

April 18, 2006

Dr. Carol A. Couch, Chair  
Georgia Water Council  
c/o Georgia Environmental Protection Division  
2 Martin Luther King Jr. Drive SE, Suite 1152  
Atlanta, GA 30334

Dear Dr. Couch:

Attached are consolidated comments from a number of statewide organizations regarding the State Water "Policy Framework" to date. As you know, these organizations have been meeting in an attempt to reach consensus on various issues relating to the State Water Plan. We thought it would be most useful to consolidate these comments into one consensus document, rather than EPD receiving numerous individual letters that say the same thing.

We are committed to assisting EPD develop a fact-based and successful State Water Plan and these comments are submitted as a constructive effort towards that end.

Many of us were present to hear your comments on March 30 at the Georgia Association of Water Professionals and American Council of Engineering Companies/Georgia Water Summit. Many of the comments in the attached document track the discussion and dialogue from that meeting from you, consultants, water providers, business and the environmental community.

As you know, the overwhelming theme of that discussion was that "facts matter."

We particularly appreciated your comments on the need for more and better facts relating to water availability, use, areas of stresses, identifying priorities and the practical impact of various water policy proposals. We agree that this process would be advanced with more facts upon which to base informed decisions.

As was pointed out, there are many facts relating to water that we do know now and that can help put many of these issues in context. We need to ensure that those facts are compiled and disseminated. There are also many important facts that we do not know, and will not know until Georgia does a resource-based, comprehensive state water plan (currently set for 2008 or beyond) and we pledge to assist EPD in securing more resources in order to obtain this information.

We appreciated and agreed with your comments that the starting point on inter-basin transfers should be to "manage" these transfers, not to "limit" them. We also agree that "one-size-does-not-fit-all" and that we need to make policy decisions on the specific circumstances of each sub-basin or region. Clearly, it will be very difficult to develop this information without a resource-based State Water Plan (post-'08), so there are limits to what we can do now during this policy framework phase (now-July '07).

We recommend that the first phase of the water plan have an *information* component in addition to the other components now underway or planned. This information component should consist of the following elements:

1. Determine the information necessary to make informed decisions around policy options during this phase and to later prepare a comprehensive State Water Plan.
  - o Identify the information currently available and disseminate it in terms that decision makers and advisory committees can understand.

We believe much data exists from past planning efforts (e.g., Metro North Georgia Water Planning District plan; SW Georgia plan; Coastal plan; ACF/ACT plans; DNR's Regional Reservoir plan, RDC plans and local plans), stream and ground water monitoring, and EPD databases on water use. This compilation of data should include areas of consensus or data gaps identified by associated technical advisory groups and stakeholders.

2. Using the information gathered above, determine what important facts are missing, and prepare a schedule, scope of work and budget to collect these facts.
3. Identify the water policy conclusions that can be made only after such facts are obtained.
4. Identify the water policy alternatives, if any, where informed decisions can be made now based on existing facts. Do not make any decisions during this first phase where more facts are needed.

During this “policy framework” phase of this process, if we do not have the relevant information to understand the effect of various policies on our ability to meet future water demands, or the economic cost to Georgians of implementing policy alternatives, we should defer action and work with EPD to make getting this information a priority.

We appreciate the opportunity to actively participate in the development of the policy framework that will lead to a State Water Plan. We are committed to working with you to come up with a plan that will meet Georgia’s future water needs while protecting human health and the environment. We also stand ready to assist you in seeking funding to enable you to develop a facts-based State Water Plan for Georgia.

We would appreciate the opportunity to sit down with you and members of your staff to discuss these comments in more detail at your earliest opportunity.

Sincerely:

- **American Council of Engineering Companies of Georgia**
- **Association County Commissioners of Georgia**
- **Council for Quality Growth**
- **Georgia Agribusiness Council**

