

## Workshop Summary and Meeting Notes: *Integrating Watershed and Land Use Planning in Maryland*

March 7, 2005, at the Blue Heron Center in Annapolis, Maryland

### Acknowledgements

The Chesapeake Bay Program Office greatly appreciates the contributions of the following people to the organization and development of this workshop:

Ted Graham of the Metropolitan Washington Council of Governments; Jim George, Janice Outen, and Danielle Lucid of the Maryland Department of the Environment; Don Outen of Baltimore County's Department of Environmental Protection; Mary Dolan of the Montgomery County Dept. of Parks and Planning, Maryland-National Capital Park and Planning Commission; Mary Searing of Anne Arundel County; Tay Harris of the Maryland Department of Planning; Sandi Olek of the Maryland Department of Natural Resources; Shannon Moore, Frederick County Department of Public Works; David Umling of the Charles County Department of Planning; and Menchu Martinez and Emily Clifton of the Chesapeake Bay Program Office.

In addition, the Bay Program Office would like to thank the generous contribution of time to the day's presenters:

Secretary Audrey Scott, Secretary, Maryland Department of Planning; Hilary Spence, Talbot County Council; Tom Schueler, Center for Watershed Protection; Sandi Olek and Jamie Baxter, Maryland Department of Natural Resources; Jim Noonan, Maryland Department of Planning; Janice Outen, Maryland Department of the Environment; Lynn Richards, Environmental Protection Agency; Shannon Moore, Frederick County Department of Public Works; Mary Dolan, Montgomery County Dept. of Parks and Planning, Maryland-National Capital Park and Planning Commission; and Don Outen, Baltimore County Dept. of Environmental Protection & Resource Management

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## Introduction

Over time, our understanding of the relationship between land use and downstream impacts to water quality and natural resources continues to improve. The number and sophistication of urban best management practices (BMPs) to minimize the impact of development has grown accordingly. As a result, BMPs in wastewater treatment, stormwater management, and better site design are widely used.

While these site-specific controls are critical, they can only mitigate the impacts of planned land uses. Land use planners today deal with far more than the classic trilogy of land use, transportation and public facilities. Localities are increasingly required to consider issues such as long-range sustainability, brownfields, assurance of clean air and water, the protection of sensitive areas, provisions for waste disposal and recycling, and affordable housing. An understanding of the watershed impact of land use choices, locations and density is often missing, especially in planning areas that address parts of watersheds. This information is often prepared in the form of a watershed plan, separate from the land use planning and zoning process.

On March 7, 2005, the Chesapeake Bay Program co-sponsored a workshop to bring together planning, natural resource, and regulatory professionals in Maryland to collaborate on how to incorporate water quality planning and regulatory requirements into comprehensive planning. The objectives of this workshop were to:\*

- Discuss the role of watershed planning and how it can be coordinated with other land use planning activities;
- Identify existing watershed based regulations or requirements facing local jurisdictions and the implications for county planning;
- Provide examples of how and to what extent land use and watershed planning have been integrated in Montgomery and Baltimore counties; and
- Provide time for practitioners from different communities to share opportunities, challenges, and needs, so you can take away specific ideas for your county.

Local practitioners interacted with State representatives from MDE, MDP, and MDNR to address State expectations or current regulations affecting natural resources and their implications for land use planning. Selected counties with advanced programs presented case studies demonstrating successful strategies, potential opportunities and challenges/impediments to incorporating watershed management into daily land use planning decisions. The following is a summary of the day's proceedings.

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\*See Appendix A for Agenda

## **Workshop Summary**

### **Opening Remarks – Hilary Spence, Talbot County Council\***

Talbot County has developed an effective, data based tool and Green Infrastructure (GI) Plan to assist its planners and elected officials in making critical land use and preservation decisions. This plan targets preserving open space for the purpose of maintaining an agriculture industry, protecting the County's watersheds, and preserving rural character.

The tool itself is a scientifically-based model used to identify, prioritize, evaluate, and preserve environmentally sensitive land areas. It includes aquatic resources (wetlands, floodplains and riparian zones that typically contribute to water quality); ecological resources (sensitive species and their habitats and valuable ecosystems); and agricultural and rural landscapes (economically productive working lands and open space).

