

Management Objective Four – Water Quality
A Summary Report of Basin Advisory Committee Responses
Submitted to the Georgia Environmental Protection Division
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Protecting water quality, the fourth management objective of the statewide water planning process, was the topic of the Basin Advisory Council meetings held between September 19th and 28th. This management objective seeks to protect water quality by reducing pollutant loading in runoff from land and treated wastewater discharges so that the assimilative capacity of waterways is not exceeded. It also works to ensure that waterways are able to meet designated uses.¹

The discussion packet disseminated by EPD and the discussions within the BACs focused on three critical issues: Understanding the Status and Condition of our Water Resources; Modified Management Practices and Tools; and Growth Management and Water Quality Protection. In each of these areas, potential policy options and questions were provided to focus BAC discussions. Following are the policy options presented and general summaries of BAC responses to those policy options.

Understanding Status and Condition of our Water Resources

Water Quality Standards – Georgia water designated uses and water quality criteria would be reviewed, updated, changed and enhanced as appropriate. Special consideration would be given to: 1) establishing standards for sensitive and/or environmentally significant waters; 2) changing fecal standards for all streams; and 3) establishing new standards or designating a specific use for urban areas.

No general agreement was reached in discussions on establishing a standard for sensitive and/or environmentally significant waters. Some BAC members expressed that if standards are set too high, the stage is being set for failure, while others felt that with incentives, communities might be more likely to work towards higher water quality designations. Others expressed the feeling that our resources should be focused on meeting current standards.. There appeared to be agreement that any decision on designations should be based on sound science, and at a minimum, we should fully utilize the current suite of designations, including ‘Outstanding Natural Resource Waters.’

In regard to fecal standards, many BAC members expressed the desire to adopt E. coli standards in place of fecal standards. It was noted that the US Environmental Protection Agency is currently finalizing E.coli (?) standards. Beyond adopting the E. coli standard, the need for strict adherence to that standard, particularly in areas where swimming is likely to occur, was also expressed by many. Others suggested that a determination needs to be made on whether other bacteria besides fecal or E. coli would more effectively

¹ From the discussion packet prepared by EPD, page 4.

reflect potential human health risks. It was noted that fecal counts can be higher than expected from the impacts of wildlife, and a differentiation needs to be made when identifying the fecal contamination source. Including sedimentation levels in the water quality standards was suggested, as was the advantage of using conductivity measurements to describe what is happening to that water.

In discussions surrounding the creation of a new 'urban waters' designation, concerns were raised on the potential downstream impacts of reducing water quality requirements in urban streams. BAC members expressed the sentiment that urban streams should actually have increased water quality requirements because of the cumulative impacts felt downstream and the potentially high level of human contact with urban streams. Stormwater runoff from intensive urban land use should be managed before it reaches a stream, and there must also be some connection made between land use planning at the local level and stream designations at the state level. A better understanding of the connection between land use and water quality needs to be made.

Statewide Water Quality Monitoring – *Georgia should review water quality monitoring efforts and develop a program to provide for monitoring to adequately assess the quantity and quality of Georgia waters and to serve as the foundation for the Statewide Water Management Plan and future water resource management decisions.*

Again and again, across all BACs, the need for adequate funding for water quality monitoring was expressed. There is no agreement on how monitoring should be funded as some expressed that developers should pay, others said local governments, while some felt the state should expend the funds. BACs were uniformly unhappy about the fact that only 20% of Georgia's 70,000 stream miles are monitored.

There was agreement with the idea that good data is needed to make good decisions and that requires funding for stream monitoring, but there was not agreement on the use of data collected by volunteer groups such as Adopt-a-Stream. Some felt it should be included if a standard protocol, created by EPD, was utilized. Others felt that there would be no quality control in place. It must be decided if the benefits of having additional monitoring data outweigh the potential variances in sampling techniques and protocol. A protocol should be established for capturing and evaluating samples. There should be training and certification for both professionals and volunteers.

There appears to be agreement that at current levels of funding, it is more important to gather statistically significant samples consistently in a sustainable manner. Building a database of information on the condition of the 20% of streams currently monitored is more important than having one sample for 80% of the state's streams. While more monitoring will lead to better information, it was again noted that single samples from all streams is not as valuable as targeting streams known to be under stress.

Modified Management Practices and Tools

Enhance and Expand Water Quality Management Tools – In order to successfully protect, maintain and restore Georgia’s water resources, the tools available to the State and its partners would be expanded, and existing tools would be enhanced and/or used more efficiently.