*(Signatories continued on next page - alphabetical )*

*(Signatories continued)*

- **Georgia Apartment Association**
- **Georgia Association of REALTORS**
- **Georgia Association of Water Professionals** (includes 135 utility members statewide - the following members also requested to add their endorsement as individual entities:
  - Augusta Utilities;
  - Columbus Water Works
  - Dalton Utilities
  - Macon Water Authority;
  - City of Austell
  - City of Brunswick Water and Wastewater Department
  - City of Hapeville;
  - City of Loganville;
  - City of Rome; and
  - City of Savannah
- **Georgia Chamber of Commerce**
- **Georgia Chemistry Council**
- **Georgia Economic Developers Association**
- **Georgia Forestry Association**
- **Georgia Industry Environmental Coalition**
- **Georgia Mining Association**
- **Georgia Municipal Association**
- **Georgia Poultry Federation**
- **Georgia Urban Agriculture**
- **Home Builders Association of Georgia**
- **Metro Atlanta Chamber of Commerce**
- **Metro Atlanta Landscape & Turf Association**
- **Regional Business Coalition of Metro Atlanta**
- **The Association of Ga.'s Textile, Carpet and Consumer Products Manufacturers**

## Comments to the Georgia Water Council on the State Water "Policy Framework" Process to Date

April 18, 2006

Consolidated comments by: *(alphabetical)*

- **American Council of Engineering Companies of Georgia**
- **Association County Commissioners of Georgia**
- **Council for Quality Growth**
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# Comments to the Georgia Water Council on the State Water “Policy Framework” Process to Date

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## SUMMARY

We believe that water is the most important issue impacting Georgia's future. Water is also an issue that has the greatest potential to divide Georgians.

To date, the biggest challenge by far is the current lack of baseline water information among stakeholders and decision makers. This information is needed to clarify the facts, put the issues in context, weigh policy alternatives and identify Georgia's priorities.

In the absence of this objective information being collected and broadly disseminated, our efforts to craft coherent and rational water policies for Georgia will be hindered. The various advisory committees created for this process and the Water Council need this information in order to understand the practical implications of the policy alternatives being proposed.

Much of this information exists today and should be pulled together into a package that non-scientists (elected officials, legislators, decision makers and opinion leaders and media) can also understand.

Just as importantly, at every step in the process we must *identify the information we need in order to make informed decisions*, and define how we need to go about getting this information.

Ideally, **Step 1** in the development of this State Water Plan would have involved creating a detailed, resource-based water plan by basin, sub-basin and region, based on facts:

Determine exactly what water supplies are available across the state, future demands on those resources, where the water quality challenges are, and what the instream needs are based on eco-region studies. We could thereby assess the combination of water tools, strategies and options necessary to meet future water supply needs in each of these different areas of Georgia.

Then, using this information during **Step 2**, we could make informed decisions about changes to certain laws and policies needed to implement these strategies.

However, in this case, we are doing Step 2 first, then Step 1.

As such, our efforts during this policy phase should be geared toward:

- Understanding the facts;
- Setting priorities, including the near-term issues that Georgia needs to address; and
- Reaching consensus on a process for the development of a Comprehensive State Water Plan beginning in 2008.

We understand EPD's challenge and support its efforts to make this process work with the funding that has been made available to date. We are optimistic that in 2008, Georgia can begin Step 2 – a robust, adequately funded, resource-based Comprehensive State Water Plan for Georgia and we support such a process.

In the meantime, we must proceed deliberately and cautiously. We must be careful not to tie our hands with sweeping water policy changes before we even get to the development of a Comprehensive State Water Plan. If we do not understand the practical implications of proposed policy changes on our ability to meet future needs all across the state, the prudent course will be to defer action - and make it a priority to get this information.

## DISCUSSION

Georgia has made significant progress in water management and quality improvement over the last 50 years. Since 1950, we have gone from virtually untreated waste water to today where all point sources are treated to high levels and permitted. But two major droughts in the late 1980's and the late 1990's, coupled with rapid growth have made Georgia keenly aware of its need to better understand its water situation and plan for the future.

As such, the "Comprehensive State-wide Water Management Planning Act" passed in 2004 required Georgia EPD to develop a State Water Plan. At the time this legislation was passed, it was anticipated that a resource-based comprehensive State Water Plan would be developed similar to the plan that had been developed by the Metro North Georgia Water Planning District.

However, given budget constraints and other priorities, only \$1.3M was budgeted for EPD to conduct this State water planning process through 2007. (By comparison, plans developed by the Metro North Georgia Water Planning District cost approximately \$8.5M, with two-thirds paid by local governments; one-third by the state).