The plan was developed during the time that the State government was implementing its "Green Print" program which essentially mapped environmentally sensitive lands. Being a State plan, however, Green Print did not provide the level of detail needed by the County, nor did it include waterfront acreage in the mapping of sensitive areas, which was important for Talbot.

Talbot County's Green Infrastructure plan was developed in 2002 under the expertise of The Conservation Fund, which allowed the County to customize its mapping to include resource areas that are plentiful in and most meaningful to the County. This customized approach was beneficial because not all counties are the same – they do not have the same types of land uses, they do not place the same values on different types of lands, they do not have access to the same amount or type of data about the parcels in their jurisdiction.

There were three driving forces which made this plan happen for the county. First, the County had a very supportive constituency that was urging the County Council to take a more proactive approach toward land preservation, with at least three groups pushing the effort. Second was the five-year update of the County's comprehensive land use plan. The County was just beginning the process and saw the development of a GI plan as a way to address preservation issues within the comprehensive plan. Third, and probably most important, was the Conservation Fund's ability to develop the plan and its desire to work with the County.

Now that the plan is developed, the County will use it to prioritize lands for preservation. The GI Plan is now included as an implementation strategy in the updated Comprehensive Land Use Plan that the County Council approved in February (2005). In addition, when zoning ordinances are revised as a result of the update, the GI plan will be required to be incorporated in the decision-making process for all land preservation decisions.

On an ongoing basis, the Planning Commission will use the Plan to review potential development projects. For example, when a developer comes in with a parcel he wants to develop, the Commission will evaluate the parcel for its resource value and decide whether development is compatible. If the parcel has a high resource value, the Commission can work with the developer to modify the project to preserve as much of the property as possible by clustering development and preserving more open space. The Planning staff, Commission, and County Council will also use the Plan to make decisions about supplemental growth allocations in critical areas.

Finally, this is a tool the County would like to share with its towns so that, as they look to annex land.

Recommendations for other counties: Land use decisions are often loaded with political and personal interest overtones. Decision makers are accused of advancing an "agenda", either pro-growth or anti-growth depending on which side you are on. Using a data-based tool such as a GI plan can disarm the nay-sayers and provide credibility. Elected officials and other decision makers will be viewed as fair and objective when they use such tools. And that is what property owners, developers, and interest groups want: fairness and objectivity.

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\*See Appendix B for presentation handout from Hilary Spence

# Incorporating Watershed Management into the Local Planning Context

## Tom Schueler, Center for Watershed Protection (CWP)\*

**The Impervious Cover Model:** impervious cover provides a general indicator of water quality or stream sensitivity. Overall, there have been more than 200 studies on 26 aquatic indicators, and the Impervious Cover Model has been studied more in Maryland than anywhere else. What it tells you:

*Between 2 and 10% impervious cover (IC):*

- Most indicators are in the good to excellent range, though subject to land management practices. Some individual indicators are more sensitive and may start to decline at 5-10% IC. Brook trout, e.g., is an indicator of a highest quality stream, and shows a decline over 5% IC. Other subwatershed metrics such as forest cover may have more predictive ability.
- *Key planning issues:* even low intensity residential development with proper treatment will degrade such streams. Protection of streams requires aggressive down-zoning, land conservation, and riparian buffers. No sewers should be allowed.

*Between 10 and 25% impervious cover:*

- Researchers have documented that at about 10% IC, the aquatic insect community in urban streams begin to decline sharply. There's a shift to more pollution tolerant organisms. Waterfowl, macroinvertebrates, amphibians and fish are adversely effected by land development. In this range, streams show clear signs of declining stream health. Stream indicators are in the fair to good range and have the highest restoration potential.
- *Key planning issues:* Apply CWP's 8 tools of watershed protection; set goals for retaining forest cover, riparian continuity and overall watershed treatment; continue to monitor.

