

Section 7: STATE AND REGIONAL POLICY RECOMMENDATIONS

This Section focuses on state and regional policy recommendations to further implementation of watershed management and water resources protection in the Metro Water District. These recommendations are intended for state and regional agencies, and require no action on the part of local governments. Implementation of these policy recommendations are intended to advance the progress towards protecting and improving watershed health within the Metro Water District. The recommendations identify actions to be taken, the agency to lead the action, and the year for the action to begin is shown in parenthesis.

GEORGIA DEPARTMENT OF TRANSPORTATION NPDES MS4 COMPLIANCE

Water quality issues resulting from the significant amount of impervious surface associated with major roads across the Metro Water District can threaten watershed health. The Georgia Department of Transportation (GDOT) is responsible for the design, installation, and maintenance of state highways and roads. Currently, GDOT is exempt from applying for land disturbance permits (O.C.G.A. Section 12-7-17(a) (9)) for their construction projects. With this exemption, the primary regulatory authority for GDOT stormwater activities is the Georgia Water Quality Control Act and Phase II of the Municipal Separate Storm Sewer System (MS4) NPDES permit system, both enforced by Georgia EPD. GDOT is required to meet the same six minimum measures that local governments must address.

In some locations, existing GDOT-maintained roads were constructed without best management practices for water quantity and/or quality. Retrofit projects may be necessary to mitigate the impact of these impervious areas on local waterbodies, especially in drinking water supply watersheds and on impaired streams. GDOT should coordinate with local governments within the Metro Water District on individual watershed improvement projects.

The following recommendations should be considered by the GDOT and the Georgia EPD related to compliance with their NPDES Phase II permit:

- Georgia EPD should issue GDOT an NPDES MS4 Phase II permit that includes the six minimum measures. (2009)
- GDOT should develop road design standards that ensure post-construction stormwater controls are designed and developed to meet the same design criteria for stormwater management included in the Georgia Stormwater Management Manual and the Model Ordinance for Post-Development Stormwater Management. (2009 – 2012)
- GDOT should look at other State Transportation Departments, such as Caltrans in California for guidance on developing their MS4 Phase II permit. (2009 – 2010)

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- GDOT should develop a capital improvement plan that includes stormwater retrofits to address areas where GDOT-maintained roads have impacted watershed health. Watershed improvement projects should be coordinated with the local governments both during design and construction. (2010 – 2014, and ongoing)

FERTILIZER NUTRIENT CONTENT

The composition and concentration of certain nutrients, principally nitrogen and phosphorus, in residential and commercial fertilizers can contribute to elevated amounts of these nutrients in stormwater runoff due to the amount of imperviousness and the high clay content of local soils.

Considering current water quality challenges in Lake Lanier and Allatoona Lake and the importance of these reservoirs as drinking water supply sources, additional research is needed on the potential impact of lawn fertilizer on water quality. Georgia EPD as part of the Comprehensive State-wide Water Management Plan will develop guidance for local government programs to manage fertilizer related to lawn use in watersheds where phosphorus loading is an issue. The Metro Water District should consider the benefits of these recommendations prior to conducting additional research or creating additional recommendations for future action.

BACTERIA STANDARDS AND GUIDANCE

Fecal coliform bacteria is the primary water quality parameter of concern in the Metro Water District as demonstrated by the 2008 Georgia 303(d) list of impaired waters. According to this list, over 1,100 miles of streams in the Metro Water District exceed the fecal coliform bacteria standard. Currently, the standard does not accurately reflect the potential for human illness based on contact with surface water. The standard also does not allow for natural background levels of bacteria found in some forested streams with only wildlife sources which are currently classified as impaired.

Studies have shown a stronger relationship between the presence of *E. coli* and the occurrence of human illness than between the presence of fecal coliform bacteria and human illness. Georgia EPD initiated actions to consider the use of *E. coli* as a bacteria standard and is currently awaiting EPA guidance documents for the monitoring of *E. coli* before continuing efforts to revise the bacteria standards. This standard may provide an appropriate measure of the potential health risk related to exposure to human-related waste products.