As such, the process that has now been laid out (now through July 2007) will not result in the creation of a Comprehensive State Water Plan; but rather will involve a "policy framework" - developing changes to statewide water policies, regulations and laws; and a proposed structure for carrying-out a Comprehensive State Water Plan for Georgia in the future (2008 or later) including who should do the plans, boundaries (regions or river basins), how to pay for the plans, etc.

We have been actively participating in the EPD "policy framework" process as members of the various Basin and State Advisory Committees that have been established. We have attended and participated in the meetings and carefully reviewed the materials and information sent by EPD as context and background. To that end, we offer the following suggestions.

**Four fundamental principles** should guide all policy proposals to be developed as part of the State Water Plan, including the proposed strategies for "maximizing returns."

1. Georgia's statewide water planning should be premised on the dual imperatives of reliably meeting our future water supply needs and protecting our environment. One without the other is not a plan Georgia can live with.
2. All water strategies must be based on fact, data and Georgia-specific information. No strategy should be based on supposition, generalities or particular stakeholder agendas.
3. All water strategies must reflect the fact that water priorities and appropriate water management tools must vary by region, river basin and streams within Georgia. "One size fits all" will not work.
4. All water strategies must be evaluated (and implemented) in totality because they are all linked. No water issue or strategy stands alone. One potential strategy may address one specific water issue but it may conflict with another potential strategy addressing a different water issue.

## COMMENTS SPECIFIC TO “MAXIMIZING RETURNS”

The Basin Advisory Committee discussion package from EPD included policy proposals concerning:

- A “prototype policy framework” flow regime where upstream water consumption would be managed in the future to mimic natural downstream flow patterns.
- Proposals for altering or creating state policies for:
  - Instream Flow (the amount of water in rivers to satisfy fish and aquatic needs)
  - Land Application Systems (spraying treated wastewater on the land instead of directly discharging to rivers)
  - Septic systems, and
  - Inter-basin transfers (the net of ‘withdrawals vs. returns’ from one river basin to another).

### **“Prototype Policy Framework” - setting river flow regimes for aquatic life**

- **This approach represents a significant change from current water policies.**

The approach is to minimize alterations to natural flow regimes to protect aquatic life through limits on water consumption and controls on reservoir operations. These “flow regimes” - once established - would set a maximum limit for all future water supply uses.

- **We do not know what these flow regimes would be.**

EPD acknowledges that this information does not presently exist, but would need to be developed later. Setting ambitious instream flow requirements such as mimicking natural flow regimes or maintaining high percentages of average flows will have a significant impact on the amount of water available to satisfy future water supply needs. In terms of “natural flows,” there is a big difference between rivers with reservoirs and rivers with no reservoirs.

- **Before agreeing to this approach, we need to understand how this approach would impact our ability to satisfy future water supply needs in Georgia.**

Among the questions, how can one say “yes” to this approach until you know how these flow regimes will be set? What are the rules? Who will set the rules? Will these flow regimes keep us from meeting future water supply needs? When and in what areas?

- **As instream flow requirements increase, the size and cost of water supply reservoirs may also need to increase to meet future water supply needs.**

Ambitious flow regimes could necessitate the development of new, more distant supply sources (including inter-basin transfers) and construction of larger reservoir storage capacities.

- **Flow impacts for species must be balanced against water supply benefits and other impacts.**

Providing water supply from streams necessarily impacts the flow in streams. Such impacts must be balanced against:

- (1) the many benefits of providing a reliable water supply for Georgia's citizens and their jobs
- (2) the potential impacts of building more or larger reservoirs to meet more ambitious instream flow requirements, and
- (3) the potential impacts of requiring more inter-basin transfers by obtaining necessary additional water supplies from more-distant and out-of-basin sources.

### **Minimizing Land Application Systems (LAS)**

- **The approach outlined assumes that land application systems reduce returns to rivers, and therefore should be minimized. However, no scientific studies or basis for this assumption are provided.**

Land application systems certainly contribute to the base flow of rivers, even though there is no discharge pipe in the river. The EPD materials sent as background to the Basin Advisory Committees state that "there is very little scientific research on which to base conclusions about the extent to which LAS and septic systems diminish the quantity and timing of surface water flow to Georgia Streams." (pg. 18).

- **Is limiting land application systems really a water policy priority for Georgia?**

Land Application in the entire state currently totals 118 million gallons per day (MGD). This is about 1/10<sup>th</sup> of the amount of wastewater discharged to rivers, and it is highly unlikely that any of these point sources would ever convert to land application systems.