*Between 25 and 60% impervious cover:*

- Non-supporting streams that do not support a full range of designated uses; streams in the fair to poor range. Streams in the 25-40% IC range show promise for stream restoration. The primary goals are to reduce pollutant loads, improve stream corridors, or enhance appearance. Water contact recreation may be allowed during dry weather.
- *Key planning issue:* Evaluate streams in 25-40% IC range for restoration potential; support active redevelopment/infill to increase IC; create an urban drainage classification for extremely high IC streams; commit to smart watersheds program.

### **Why has success in integrating land use and local watershed plans been limited?**

Reasons for limited success in integrating land use into local watershed plans: 1) overzoning; 2) segregation of planning entities (3) bmp effect; (4) confusion on scope; (5) lack of watershed zoning unit.

- (1) *Overzoning* – Most watersheds are already zoned for development, and nearly all residential zoning categories produce more than 10% IC. For an area zoned for agriculture (considered a transitory zoning category), you can expect an IC percentage around 1.9%. A subdivision with one dwelling unit per two acres is about 10.6% impervious, so it doesn't take a whole lot of development to go over 10%. For an area zoned one dwelling unit per ½ acre, IC percentage is around 21.2%. Reducing impacts would require downzoning, which is very difficult.
- (2) *Segregation of planning entities* – comprehensive planning focuses on the whole package and tends to be growth-oriented, while watershed planning occurs outside of the comprehensive planning process. Also psychological differences: for comprehensive planners, density is good. It reduces costs for municipal services, supports vibrant communities, and provides jobs. For land use planners, low density zoning is the most inefficient land use.
- (3) *Uncertainty regarding the BMP effect* – Current BMP's cannot fully mitigate land use impacts and as such, the implementation of BMP's should not be the sole focus for reducing pollutants, etc. Communities have found that no matter what watershed they are working in, the same eight basic management tools apply: watershed planning, land conservation, aquatic buffers, better site design, erosion and sediment control, stormwater management, non-stormwater discharges, and watershed stewardship programs. A holistic approach is best.

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\*See Appendix C for presentation handout from Tom Schueler

- (4) *Confusion on the scope of watershed plans* – The goals and management focus of local watershed plans are different, depending on what unit of local, state, or federal government you talk to. There is no standardization among agencies, and no standard approach or scale for watershed planning. There are multiple and ambiguous goals in Maryland, and more watershed planning directors in this state than anywhere else.
- (5) *Lack of a true watershed zoning unit.* Traditional zoning doesn't regulate land cover – such as imperviousness, forest, and turf – but density. A watershed protective zone would modify master plans/zones to correspond to subwatershed targets and closer linked to impervious cover goals (*Note: see slides for all information presented on what a true watershed protection zone would look like – 4 slides total*).

To increase success in integrating land use and local watershed plans, more time must also be spent educating elected officials and comprehensive planners on the benefits of local watershed planning. A more *unified approach* to watershed planning is also necessary – one that uses common resource inventory elements and pollutant load calculations; common reporting elements; portable nutrient reduction targets and habitat restoration across watershed management units.

One final point is the need to provide real incentives. Incentives can take many forms but are necessary if the concept of watershed management planning is to move forward. These may include:

- Cost-sharing of local planning efforts
- Extended TMDL implementation schedules (ex: in Los Angeles, there are 27 sub-watersheds. Areas have eighteen years to comply with the TMDL with a watershed plan, and only six years if no plan exists)
- Automatic eligibility for 319 funds
- Trading between watershed scales (TMDL offsets)
- Safe harbor from addl. regulations in highly urban watersheds
- Free technical assistance (w/o strings)
- Access to special watershed implementation funds from SRF
- Presumed compliance with nutrient reduction for next ten years
- Five year grace from any more watershed guidance/requirements
- Real credits for implementing watershed-based zoning

For county participants, there are some new products available. Be sure to check out the *Small Watershed Restoration Manual Series* (available at [www.cwp.org](http://www.cwp.org)) for new updates. In addition, community testing will begin on the Smart Watersheds Benchmarking Tool later this spring. The Smart Watersheds project evaluates municipal programs on how well they implement and integrate fourteen key municipal program areas, such as Stream and Subwatershed Field Assessment, Management of Natural Area Remnants, Illicit Discharges Detection and Elimination, and Public Involvement and Neighborhood Consultation, into a coherent strategy to treat stormwater runoff and restore urban watersheds. Testing will occur in four to six communities throughout the summer, with full application and potential certification of Smart Watershed programs in two communities. The final tool, program profile sheets, and a Guidebook will be completed this winter.