Current rules and regulation provide for a variation in fecal coliform standards if water quality and sanitary surveys show that fecal coliform from non-human sources exceed 200/100mL occasionally. The *E. coli* standard would provide another tool to determining the source of fecal coliform bacteria concerns.

The following recommendations should be considered by Georgia EPD related to the Metro Water District Watershed Management Plan:

- Review EPA guidance documents on monitoring when available.
- The Georgia EPD should allow local governments to remove streams from the 303(d) list of impaired waters if, through *E. coli* monitoring, it is proven that the source of impairment is natural wildlife sources. (2014)

COMPREHENSIVE LAND USE PLAN COORDINATION

Georgia Department of Community Affairs (Georgia DCA) is responsible for overseeing required Comprehensive Land Use Plans and implementation of Part V Environmental Planning Criteria under the Georgia Planning Act.

Georgia DCA currently reviews Comprehensive Land Use Plan for compliance with the Metro Water District Watershed Management Plan. The updated Watershed Management Plan includes new coordination actions for local governments related to watershed planning. For example, local governments are required to communicate annually with the local land use planning staff on watershed health issues (Measure 5.B.1). These requirements are important to protecting watershed health by avoiding problems that could occur due to future land use changes.

The Part V Environmental Planning Criteria include important protections for source water supply watersheds. These criteria were recently updated by Georgia DCA and Georgia EPD. Reviews of the Part V Environmental Planning Criteria will need to be more thorough as local governments have several options available for compliance with the updated criteria.

The following recommendations should be considered by Georgia DCA related to required Comprehensive Land Use Plan reviews:

- The new Comprehensive Land Use Plan review checklist should be updated as needed to reflect the updated Watershed Management Plan requirements. (2009)
- Require annual coordination between the land use planning staff and watershed management/stormwater staff to mirror the requirement for this annual coordination in the Watershed Management Plan. (2010 and ongoing)
- Georgia DCA should communicate periodically with the Metro Water District staff on local implementation challenges that are shared by multiple communities so that staff may work through these challenges with the Technical Coordinating Committee (TCC). (2009 and ongoing)
- A thorough review of local ordinances during 10-year Comprehensive Land Use Plan updates should be accomplished to ensure that Part V drinking water supply watershed buffers have been adopted and are being implemented at a local level. (2009 and ongoing)
- Consider adding additional reviews of the Part V Environmental Planning Criteria implementation prior to issuance of grants or awards sponsored by Georgia DCA. (2010 and ongoing)
- Georgia DCA should discuss implementation challenges of the Part V Environmental Planning Criteria annually with Georgia EPD. (2010 and ongoing)

SEPTIC SYSTEM PLANNING AND COORDINATION

The Georgia Department of Human Resources (Georgia DHR) is responsible for setting standards for the installation of septic systems and post-construction inspections of septic systems. The Georgia DHR is also responsible for working with homeowners on addressing failed septic systems. As failure of septic systems can have an impact on watershed health, they play an important role in implementation of both the Long-term Wastewater Management Plan and the Watershed Management Plan.

The following recommendations should be considered by Georgia DHR:

- Environmental Health professionals should meet annually with local governments and local wastewater providers. (2009 and ongoing)
- Local governments under the Long-term Wastewater Management Plan are required to identify critical areas that may not be appropriate for septic systems or where additional management of septic systems is needed. Environmental Health professionals should work with the local jurisdictions to identify these critical areas and support the additional management measures that local jurisdictions require in these critical areas. (2009 and ongoing)
- Consider amending current law to allow establishment of maintenance requirements for non-mechanical wastewater systems (i.e. septic systems). (2009)

STREAMLINE REPORTING REQUIREMENTS

Georgia EPD oversees a number of permit programs, each with their own reporting cycle and reporting requirements. The reporting requirements for the NPDES permits, Metro Water District, State Water Plan, and Watershed Protection Plan programs managed by the State often overlap and require the same information to be reported to several different departments within Georgia EPD during different times of the year. Instead of focusing on addressing local watershed issues, local governments spend valuable time completing these reports. The Georgia EPD and the Metro Water District participated in the Georgia Association of Water Professionals (GAWP) committee focused on the streamlining of watershed and stormwater reporting requirements.

