



**MONTGOMERY COUNTY PLANNING DEPARTMENT**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

**MCPB**

**Item # 11 A**  
**9/17/09**

September 11, 2009

**MEMORANDUM**

**TO:** Montgomery County Planning Board

**VIA:** Mark Pfefferle, Acting Chief *MP*  
Green Division  
Mary Dolan, Master Planner/Supervisor *MD*  
Green Division

**FROM:** Mark Symborski, Planner Coordinator, (301) 495-4636 *MS*  
Green Division

**SUBJECT:** Roundtable Discussion: Update on the Water Resources Functional Master Plan

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**RECOMMENDATION:** Information and Discussion of Proposed Plan Policies and Recommendations

**Background**

The purpose of this briefing is to present the proposed policies and recommendations of the Water Resources Functional Plan to the Planning Board. The Planning Board has heard previous briefings on the requirements of the state law and approved the planning approach. It is now time to present the key results of this work and get Planning Board feedback before preparing the full draft of the Plan. This memo summarizes the findings of the work we have done so far and contains the policies and recommendations staff proposes to include in the plan.

**Statutory Basis and Scope**

As mandated by HB 1141, all Maryland counties and municipalities that exercise planning and zoning authority must prepare and adopt a Water Resources Element (WRE) in their comprehensive plans by October 2009, or October 2010 with extensions.

HB 1141 requires amending the General Plan to address the following in light of planned growth to 2030:

- Drinking water supply adequacy
- Wastewater treatment capacity
- Stormwater management adequacy to maintain water quality standards and regulatory requirements

The purpose of the State law is to assure that water supply, wastewater treatment and water quality are sufficient to serve planned growth, and to help us meet the Goals of the Clean Water Act and the Chesapeake Bay agreements to protect and improve water quality. To meet this State Law, a Water Resources Functional Master Plan is being developed that will amend the General Plan. The Functional Master Plan will amend all approved and adopted area, sector, and functional master plans. The policies and recommendations of the Water Resources Functional Master Plan will guide revisions and amendments to future master plans. The Functional Plan will also provide guidance for the Comprehensive Water Supply and Sewerage Systems Plan.

We have received a six-month extension to the October 1, 2009 deadline and have requested another as allowed under HB1141 to enable us to complete the plan (on the schedule approved by the County Council) and take it through the Planning Board, County Executive, and County Council review process prior to October 1, 2010.

### **Plan Goals and Key Findings**

**Goal:** County land use, growth, and stormwater management that are consistent with adequate drinking water supplies, wastewater treatment capacity, and water quality regulatory requirements.

The plan finds that water supplies and wastewater treatment capacities are sufficient to serve planned growth through 2030. The existing process for master plans growth forecasting, and staging of facilities is well established to assure that growth does not outpace facilities.

Water quality protection that accommodates stormwater discharges is a much greater challenge. While redevelopment will give us the opportunity to reduce impacts from some areas developed before current environmental regulations, as well as reducing per-capita imperviousness as we grow, many parts of the County will need substantial investment to retrofit solutions and restore degraded streams.

### **Summary of Functional Plan Findings**

Dealing with water resources issues comprehensively is beyond the scope of any one agency or plan. Consequently, the Functional Plan must establish overarching policies and recommendations to guide more specific plans, and implementation actions. Implementing and updating the plan (as required by State law) will involve additional more detailed analyses, programs, and action strategies by a variety of stakeholder agencies that have different responsibilities related to water resources. A coordinated, interagency approach consistent over many years will be needed to make progress in meeting the goals of the Functional Plan, including meeting water quality regulatory requirements that will continue to evolve. The Functional Plan is one component of an overall coordinated interagency approach to dealing with water resources and water quality issues and needs.

### **Water Supply/Wastewater-Related**

1. Continued growth beyond 2030 will put more demand on drinking water resources and wastewater treatment capacity, which will need to be addressed in planning.
2. There is a need to continue close coordination of water and sewer planning with the County's land use plan, and Growth Policy as the County continues to grow.
3. The Comprehensive Water Supply and Sewerage Systems Plan will continue to be the primary technical plan for addressing water supply and sewerage systems issues and needs in Montgomery County.
4. The following will continue to be important:
  - (a) Current plans and programs to address adequate resources for life-cycle replacement and maintenance of water supply and wastewater infrastructure.
  - (b) Source water protection and recharge.
  - (c) Planned reductions in nutrient loadings from wastewater treatment plants.
  - (d) Existing programs and actions to reduce water pollution from water and wastewater infrastructure.
  - (e) Protection of groundwater resources.
  - (f) Reduction of nitrogen contributions from septic systems will be an important component of overall nutrient control and reduction.