## **Remarks to Local Planners**

### **Audrey Scott, Secretary, Maryland Department of Planning**

The Maryland Department of Planning provides a vision, recommendations, and technical assistance, but each of these depend on local governments. Success is determined by relationships with local officials.

In Governor Elrich's commitment to balanced growth, the Chesapeake Bay is a priority. The connection between land use and water quality have not always been made when addressing daily development decisions. We have to change this thinking. When a development proposal comes before an elected county official, we need watershed and water quality to become as automatic in the decision-making process as issues such as overcrowded schools. We need to begin to ask the question: "How will development impact the watershed?"

What's happening on the State level: Maryland is currently refocusing its smart growth initiatives, and the two first Priority Places have just been announced – Leonardtown in southern Maryland and the Poppleton neighborhood in Baltimore City. The goal of the Priority Places initiative is to target state resources to redevelop older, more established areas to capitalize on existing infrastructure and on private–public partnerships. Though not the only tool, TMDL's will also become an increasing factor in development and land use decisions, just as capacity issues and upgrades of wastewater treatment plants and overcrowded schools are.

Beginning in the fall of 2005, the Maryland Department of Planning and Maryland Department of the Environment will host a series of workshops for state and local officials to discuss land use planning and watershed management– covering Central, Southern, and Western Maryland and the Eastern Shore.

For more information on the upcoming workshop dates and locations, visit [www.mdp.state.md.us](http://www.mdp.state.md.us).

## Discussion session: Existing federal / state environmental requirements and their impact on county planning and development.

Moderator: Sandi Olek, Maryland Department of Natural Resources

Panelists: Jamie Baxter, Maryland Department of Natural Resources  
Jim Noonan, Maryland Department of Planning  
Janice Outen, Maryland Department of the Environment  
Lynn Richards, Environmental Protection Agency

Remarks from Panelists:

*Jamie Baxter*, Tributary Strategies Program Director, Maryland DNR

- How do we incorporate the impact of future growth with the Bay Cleanup? The tributary strategies reflect the state's plan to meet proposed water quality standards. To do so, we need to have technical assistance to provide tools and resources without strings attached. The strategy does attempt to accommodate growth in two areas: 1) upgrading treatment plants; and 2) building bmp's on predicted future land use baseline through 2010.

*Jim Noonan*, Director of Infrastructure Planning, MDP

- There's a push/pull between different state requirements. The sensitive area element requirement for comprehensive plans is not specific, and we may not have the infrastructure in place that we think we do to tie into opportunities to focus growth, and for now, it is still easier to grow on the fringes due to public opposition to infill and the difficulty of getting innovative development through the permitting process. We need to translate competing policies to impact how and where growth occurs and do a better job at capacity building at the local level (i.e., staffing). In terms of scale, planning and zoning comes down to the parcel level, so we need tools not just for policy level but for better managing individual parcels.

*Janice Outen*, Water Resources Engineer, MDE

- Maryland's population will increase by 1.1 million by 2030. That's 550,000 new households (Anne Arundel: 48,000 households; Prince George's 87,000; Frederick County – 52,500. For additional figures, see *Appendix H, Handout: Maryland Department of the Environment*). If each new household is developed on one acre lots, the total footprint would be 850 miles squared, or the size of Charles and St. Mary's Counties. At 3.5 lots per acres, this number would be 250 miles squared – the size of Howard County. We must think more about how to best design and plan for population increase, water quality and supply, and point and non-point pollution. What requirements can you use in your favor? Communities should explore source water protection. MS4 permits, which apply to larger metropolitan counties, permit for stormwater systems and provide money for activities such as education, planning, and capital facilities improvement. Outside sewage systems, there's money available to upgrade septic systems in certain priority areas. And finally, additional comprehensive plan preparation guidance is being developed jointly by MDE and MDP so that comprehensive planning is not as developer-driven.