The general response heard across the BACs was that there are good laws and regulations in place, but the lack of enforcement is problematic. The tools are there, but the funding is not. Some suggested that EPD should analyze what is and is not currently working and, if a particular program is not working, determine what needs to be done. It seemed more important to improve existing programs, and focus limited funding there, instead of developing new ones.

Several suggestions were made on this topic, including: creating a funding source for NPDES monitoring and enforcement through a permit fee; creating a clearinghouse of funding sources available for water quality improvement programs; creating uniform BMPs for all residential development; ensuring that the funds collected through E & S permits actually go to a dedicated fund for monitoring and enforcement, not the general fund; and improving agricultural regulations and enforcement.

The BACs again expressed that one size does not fit all permit holders, and this must always be considered. Water quality management tools that work in one basin might not be effective in another. Fitting the appropriate tools to the watershed is more important and could lead to greater water quality improvements. A combination of education, incentives and consequences as mechanisms for improving water quality should be in place.

Engage State Partners – EPD would engage all water partners to work together to cost effectively achieve Georgia’s water goals and ensure that all resources, especially natural resources and financial resources, are effectively employed.

Overall, the need to improve communication across state agencies was seen as vital to making water quality improvements. Better electronic recordkeeping and increased electronic communication were both recommended tools for engaging state partners. As well, BAC members felt it was important for EPD to have a strong interface with the Georgia Municipal Association and Association County Commissioners of Georgia, recognizing their ability to effectively communicate with local governments. Recognition for agencies and communities who work towards and accomplish water quality improvements was seen as important.

Several other recommendations to more effectively engage state partners were made, including:

- Support the approaches and efforts of regional and basin groups that are already working together;

- Allow non-profit groups to apply for 319 grants;
- Engage forestry, business, industry and the military in the process;
- Involve the Georgia Soil and Water Conservation Commission in the water management process;
- Require DOT to employ BMPs;
- Move quickly to establish links between the DCA planning process and EPD permitting; and
- Increase water quality education to the general public and elected officials.

On-Site Sewage Management Systems – *On-site Sewage Management Systems would be properly sited, designed, installed and maintained to ensure long-term performance to effectively reduce or eliminate negative impacts to water quality. Additional guidance and management would be required.*

Opinions on on-site sewage management systems varied widely. Some felt that EPD should take over the function of permitting septic tanks from the health department, while others expressed that the siting of septic tanks should be a function of the local government. There was agreement on the fact that there is no one size fits all approach with regard to septic because of the variety of soil types and conditions around the state. A comprehensive study needs to be done to better understand what kinds of soils and engineering are appropriate for septic, and the results of that study need to be enforced. The hardship waiver that can currently be granted by local health departments should be reconsidered in an effort to prevent septic from being placed where it will not function properly.

There are no requirements to repair a failing or defective septic system. BAC members felt that some type of maintenance requirement should exist. Several ‘absolutes’ emerged from the various BAC discussions: (1) No septic should be allowed in riparian zones; (2) no septic should be allowed in coastal zones with sandy soils where ground water is the primary drinking water source; and (3) no septic should be allowed where sewer is available. Home sellers should be required to inform buyers of the septic location and any maintenance that has been performed. Education programs for owners of on-site sewage management systems need to be in place, and certification programs for installers and inspectors should be created.

Illegal dumping of septage, and its impacts on water quality, is seen as an increasing problem. Another problem: What happens when a wastewater treatment plant does not have the capacity or refuses to accept septage from a hauler? Sewer customers have funded the wastewater treatment facilities, not users of septic systems. There must be some equity. A large concern is that fewer and fewer wastewater treatment plants will be willing to accept septage. This issue must be addressed.

Environmental Operator Certification and Training – *Georgia would continue to enhance environmental operator certification programs by providing training, education, and technical assistance as resources allow. EPD would continue to work with other state*

agencies, which issue licenses and/or certification, to develop and implement programs improving the quality of the water resources of the State.

Myriad workers impact point and non-point source pollution, from wastewater treatment plant operators to landscape crews. There are currently no licensing/certification requirements for individuals working under an organization or business, and there should be. A point system for maintaining certification should be developed, and training should be offered through vocational and technical colleges around the state. Regular reviews and testing should be required to maintain certification.

BAC members reiterated that as much education and enforcement as possible should be in place with a state curriculum for certification that extends beyond the scope of current regulations. Pertinent courses that provide updates on technologies and changes to regulations should be made available. Training should also be required for septic tank installers and for health department employees who approve septic installations. Fines for water quality violations should be significant enough so that they serve as a disincentive.

Incentives need to be in place to encourage members of the agricultural community to take voluntary courses and gain a better understanding of what they can do to protect water quality. Many options are currently available, but there is no incentive to take advantage of the offerings.

