Co
Fred Orr, Senior Engineer, Carroll Co

Gail Ownings, Director, Kent Co. Planning
Rick Pollitt, City Manager, Town of Fruitland
Ed Raffetto, Planning & Zoning Commission
Marie Rameika, Town Administrator, Town of Church Hill
Gary Robertson, Town of Chesapeake City
Dave Russ, Talbot Co. Health Dept
Bill Satterfield, Executive Director, Delmarva Poultry Industry, Inc.
Eric Sennstrom, Director, Cecil Co. Off. of Planning & Zoning
Jennifer Shull, Director Housing & Community Dev, Town of Denton
Charles Smyser, Director, Cecil Co. Environmental Health
Del. Richard Sossi
Leland Spencer, DHMH
Renee Stephens, DBED
Carol Stockley, Councilwoman, Town of Denton
Lynn Sutton , Kent Co. Environmental Health
Owen Thorne, Community Activist, (ARCA) Cecil
Sue Veith, Environmental Planner, St. Mary's Co.
Del. Mary Roe Walkup
Alfred C. Wein, Jr., Administrator, Cecil Co
Richard Wells, Worcester Co. Environmental Health
Dwayne Wilding, Bayland Consulting
Don Williams, Community Activist (ARCA), Cecil
Perry Willis, Executive Director for Support Services, Cecil Co. Schools
Terry Willis, Chesapeake Education
Don Wilson, Director, Caroline Co. Environmental Health

College of Southern Maryland

November 1, 2005

Gene Ambrogio, Mayor, La Plata
Toni Battle, Grad. Student, Frostburg State
Elmer Biles, Charles Co.
Amy Blessinger, Planner, Charles Co. Government
Robert Boxwell, Executive Director, Cove Point Natural Heritage Trust
Dr. John Brooks, Deputy Secretary, Dept. of Agriculture
David C. Brownlee, Planning and Zoning, Calvert County
Daryl Calvano, Director of Environmental Health, St. Mary's Co.
Aimee Dailey, Planner, Charles Co. Government
Gary Davis, Director, Charles County Health Dept.
Donna Deville
Jason Dubow, Chair of the Lower Eastern Shore Tributary Team, Eastern Shore
Cathy Flerlage, Director of Planning & Zoning, La Plata
Ellen Flowers-Fields, Southern MD Workforce
Chet Frederick, Engineering Administrator, St. Mary's Co
Dr. William Icenhower, St. Mary's Co. Health Dept.
Robert Kuntz, Director of Planning & Architectural Services, PG Co. Public Schools
Cecilla Lammers, MNCPPC
Desmond Lee, Grad. Student, Frostburg State

Del. Murray Levy, Delegate
Lindsay Lieterman, DNR
Barbara Livingston
Star Mahaffey, DBED, Southern MD Regional Off.
Rupert McCave, Capital Improvement Program Officer, PG Co. Public Schools
Doug Miller, Town Manager, La Plata
Patrick Naehu, Nature Conservancy
Margie A. Posey, Vice Mayor, Town of Indian Head
Carol Rollins, Development Coordinator, La Plata
Bill Shreve, Asst. Director, St. Mary's Co.
Mary E. Thompson, Council, Town of Indian Head
Steven T. Sager, Deputy Town Manager, Town of Indian Head
John Savich, Director, Economic and Development, St. Mary's Co.
Margaret Schmidt
Steven Wall, DBED, Southern MD Regional Off.
Lori Windsor, Dept. of Planning & Agriculture Services

Frederick Community College

November 15, 2005

Jared Bartley, Canaan Valley Institute
Mayor Joyce Beck, Forest Heights
Jim Bishop, Washington County
Glenn Blanchard, Public School Teacher, Frederick County
Larry Bohn, Director, Frederick County Department of Health
Renee A. Bone, DBED, Western Maryland
Chris Bordlemay, Acting Manager, Hagerstown
Mark Bradshaw, Washington County
Barbara Buehl, Executive Director, Allegany Chamber of Commerce
Ellis Burruss, Planning Commission Brunswick
Matthew Candland, Town Manager, Sykesville
Michael Carnock
Delegate Jean B. Cryor
Matthew Davis, Westminster
Carrie Decker, Tributary Strategies, DNR
Ken Decker, Town Manager, Hampstead
Mark Depoe, City of Gaithersburg
Tom Devilbiss, Carroll County
Bill Devore, Garrett County
John Dimitriou, Planner I, Frederick County
David Eberley, Allegany County
Merrill Elliott, Water and Sewer, Washington County
Jay Michael Evans, Carroll County
Erik Fisher, Westminster
Curt Folkes, Maryland Farm Bureau
David Gatrell, Program Manager, Frederick County Department of Health
Robert Garver, DBED, Western Maryland
Edward Gladstone, Chair Planning Commission, Brunswick

Tim Goodfellow, Frederick County
Ted Graham
Jim Gugel, Division of Planning, Frederick County
David Haller, Town Manager, Emmitsburg
Carlton Haywood, Chairman, Middle Potomac TT
George Jackson, Chesapeake Research Consortium, Chesapeake Bay Program
Kolin Jan, ATK Tactical Systems
Keith Jewell, Harford County Schools, Harford County
Carroll A. Jones, Mayor
John L. Kendall, Town Manager, Boonsboro
Ray Kerr, AC Quest
Connie Koenig, Vice Chair Planning Commission, Brunswick
Don Krigbaum, Planning Commission, Brunswick
Katherine Lewis, Baltimore County
Jeffrey Love, Development Review Planner
Timothy Lung, Planning Department, Washington County
Craig Leonard
Kathleen A. Maher, Planning Director, Hagerstown
Rose Mann, Carroll County
Nancy McCormick, Economic Development Director, Taneytown
Amy McKenzie, Planner, Allegany County
Graig Murray, Washington County
Paul Offutt, Program Manager, Frederick County Department of Health
Dawn Paige, Vice Chair Board of Appeals, Brunswick
Peter Perini
Gary Rohrer, Director of DPW, Washington County
Dusty Rood, Rodgers & Associates
Kay Schultz, Community Restoration Coordinator, Frederick County DPW
Jim Schumacher, City Manager, Taneytown
Delegate Christopher Shank
Jeff Shetron, Washington County
Edward Singer, DHMH
James Song, Montgomery County
Walt Stull, Planning Commission, Brunswick
Rick Stup, Planning Zoning Administrator, Brunswick
Mike Thompson, Washington County
Glenn M. Torgerson, Deputy Director Office of Real Estate, MDOT
Larry Twele, Director Economic Development, Carroll County
Bill Valentine, Allegany Chamber of Commerce
Aaron Valentino, Zoning Administrator, Taneytown
William C. Wantz, Attorney, Hagerstown
Chris Weaver, Baltimore County
Charles Zeleski, DHMH

Appendix #4

Agency Assistance During the Workshops

Numerous MDE/MDP staff members assisted with facilitating and recording the discussions, including:

Maryland Department of Planning

Steve Allan
Angela Butler-Perkins
Jim Noonan
Mark Gradecak
LaVerne Gray
Larry Fogelson

Maryland Department of Environment

Rich Eskin
Jim George
Danielle Lucid
Virginia Kearney
Steve Luckman
Matt Pajerowski
Marie Halka
Bob Summers

In addition, the Workshop logistics (from invitations to facility arrangements) were carefully planned by Julie Oberg and Don Mauldin of MDE, and Weldon Freeman of MDP.