*Lynn Richards*, Senior Policy Analyst, US Environmental Protection Agency Smart Growth Program

- Total US population will increase by 50 million by 2020 – we need to think more about where and how new growth will be accommodated. The planning process should be kept in perspective – we need to look at what drives development: local codes and regulations – developers responds to these – minimum densities, mixed use prohibitions (mixed use illegal to build in many areas). We need to incentivize redevelopment. Baltimore City, for example, can accommodate 50% of the expected growth with existing structures. We need to take a look at rehab standards – New Jersey, for example, focuses on places already degraded. Greensboro, NC is a good example of brownfield redevelopment. For other ideas or reading materials, visit [www.epa.gov/smartgrowth/](http://www.epa.gov/smartgrowth/) and click on publications.

## **Spotlight: Frederick County**

### **Shannon Moore, Frederick County Department of Public Works\***

*The issue:* watershed health is deteriorating and water resources diminishing. *The solution:* water quality, quantity and habitat issues must be addressed on a watershed basis.

In general, watershed management is seen to detract from other issues and is not a high priority. As a result, we lack the mechanisms to implement the necessary planning elements. What do our decision-makers value?

- (1) decreased cost and increased benefit of program
- (2) defensibility of decisions
- (3) avoidance of conflict
- (4) meets definition of “important,” including what is important to key stakeholders
- (5) other personal value.

In Frederick County, the initiation of watershed management planning was a reaction to the threat of regulatory requirements. A fear of fines or consent order for not meeting NPDES Phase I MS4 permit requirements initially drove watershed management planning. NPDES Phase II MS4 permit requirements can provide some of the same impetus.

In addition, public conflict over Lake Linganore reservoir’s volume and water quality and a TMDL was a hot topic, causing the Commissioners to act. As a result, the Commission requested an Action Plan for reducing nutrients and sediments. The antidegradation rules specified under Maryland’s antidegradation policy (COMAR §26.08.02.04) also have the ability to address the maintenance of water quality in more pristine areas.

One priority for Frederick County in developing its watershed management plans has been the inclusion of “key stakeholders”, or those people commissioners feel especially responsible to – such as farmers, developers, large landowners – and could directly communicate their support to decision-makers. Stakeholders were identified and kept part of the process. Honestly seeking opinions and involvement in identifying problems and solutions was key.

Another priority was cost and importance. No one wants to pay to dredge Lake Linganore, but ICPRB estimates that the County may not be able to meet future water supply needs during drought conditions. The Director of Utilities is concerned about future impacts to water supply from water quality issues. The goal is starting to look more important to the Commission, and in December of 2004, the County Commission voted to establish an Integrated Water Resources Management Task Force to address water quality and quantity issues.

The County’s NPDES program lacks tools to adequately identify problems. To address this, the County leveraged funds through the DNR (now MDE) Watershed Restoration Action Strategy program for watershed and field assessments. The Stream Corridor Assessment allowed the County to cover more area with less money, and identified sites for further upland and upstream investigations. The County followed up with Stream Restoration and Stormwater Management Facility Retrofit Assessment.

The Conclusion: there are a number of points that will help the County move forward to better integrate land use and watershed planning. This includes the organization of a well-armed Integrated Water Resources Management Task Force to address water quality and quantity issues; coordination with MDP on the integration of water resources issues into Priority Funding Area approvals; better coordination between planning staff and NPDES compliance staff; the development of an Action Plan for the Commission; better interaction with the public and key stakeholders; and continued briefings to Commissioners on topics they value.

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\*See Appendix D for presentation handout from Shannon Moore

## The Montgomery County Experience

### Mary Dolan, Montgomery County Dept. of Parks and Planning, MNCPPC\*

Montgomery County integrates water quality and environmental concerns in its environmental review process, where the county analyzes and reviews 'environmental resources' on a predetermined area to correspond with the County's 49 master planning areas. In the environmental review process, all sub-watersheds contained either partially or fully within the master planning area are included to appropriately determine how different development scenarios might affect natural resources. The environmental review process for a particular master planning area is timed to occur before the master plan for that area is reviewed and updated. Thus, the environmental criteria are considered upfront and have a better chance for impacting zoning decisions.