Growth Management and Water Quality Protection

Development and Urbanization – Georgia would continue to support and foster the cooperative and coordinated integration of land activity, development, and water quality management programs and activities that will restore and maintain the beneficial use of State waters. EPD will: coordinate relevant land and water quality management programs and activities; support and encourage local land development practices which minimize quantity and quality impacts on water resources; enhance an infrastructure to foster the coordinated development and implementation of watershed protection plans; explore additional resources to support local implementation plans; and assure that wastewater management decisions are consonant with positive community growth and local comprehensive plans.

The primary recommendation that arose from the discussions on development was the need to improve the current comprehensive land use planning requirements and to link EPD's permitting of water withdrawal and wastewater discharge with the planning requirements. The State Planning Act should be amended to strengthen the land and water link. The current planning framework is inadequate because different agencies regulate different parts of the problem (DCA is changed with comprehensive land use planning while water permits are issued through EPD). This integration of state programs would bring all agencies involved in planning, whether land or water, to the same table.

BAC members expressed that too much of land use planning is political and not based on science. The reduction of stream buffer requirements was an example provided. Real water quality planning can not be done without incorporating land use planning. The cumulative impacts of how land is used throughout a watershed and those effects on both water quality and quantity are important and must be linked. EPD should support state and local land development practices that minimize impacts on water quantity and quality, and local governments must work together to make this happen. Increased funding should be made available to encourage regional water (and land use) planning.

Antiquated tax structures are seen as a driving force behind agricultural and timber lands being intensely developed for residential use. The Department of Agriculture and the Forest Commission need to be engaged to reduce sprawl and the impact it has on water quality.

Wasteload Allocations – Wasteload allocations would be calculated using a basin wide or watershed approach. Allocations would thus be based on water quality modeling that considers multiple discharges within a basin or watershed. Furthermore, all potential discharges (20 year projections) would be included in the wasteload allocation process to move the State away from the current “first come, first served” basis.

While there appears to be some agreement that a watershed approach is the best way to look at wasteload allocations, BAC members would like to see the scale of the watershed defined and include both upstream and downstream considerations when determining wasteload allocations.

From a riparian rights perspective, one member questioned how future resources can be allocated to someone who does not have an existing right. Many recognized the inherent unfairness in the current ‘first come, first served’ system, but are unsure of how allocations will effectively be made if another strategy is used. Members questioned what will happen when a stream’s assimilative capacity has been reached and there is nothing left to allocate.

One BAC member recognized that this type of wasteload allocation would provide a chance to leave a set-aside for the possibility that there will be additional areas that will need allocations. The ‘first come, first served’ approach had pre-determined allotments, and once all the allotments had been distributed, no one else could request additional capacity necessary for growth. It was also pointed out that there must be a way to validate these future projections if allocations will be based on this. Other members preferred the ‘first come, first served’ system currently used.

While a watershed approach will give a better indication of the overall big picture and force cooperation among cities and counties, it could also lead to less control for local governments in how their own communities can grow. BAC members also expressed concern over the disconnect between this and the CUBs; they would like EPD to integrate the two more clearly.

Pollutant Allocation Trading – *EPD would develop a trading mechanism to allow for cost savings and flexibility in the management of the State’s assimilative capacity. The mechanism would be designed and managed to ensure that trading will result in water quality standards being met in a cost effective fashion.*

The majority of BAC members who commented on pollutant allocation trading were somewhat uneasy with the concept. Some felt it should be used only as a last resort, as it is more important to improve overall water quality. Trading was viewed as a race to the middle - an incentive for mediocrity. Providing trading as an option decreases the incentive for local governments to seek ways to improve water quality within their own jurisdiction, and it was seen as a mechanism to “buy your way out of a problem” instead of working to fix the problem. Some felt trading would require intensive monitoring at a large and prohibitive cost, which would negate the benefits of the trading program itself.

Pollutant allocation could negatively impact a community’s ability to grow because of limits in assimilative capacity. Another concern was the potential that trading could create hot spots where none currently exist because unbalanced loading would be difficult to manage. Improvement of water quality is the goal, not shifting water quality problems from one place to another. EPD is currently unable to put forth the type of enforcement this program would require.

On the other side, some BAC members believe that this is a tool that should be in the tool box, with the recognition that point source to point source trading would be more manageable. It was viewed as an innovative solution that could provide a more effective way to meet water quality standards. However, trading rules would need to be strictly enforced.

One BAC member said this trading program is one of the most interesting ideas heard and discussed in all the meetings to date and would like to see a program that clearly defines all the elements, including referencing specific credits for actions taken to improve water quality.