Moreover, as pointed out in the materials, of the total of 118 MGD for land application systems in Georgia, Dalton and Clayton County make up over half (Dalton is 44 MGD; Clayton County's combined LAS/constructed wetlands is 20 MGD). These LAS systems are widely regarded as state-of-the-art, and beneficial to the environment.

- **It is unwise to make any statewide policy for land application systems without looking in detail at the needs of specific areas.**

The Carl Vinson background materials on "Maximizing Returns" state in its conclusion on LAS: "Consequently, careful and site-specific consideration should be given to the use of land application, depending on the water quality and quantity needs of the basin. Whether land application is appropriate or not in any given watershed depends on the local situation and the water management objectives for that stream." (pg. 35)

*This underscores the overall need to make decisions on water policies based upon the specific situation and needs in different watersheds and jurisdictions. This is difficult, if not impossible, without first doing a detailed and resource-based state water plan.*

- **In many cases, we have land application systems because streams are not large enough to accommodate a surface water point source discharge, or surface discharge permits were not otherwise available from Georgia EPD.**

EPD has been encouraging land application systems in some areas for well over 20 years. EPD will soon be considering changes to the water use classification system for rivers that could also limit new surface water discharges. This should be looked at as well, because without a surface water discharge, the only available option will be land application systems and septic systems.

### **Minimizing Septic Systems**

- **We need more scientific information about consumptive use from septic systems during drought conditions.**

EPD considered septic systems and land application systems to be 100% consumptive for purpose of the Tri-State negotiations. But as stated above, we know that water from septics (like land application) contributes to the base flow of rivers and streams.

However, the critical condition is what happens to water in septics during extended drought periods with no rain. But to date, we are aware of no information about how much water gets back to rivers in various parts of Georgia in times of drought. Absent this information, we cannot make a fact-based case to limit septic development based solely on the motivation of “maximizing returns.”

- **Septic systems are an issue where we can’t have a one-size-fits-all policy. The way septic systems return water in groundwater areas versus surface water areas is very different.**

Septic systems are used throughout Georgia and probably pose no water supply threat in many areas, especially groundwater areas. In rapidly growing urban areas, the issues of the amount of water that septic systems receive and when and how it is returned to the source needs considerable study. For example, in the metro Atlanta area it is estimated that over 500K septic systems exist, with new ones being added daily. Virtually all of the water entering these septic systems is withdrawn from surface water sources. It is necessary to understand the route and quantity of water returned to the streams by septic systems so that an adequate water balance can be developed and understood in this rapidly growing area.

- **We also can’t just look at the “maximizing returns”- water supply aspect of septic systems and develop a coherent policy.**

To develop workable policies on septic systems, in addition to the baseline information gaps noted above in terms of consumptive use, we will also need to consider other aspects including water quality issues created by septic systems, sewer availability, infrastructure costs, etc.

## “Limiting” Inter-basin Transfers

- **The policies and background documents provided by EPD have, as their starting-point, “limiting” inter-basin transfers. We should rather be talking about “managing” inter-basin transfers.**

Any discussion of inter-basin transfers should address both detriments to the donor basin, as well as benefits to the State of Georgia. As such, in considering policy changes on inter-basin transfers, we need to be looking on a case-by-case basis.

To illustrate, the Carl Vinson 2006 research document prepared for EPD, state in its conclusion on inter-basin transfers:

It is important to remember that while an inter-basin transfer can appear to be negative from a basin-of-origin perspective, it may result in positive net benefits when viewed from a regional or statewide perspective. For example, there may be circumstances in which an inter-basin transfer could improve the quality and instream flow of a high-value water body. (pg 64)

- **There is a lot of strong opinion and passion around the inter-basin transfer issue, especially as it relates to metro Atlanta. There should be a discussion of the real impact of these inter-basin transfers on water supply in other parts of the state.**

*Note: Since the main challenge of managing water in Georgia is droughts, all flow numbers below are based on a worst-case scenario – the lowest-ever recorded annual average of flows in each river.*

**Flint River Basin:** By way of example, today, approximately 6 MGD (net) is transferred out of the Flint River basin by metro Atlanta. Based on a worst case scenario (using the lowest recorded annual daily flow during the 1988 drought) these inter-basin transfers impact the flow of the Flint River at Albany by 0.3%.