No matter what approach your county chooses to take, the following is some general advice for ensuring effectiveness in implementing environmental criteria:

- Cultivate respect even with competing interests
  - recognize land use goals & influences
  - get together and exchange info
- Prepare yourself
  - Stay ahead of the crowd and know sources of information
  - which facts & direction relate to land use planning
  - environmental concerns can support desirable land use objectives
  - take time to make the connections
- Become part of the process
  - can't save resources by monitoring its change
  - master plans can forever compromise environmental options
  - no one wins in a turf battle, be aware of schedules
- Convey your passion
  - invite environmental staff to outreach meetings
  - provide analysis and insight
  - recognize the realities and tailor options
- Support the results
  - be there to explain and answer questions
  - simplify the results
  - suggest further options
  - be creative and responsive
  - give limitations with caveats

The Montgomery County process can be best understood by looking at an example of a previously completed environmental review and master plan revision, which occurred for Upper Rock Creek Park (for this example, the watershed boundary happily corresponded exactly with the master plan area boundary). In general, for the Montgomery County process, we begin by staying ahead of the crowd and knowing our sources of information. We also focus our efforts on areas where the environment is a critical factor. The environmental review takes the following form:

- Prepare documentation – in Montgomery County, it is called an *environmental resource inventory* – to appropriately review environmental resources, explain policies and recommendations, inform the public, and establish credibility
- Determine appropriate range of alternatives by establishing objectives for things such as imperviousness, forests, and resource protection based on inventory findings; by testing development scenarios; and by involving stakeholders in the process
- Review results and prepare recommendations, with the planning team, to present to the planning board. It's important to include in this tests using various zoning alternatives as well as the appropriate zoning and density for a particular area. In the case of Upper Rock Creek (used as an example during the presentation), the team settled on appropriating zoning and density at about 7-8% impervious.

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\*See Appendix E for presentation handout from Mary Dolan

In making recommendations, just as important is to understand or deal with the politics involved. In Upper Rock Creek, recommendations included a special protection area in order to ensure more stormwater management and reforestation. An 8% impervious cover cap was also put in place. These were a result of pressures from the community for more protection. Modifications for the Upper Rock Creek area also included increasing the total number of units allowed, decreasing imperviousness, adding a 400 acre park, and additional stormwater requirements.

In conclusion, results come from respect, preparation, and participation. Convey your passion, support your results, be content but not contented, and improve the process the next time.

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*Note:* For those county participants that attended the meeting, Mary Dolan provided CD's which included Montgomery County's environmental planning documents. We do have some cd's that are still available and can make a few additional copies upon request. Please contact Emily Clifton ([eclifton@chesapeakebay.net](mailto:eclifton@chesapeakebay.net)) or Menchu Martinez ([martinez.menchu-c@epa.gov](mailto:martinez.menchu-c@epa.gov)) if you would like a copy and we will try and accommodate your request.

## **The Baltimore County Experience**

### **Don Outen, Baltimore County Dept. of Environmental Protection & Resource Management\***

Baltimore County has the third largest land area and the third largest population (780,654), and the second highest number of jobs (364,837) in Maryland. It is slow growing, at about 1% a year, and has no incorporated municipalities.

Environmental degradation is not just problem spurred by new development; it's an inherited legacy of land abuse before the pre-industrial era. Land use patterns are determined by historic and local regional development, the decentralization of metropolitan areas, timing of regulatory controls, low interest mortgage rates, the Baltimore Beltway, the 'white flight' following the desegregation of schools, the pursuit of the American Dream, and the declining role and presence of agriculture.

In terms of the 'land use planning versus environmental' dilemma, *land use planning, not environmental restoration, should drive and provide a framework for integration*. Integration needs to be reflected in continuing, comprehensive and coordinated County programs. Program elements should include Growth Management and Integrated Watershed Management. And environmental outcomes of land use decisions need to be purposeful and address past and future commitments.