### **Water Supply/Wastewater and Water Quality/Stormwater-related**

1. Future growth needs to be consistent with Smart Growth principles.
2. There is little greenfield development capacity left in the County.
3. There will be an increasing need to redevelop to accommodate expected growth through redevelopment and infill.
4. Continuing to develop effective public outreach on water resources and water quality issues will remain an important factor.
5. Healthy natural resources are critical in ensuring good water quality.

### **Water Quality/Stormwater-Related**

1. Water quality is continuing to decrease locally and regionally as growth continues.
2. Where and how we grow in the future will be increasingly important in meeting water quality regulatory standards.
3. Opportunities to affect significant changes in water quality through land use will be limited; other strategies will be critical for maintaining compliance with regulatory requirements.
4. Redevelopment affords an opportunity to reduce imperviousness impacts associated with that growth.
5. Redevelopment affords an opportunity to increase water quality over existing conditions through better stormwater management.
6. Increasing water quality regulations will require more effective stormwater management and environmental site design for new development, redevelopment, infill, retrofitting of older development, and roads.

7. Water quality is continuing to decrease as our natural resources decrease in area, quality, and connectivity.
8. Natural resources protection and enhancement will be increasingly important in meeting water resources protection needs and water quality regulatory requirements.
9. Increased inter-agency cooperation and collaboration will be essential to meet water quality standards and regulatory requirements.
10. A watershed-based approach is needed to identify and prioritize land use planning and stormwater management opportunities for improving and protecting water quality.
11. County watershed studies, County stormwater permit (MS-4) Implementation Plans, and Total Daily Maximum Load (TMDL) Implementation Plans for non-point sources will provide the primary technical tools and plans for detailed analyses of water quality-related issues and needs, and action strategies.
12. Results of County technical analyses and plans will provide important input to guiding the implementation and updating of master plans, natural area protection and enhancement efforts, and the development review process.
13. Coordination of water quality improvement efforts with other stakeholder jurisdictions will be important in addressing TMDLs.

### **Policies and Recommendations**

A set of Policies and Recommendations have been drafted and have included significant input from stakeholder agencies. These agencies include the Department of Environmental Protection, the Department of Permitting Services, the Department of Transportation, the Department of Economic Development, Montgomery County Soil Conservation District, the Washington Suburban Sanitary Commission, and our Parks Department. Outside stakeholder groups are currently being briefed on the proposed policies and recommendations.

### **Land Use and Growth Policy**

**Policy 1.** *Plan future growth to not exceed water supply and wastewater treatment capacity.*

### **Recommendations**

- 1.1 Continue to assure that future development and redevelopment is coordinated with the County's 10-Year Water and Sewer Plan and with WSSC.
- 1.2 Reassess the Patuxent River Functional Master Plan, and update if needed to respond to and coordinate with the Patuxent Reservoirs Watershed Management Plan and the updated Patuxent River Policy Plan.

**Policy 2.** *Ensure that future growth is consistent with Smart Growth principles.*

**Recommendations**

- 2.1 Accommodate future growth as much as possible through redevelopment and infill development in existing urban areas within the Priority Funding Areas.
- 2.2 Continue to support agriculture as the preferred land use in the County's Agricultural Reserve.
- 2.3 Evaluate the success of the Building Lot Termination (BLT) Program for limiting non-agricultural development in the Agricultural Reserve.

**Policy 3.** *Plan future growth to minimize impacts to water resources.*

**Recommendations**

- 3.1 Design and implement redevelopment and infill to maximize water resources improvements over existing conditions.
- 3.2 Evaluate and recommend new or enhanced incentives for constructing green buildings, green redevelopment, and green retrofitting of existing development to maximize water resource benefits.
- 3.3 Integrate land use, zoning, redevelopment, and urban design planning and strategies into water resources protection and regulatory compliance programs and plans.
- 3.4 Use results from approved water quality implementation plans, watershed studies, Special Protection Areas, and State and County water resource monitoring to guide the master plan update process.

**Policy 4.** *Focus natural area protection, conservation, mitigation, enhancement, restoration and management to maximize water resources protection and quality.*

**Recommendations**

- 4.1 Increase forest, wetland, meadow, stream buffer, and urban tree canopy area countywide, especially in watersheds with regulatory limits, water quality impairments, or Tier II designations.
- 4.2 Adopt a Tree Ordinance.
- 4.3 Revise the Forest Conservation Laws and Regulations and Trees Technical Manual as needed to increase the speed and success of reforestation efforts.

- 4.4 Continue to support natural land preservation programs and activities, especially in watersheds with known water quality impairments.
- 4.5 Coordinate park planning and development with countywide efforts to address water quality regulatory requirements.
- 4.6 Develop and implement natural resource management plans for lands owned by local government agencies.
- 4.7 Identify ways to maximize water quality protection and improvement through protecting, restoring and enhancing natural areas.

### **Water Quality and Stormwater Management**

**Policy 5.** *Manage stormwater and non-point source pollution to maximize water quality and quantity benefits, and meet regulatory requirements and inter-jurisdictional commitments.*

### **Recommendations**

- 5.1 Develop and implement a collaborative interagency and external stakeholder process to effectively address existing and evolving water resource-related regulatory issues and needs.
- 5.2 Re-evaluate the Clean Water Task Force recommendation for an overarching Water Resources Policy Coordination Committee, and implement an institutional framework to assure broad-based interagency coordination and collaboration.
- 5.3 Identify and implement means to assure coordination with County municipalities that have planning and zoning authority, adjacent counties, and federal and state property-owners to meet water quality protection, compliance, and improvement needs.
- 5.4 Evaluate guidelines, regulations, and practices, including rainwater harvesting and reuse, and identify improvements needed to maximize water quality improvement and protection associated with new development, redevelopment, infill, roads, and retrofitting of older development.
- 5.5 Evaluate water quality models for subwatershed analysis and for use in developing TMDL Implementation Plans for pollutant sources not covered by the County's MS4 Permit Implementation Plans.
- 5.6 Use results from approved TMDL and MS4 Implementation Plans, watershed studies, Special Protection Areas, and State and County water resource monitoring to guide the development review process.

5.7 Identify and pursue for priority implementation those recommendations of the County's Climate Protection Plan and any subsequent efforts of the Sustainability Working Group which will have direct benefits on water quality and quantity.

**Policy 6.** *Maintain effective public outreach and educational programs to convey the vital role of water resources and water quality to the County's overall health and sustainability.*

**Recommendations**

6.1 Evaluate existing efforts and implement more effective programs to foster a general awareness of the importance of viewing stormwater as a resource to be valued and used as much as possible.

6.2 Enhance stewardship, education, and outreach programs for all stakeholder groups to increase the voluntary implementation of pollution prevention and runoff management practices.

6.3 Continue the development, refinement, and promotion of on-line tools to raise awareness and encourage stewardship for water resources and promotion, of public management and water quality improvement.

**Drinking Water and Wastewater**

**Policy 7.** *Continue to ensure that the Comprehensive Water Supply and Sewerage Systems Plan supports and is consistent with the land use component of the General Plan as amended by area and sector master plans.*

**Policy 8.** *Continue to use the Comprehensive Water and Sewerage Systems Plan to ensure that water supply and wastewater treatment capacities are sufficient for existing and planned development and redevelopment.*

**Policy 9.** *Continue to ensure adequate and safe water supply and wastewater conveyance throughout areas served by community systems.*

**Policy 10.** *Continue to foster, through public outreach and education, a general awareness of the importance of viewing drinking water as a resource to be valued, conserved, and used as wisely as possible.*

**Policy 11.** *Continue programs and actions to minimize pollutant contributions to surface water and groundwater from water and wastewater infrastructure, and meet applicable water quality regulatory requirements.*

**Recommendations**

- 11.1 Continue to incorporate appropriate and progressive technology at wastewater treatment facilities to meet wastewater point source pollution limits, while allowing for planned growth.
- 11.2 Continue studies and programs to reduce inflow and infiltration into wastewater collections systems.
- 11.3 Continue programs to reduce sanitary overflows and pipe failures, in accordance with WSSC's Consent Decree agreement with EPA.

**Policy 12.** *Continue programs and actions to protect and recharge source water resources.*

**Recommendations**

- 12.1 Continue to promote and implement local and regional source water planning and recommended actions to protect the Potomac and Patuxent Rivers as drinking water sources.
- 12.2 Reduce nitrogen contributions to surface and groundwater from septic systems.
- 12.3 Continue to address well and septic system issues according to the policies and procedures included in the County's Water and Sewer Plan.

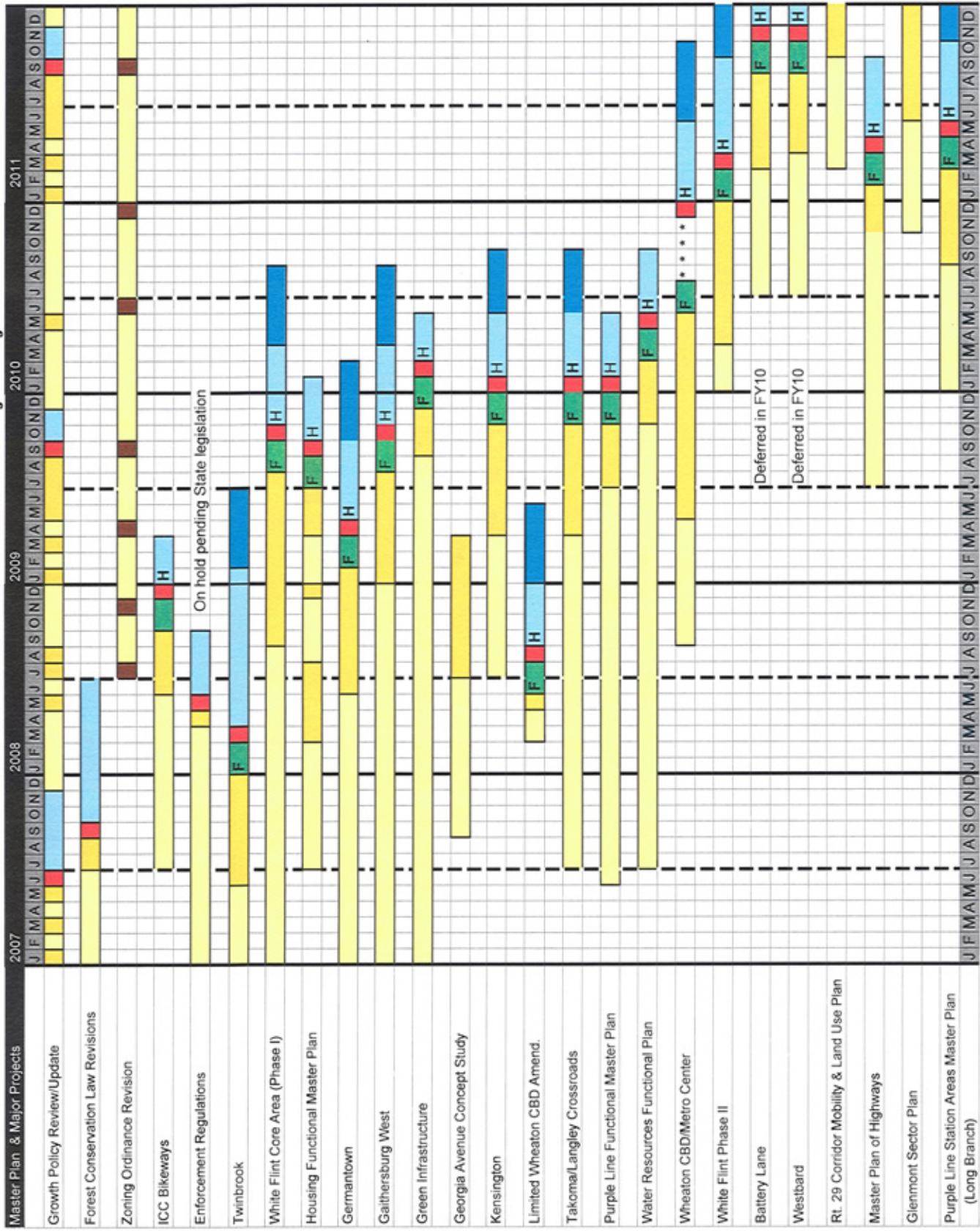
**Next Steps**

A draft WRE is being prepared and we anticipate bringing the full draft text to the Planning Board in mid October. See the attached master plan chart for the approved plan schedule.

MS:ss  
Attachment



# Schedule: Master Plans and Major Projects



■ Staff  
■ Planning Board  
■ Planning Board and PHED  
■ County Executive  
■ Council Hearing Notice Period  
■ Council Review  
■ Commission Adoption, SMA, Publication  
■ F Planning Board Draft  
■ H Hearing  
■ H Hearing  
■ Designates Fiscal Years  
■ \* Council consideration delayed until after election.