By 2030, inter-basin transfers out of the Flint River will decrease to 2 MGD, representing a net loss of flow of 0.1% in the Flint River at Albany.

**Ocmulgee River Basin:** The Ocmulgee River basin has a net gain of water of 87 MGD (6.1% of the river flow at Lumber City), which helps meet water supply needs, the instream needs of aquatic life, and to dilute and assimilate wastewater.

**Etowah River Basin:** Currently, 12 MGD is transferred out of the Etowah River basin by metro Atlanta. Based on a worst case scenario using “lowest annual daily flow,” these inter-basin transfers reduce the flow of the Coosa River at Rome by 0.7%. By 2030, this transfer is projected to increase to 65 MGD. However, the impact on the Coosa River at Rome would be 4%. (Note – the Oostanaula and Etowah Rivers converge in downtown Rome to form the Coosa River).

**Chattahoochee River Basin:** Currently, transfers out of the Chattahoochee River basin by metro Atlanta are 87 MGD but under the Metro N. Ga. Water District plan, are expected to decrease to 31 MGD by 2030 (a net gain of 56MGD).

**Savannah River Basin:** The City of Demorest (Habersham County) has submitted a water withdrawal application to Georgia EPD requesting to withdraw 10 MGD from Lake Yonah. This water would be discharged back to the Savannah River Basin and to the Chattahoochee River Basin through septic systems. To put this in context, even if none of this 10MGD were returned to the Savannah Basin (which is not the case) this would result in a loss of less than *one-half of one percent* (0.5%) of the Savannah River's flow at Augusta under a worst case scenario (lowest annual average flow).

## CONCLUSION

We recommend that this first "Policy Framework" phase of the Water Plan due in mid-2007 have an *information* component in addition to the other components now underway or planned. This information component should consist of the following elements:

1. Determine the information necessary to make informed decisions around policy options during this phase and to later prepare a comprehensive State Water Plan.
  - o Identify the information currently available and disseminate it in terms that decision makers and advisory committees can understand.

We believe much data exists from past planning efforts (e.g., Metro North Georgia Water Planning District plan; SW Georgia plan; Coastal plan; ACF/ACT plans; DNR's Regional Reservoir plan, RDC plans and local plans), stream and ground water monitoring, and EPD databases on water use. This compilation of data should include areas of consensus or data gaps identified by associated technical advisory groups and stakeholders.

2. Using the information gathered above, determine what important facts are missing, and prepare a schedule, scope of work and budget to collect these facts.
3. Identify the water policy conclusions that can be made only after such facts are obtained.
4. Identify the water policy alternatives, if any, where informed decisions can be made now based on existing facts. Do not make any decisions during this first phase where more facts are needed.

This will be a major, but extremely important, work effort. The existing Advisory Committees should be involved.

This effort should also include an examination of the economic cost of these policy options. In order to make informed judgments, the Water Council and Advisory Committees need to know estimated cost to Georgians that would result from the implementation of water policy changes.

A key fact essential to the success of any plan is to know what proposed changes in policies will *cost* and identifying adequate *funding*. In Spring 2001, the DNR Board issued a "White Paper" stating that the need to fund water programs was the most important issue the Joint Comprehensive Water Plan Study Committee would face. Sixteen months later, the Joint Committee report encouraged the General Assembly to appropriate funds for development of the comprehensive water plan and to "*establish a group of experts to examine mechanisms and alternatives for funding of the Plan...*"

The end result should allow an overall perspective of the needed future financial commitment by the State, an assessment of local government revenue tools needed to implement current state minimum requirements, and what cost estimates need to be determined to achieve a comprehensive Georgia Water Plan

In examining the water planning that has been done or is in progress across the State, and through the existing Advisory Committee process, EPD should also consider outlining the minimum requirements for local, regional, aquifer and/or watershed planning.

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We are all searching for a more productive and efficient use of Georgia's water. This involves the scientific and technical, and equally important, social and economic considerations. It is not an easy task, but an emphasis on communicating more baseline facts and putting the overall issues in context will be helpful.

Planning or policy positions advanced without a full understanding of the facts, or based on opinions or assumptions will not provide the foundation we need to plan and manage Georgia's water future.

With water planning and policy that is fact-based, we can successfully accommodate growth in our State while protecting our natural environment.