Meeting all of the programs' reporting requirements could be streamlined without changing the individual programs by aligning the reporting periods and establishing a web-based electronic data management center for long-term water quality results and annual reporting. Web-based data entry would allow Georgia EPD to query data submitted over several years and electronically search for key words. If implemented correctly the web-based reporting will simplify reporting procedures and decrease the amount of paperwork for both the local jurisdiction and the Georgia EPD.

The following recommendations should be considered by Georgia EPD related to streamlining existing reporting requirements related to the Watershed Management Plan:

- Develop an internal implementation team with community representatives to work towards implementation of the GAWP Streamlining Task Force recommendations. (2009 – 2010)
- Update reporting timelines for interested communities so that their reports have the same reporting cycle to reduce challenges of streamlined reporting. (2009)
- Assess the viability of a web-based electronic data management center that would accept and store data related to reporting requirements. (2010)

GEORGIA STORMWATER MANAGEMENT MANUAL

The objective of the Georgia Stormwater Management Manual is to provide guidance on addressing post-construction stormwater runoff. The goal is to provide an effective tool for use by local governments and the development community to reduce both stormwater quality and quantity impacts, and protect downstream areas and receiving waters. The Manual was first published in 2001 and should be updated to include additional best management practices for addressing stormwater.

The Atlanta Regional Commission (ARC) has received a 319(h) grant from Georgia EPD for the creation of Volume 3 of the Georgia Stormwater Management Manual on Pollution Prevention. This manual will provide a resource for communities implementing the pollution prevention requirements of this Watershed Management Plan as well as NPDES MS4 permit requirements.

The following recommendations should be considered:

- ARC should update Volume 2 of the Georgia Stormwater Management Manual (Technical Handbook). Additional stormwater controls for consideration may include: greenroofs, tree planter boxes, rain gardens and cisterns. Consider additional/revised design variants for stormwater controls already in the Manual as well as additional guidance on downstream analysis requirements. (2009 – 2011)
- ARC and the Metro Water District should coordinate training classes on the Georgia Stormwater Management Manual as needed with organizations such as the Georgia Association of Water Professionals (GAWP). (2009 and ongoing)
- ARC should complete Volume 3 of the Georgia Stormwater Management Manual (Pollution Prevention Guidebook). (2009)
- Conduct training, as needed, with the communities in the Metro Water District on use and applicability of Volume 3 when completed. (2009 – 2012)

WATERSHED MANAGEMENT PROGRAM EVALUATION

The Metro Water District should work through the Technical Coordinating Committee (TCC), and if necessary, a sub-committee of the TCC to discuss options for measuring progress to improve the Metro Water District annual progress reports. Metro Water District staff should facilitate discussions to establish additional methodologies for measuring progress of the Watershed Management Program (2009 – 2011).

REGIONAL MONITORING NETWORK

Monitoring efforts--a particularly those on inter-jurisdictional water bodies and main-stem rivers--can expand the assessment of the Watershed Management Plan and implementation efforts across the Metro Water District.

The Metro Water District should explore leveraging existing real-time flow and water quality monitoring data currently performed by USGS and other entities within the region. The Metro Water District should also consider using USGS or other entity to perform more detailed analysis of the monitoring data to determine linkages between watershed conditions and the water quantity and quality data. As funding permits, the Metro Water District may consider supplementing the existing monitoring stations with additional stations and/or adding equipment to existing stations.

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