We also need science-based indicators of sustainability. Environmental assessments for land use plans should assess the relationship of existing and proposed urban land uses to: green infrastructure (ecologically important forests and habitat), watershed hydrology (headwater streams), stream biological quality, stream channel stability, and impervious cover and water quality.

Within Baltimore County, growth management has been aided by the delineation of urban and rural areas (growth boundary) in the late 1960's, and that growth boundary is still in force today. Baltimore County has used zoning tools and basic services (water and sewer) to concentrate development and reduce sprawl. Through our new 'Renaissance Process', we are encouraging infill and re-development within older communities, and future growth is accommodated in planned growth areas.

Some ways that environmental management is incorporated in Baltimore County:

- Zoning tools and land preservation are used to reduce rural development, protect reservoir watersheds and agriculture;
- Development regulations protect resource function in both urban and rural areas;
- Implement aggressive restoration programs in older urban areas; and
- Integrate resource management strategies ("Green Renaissance").

There are both benefits and liabilities to concentrated growth. While concentrated growth helps reduce sprawl, improve efficiencies, and protect working lands and reservoirs, its liabilities include concentrated pollution and the high cost of retrofit.

When planning communities, we need to think further out into the future – we need cities that are done well ("new urbanism") and must measure our success based on the health of our waters. Currently in Baltimore County, 90 percent of the total population lives in our urban growth boundary, which makes up one third of the County's total land. Most rural streams are fairly functional, and we have downsized more than 60 percent of the County (outside the urban growth boundary) to maintain rural lands. We have spent about \$90 million so far towards our preservation goal and are developing a strategy for protecting the remaining acres, and have spent \$5 million a year on restoration.

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\*See Appendix F for presentation handout from Don Outen

## Appendix A. Workshop Agenda

9:00AM **Sign in and refreshments**

9:30AM **Welcome and Overview**

Ted Graham, Chair, Chesapeake Bay Program Land Growth and Stewardship Subcommittee

9:35AM **Plenary speaker**

Hilary Spence, Talbot County Council

9:50AM **Incorporating Watershed Management into the Planning Context**

Tom Schueler, Center for Watershed Protection

10:25AM **Break**

10:40AM **Remarks to Local Planners**

Audrey Scott, Secretary, Maryland Department of Planning

10:45AM **Discussion session:** Existing federal / state environmental requirements and their impact on county planning and development.

Moderator: Sandi Olek, Maryland DNR

Panelists: Jamie Baxter, MDNR

Jim Noonan, MDP

Janice Outen, MDE

Lynn Richards, EPA

**Description:** One challenge affecting local governments in incorporating watershed protection goals into the comprehensive planning process is finding the right resources and agencies to provide guidance. Often times, different agencies have conflicting goals. This session provides an opportunity for local practitioners to engage a panel of representatives from MDE, MDP, MDNR, and EPA on current state and federal regulations, addressing such questions as:

- What are the federal and state requirements that impact planning and development?
- What are counties going to have to respond to?
- What guidance is there for counties to follow?

11:30AM **Spotlight: Frederick County**

Shannon Moore, Frederick County DPW

**Description:** Frederick County has been taking steps to better align watershed protection goals with its land use planning responsibilities. Ms. Moore will set the stage for the afternoon discussion by posing some issues her county is facing and the possible solutions to those problems.

12:00PM **Lunch**

1:00PM **Spotlight on Montgomery and Baltimore Counties:**

**Description:** In Maryland, Montgomery and Baltimore counties are considered successful for linking land use and watershed protection goals, yet the ways in which they do so differs. Mary Dolan and Don Outen will explain their own county processes and highlight some of the tools and techniques they have used to impact daily development decisions through the planning process.

**The Montgomery County Experience:** Setting Environmental Parameters at the Beginning of the Planning Process

Mary Dolan, Montgomery County Dept. of Parks and Planning, Maryland-National Capital Park and Planning Commission

**The Baltimore County Experience:** Progress and Challenges for Land Use-Watershed Planning Integration

Don Outen, Baltimore County Dept. of Environmental Protection & Resource Management

2:00PM **Problem solving session:** Identifying and overcoming obstacles in your county.

3:30PM **Adjourn**

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This workshop was organized in partnership with:

