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January 29, 2009

Chairperson Kit Dunlap
Metropolitan North Georgia Water Planning District
40 Courtland St. NE
Atlanta, GA 30303

Re: Metro District's 2008 Draft Water Supply and Water Conservation Management Plan

Dear Ms. Dunlap:

I am writing on behalf the Coosa River Basin Initiative/Upper Coosa Riverkeeper, a non-profit environmental advocacy organization with 3,400 members. Our mission is to inform and empower citizens so that they may become involved in the process of creating a cleaner, healthier, more economically viable Coosa River Basin. Our members reside both within the Metropolitan North Georgia Water Planning District and downstream from the District. Those in the District are concerned that the 2008 Draft Water Supply and Water Conservation Management Plan (WSWC) falls short of their needs and those downstream are concerned that the plan fails to implement aggressive water conservation measures and relies too heavily on construction of new reservoirs and escalating interbasin transfers from the Coosa River Basin. While we commend the District for progress in saving water through conservation, we feel the District can and should do more to protect water supplies in Metro Atlanta and downstream. We appreciate the opportunity to comment on the 2008 update of these plans.

Weak Water Conservation Goal

The 13 percent water conservation goal for 2035 (draft 2008 WSWC Plan, 4-13) falls far short of what downstream communities would like to see Metro Atlanta accomplish.

In water conservation education programs conducted by CRBI in Rome, families in "new housing stock" reduced their winter time water use by as much as 25 percent by changing behavior and by installing devices included in water conservation retrofit kits in their homes. In light of our own efforts at water conservation in newly constructed homes, excuses about difficulties achieving high percentages of water conservation in new housing stock ring hollow.

We recommend that the District follow Governor Sonny Perdue's lead with a goal of permanently reducing Metro District water use 20% by 2020 and set a more aggressive long-term goal of 30-35 % by 2035. Water savings should be documented by each water utility in the District and goals should be set for each water conservation measure.

CRBI is a grassroots environmental organization that works to inform and empower citizens so that they may become involved in the process of creating a cleaner, healthier, more economically viable Coosa River Basin. 1

We also recommend the following measures:

- Set an aggressive goal to reduce leaks to 10% by 2020, and to 5% by 2035. The 2003 plan had a weak goal of 15% leak reduction by 2030 (Table 5-4, 2003 WCWS Plan, 5-14). The current draft plan does not appear to contain *any* quantitative goal;
- Reinstate the requirement that local governments pass an ordinance requiring retrofit on reconnect for single- and multi-family residential housing (2003 WSWC Plan, 2-8), modeled after the successful program implemented in Dekalb County;
- Require local governments to pass an ordinance restricting daytime watering, year-round on a permanent basis;
- Require local governments to pass ordinances implementing the following conservation actions considered but ultimately rejected in the final 2003 plan (Table 5-4, 2003 WSWC Plan, 5-12 through 5-14) and the draft 2008 plan (Table 4-3, draft 2008 WSWC Plan, 4-6 through 4-8):
 - residential washer rebate program for the purchase of water-efficient washers;
 - coin-operated washer rebate program for the purchase of water-efficient washers;
 - hotel-motel water audits focused on bathrooms, kitchens, ice machines, cooling towers, landscaping, and irrigation systems/scheduling;
 - require or offer rebates for installation of low flow spray nozzles used for rinsing and operations in restaurants;
 - require or offer rebates for installation of advanced irrigation controllers on existing and new irrigation systems, to include a water-budgeting feature, multiple start times, and a rain/soil moisture sensor;
 - drought-tolerant requirements for new, non-residential landscapes;
 - drought-tolerant landscaping of city and county utility facilities;
 - irrigation audits of large turf areas;
 - require or offer rebates for installation of efficient process equipment for select businesses (restaurants, hotels/motels, office sanitation); and
 - require or offer rebates for sub-meters on cooling towers.

Some of the conservation measures placed in the “Optional Education Toolbox” (table 4-3, draft 2008 WCWS Plan, 4-8) should be made mandatory. For example, the Metro District should develop model ordinances and require local governments to

- provide customers with their historical water use on water bills. This information should include average daily use and be stated in “gallons” rather than an alternative such as “units” or “cubic feet.”
- pass a water waste ordinance to prohibit water waste such as runoff from over-watering landscaping, irrigation during rainfall events, not repairing leaks, and other wasteful activities; and
- pass an ordinance prohibiting homeowner associations (HOA) and covenants, conditions, and restrictions (CC&R) from mandating water intensive landscaping or irrigation.

Residential water users should not bear the entire burden of meeting our water conservation goals. In addition to the business-focused measures enumerated above, we strongly urge the Metro District to require local governments to pass ordinances or provide rebates to implement the following:

- retrofit or reconnect for new businesses;
- installation of high efficiency toilets (HET) and urinals for new businesses;
- rebates for installation of HET toilets and urinals in existing businesses;
- sub-metering for irrigation;
- conversion from once-through to twice-through cooling; and
- install systems for recapture and reuse of water on evaporative coolers/steam generators.

Impact of New Reservoirs on Yield of Lake Allatoona?

The WSWC plan relies heavily on the construction of new reservoirs in the Etowah River Basin. Three new reservoirs are planned in the Coosa River Basin prior to 2035; an additional six potential reservoir sites have been identified for post-2035 planning. We request an explanation of how these reservoirs will impact the yield of Lake Allatoona as it appears that each of these new reservoirs will only shift water storage from Allatoona to upstream portions of the basin.

Georgia EPD has set a withdrawal limit from Lake Allatoona of 200 AAD-MGD, but if one tallies the total permitted average monthly withdrawals from Lake Allatoona, existing reservoirs and planned reservoirs located upstream (table 6-1, draft 2008 WCWS Plan, 6-5) the total permitted withdrawals from this portion of the Etowah River Basin would amount to 227.3 MGD, exceeding EPD's AAD-MGD limit by 27 MGD. These figures do not include a yet to be determined withdrawal from proposed Bannister Creek and Etowah Watershed reservoirs in Forsyth County. Nor do these figures include proposed post-2035 reservoirs upstream of Allatoona. It seems inconceivable that the District can keep withdrawals from Allatoona below EPD's 200 AAD-MGD threshold.

Furthermore, the planned 2035 average monthly permitted withdrawals directly from Allatoona (Cobb-Marietta Water Authority and City of Cartersville) outlined in Table 6-1 total 162 MGD. This figure does not match the statement in Section 6-11: "the total withdrawal from Lake Allatoona in the plan is 133 AAD-MGD.

We assume that lower winter time withdrawals would keep the AAD-MGD at 133 or below. However, higher summertime withdrawals are what should be considered most critical. We recommend that the District and EPD consider determining Allatoona's yield seasonally, with particular attention to summer time demands, rather than relying on average annual daily (AAD) yields. The summer months are when demands on Allatoona are at their greatest and when interbasin transfers levels are at their highest.

Interbasin Transfers for Coosa River Basin Accurately Calculated?

We question whether the existing and projected interbasin transfer (IBT) figures for the Coosa River Basin have been accurately calculated.

WSWC Table 2-4 shows a net 14 AAD-MGD transfer from the Coosa to the Chattahoochee in 2006. This runs counter to information that the Cobb County-Marietta Water Authority (CCMWA) supplied to CRBI this January. According to CCMWA data, the average monthly transfer in 2006 was 24 MGD. What is the explanation for the incongruity of these figures? What are the sources of the District's data—CCMWA or EPD?

Obviously, the figures included in the District plan understate the impact of this interbasin transfer and thus call into question the validity of projected 2035 IBTs.

WSWC Table 6-2 shows a projected net 32 AAD-MGD transfer from the Coosa to the Chattahoochee in 2035. This figure does not seem to reflect current reality.

Currently, CCMWA consistently transfers approximately half of the water withdrawn from Lake Allatoona to the Chattahoochee basin. For instance, in July 2008, it pumped approximately 38 MGD and transferred 18 MGD to the Chattahoochee.

Table 6-1 shows CCMWA with a permitted monthly average withdrawal of 106.5 MGD. If IBT trends remain consistent with CCMWA data collected from 2002-2008, at the 106.5 MGD withdrawal level the District should expect an average monthly transfer of about 50 MGD.

What is the District's explanation for its IBT projections?

In Section 6-2, the District pledges to "minimize interbasin transfers," but this draft plan appears designed to distort the facts on IBTs from the Coosa River Basin. In a 204-page document, only two pages are dedicated to addressing the issue of interbasin transfers and there is no discussion whatsoever of how the District plans to "minimize interbasin transfers."

We request that the District cap IBTs from the Coosa basin at existing levels by developing plans to construct the necessary infrastructure (wastewater treatment facilities, delivery lines and pumping stations) to return transferred water to Lake Allatoona and the Coosa basin.

Again, we question the use of AAD-MGD when evaluating the impact of water withdrawals and IBTs. Withdrawals and IBTs will always be at their greatest during the summer months when meeting downstream water quality and water quantity requirements are most critical.

Other Deficiencies in Water Supply Plan

Other aspects of the plan remain deeply flawed, and we strongly recommend that the Metro District go back and address these deficiencies. Specifically, we recommend that the Metro District

- Acknowledge the recent and future court rulings that may diminish the water supply allocation out of Lake Lanier from 22% to 13% or 9% or even 0%. The current WSWC plan hinges on the assumption that 22% of Lanier may be used to meet Metro District water supply needs (draft 2008 WSWC Plan, ES-9 & 10-1). Prudent planning

requires examination of several water supply scenarios including 0%, 9%, 13%, and 22% Lanier allocation for water supply.

- Reassess the future water demand projections which clearly exaggerate future water demand needs. Specifically, revisit the underlying assumptions and initial conditions for the parameters driving the projections, including the
 - baseline year: Although the plan acknowledges that a normal rainfall year should be used as the baseline, the Metro District’s decision to perform a post-hoc, “black box” adjustment of a single drought year understates our current water use while overstating our future water needs (draft 2008 WSWC Plan, 3-6). Instead, the Metro District should use a normal rainfall year, or better yet a series of normal rainfall years, as the baseline for determining future water demand.
 - population and employment forecasts: In light of the ongoing, long-term economic recession we are experiencing, the Metro District should re-examine these forecasts (draft 2008 WSWC Plan, 3-4). Importantly, the plan should employ the most prudent approach of modeling low, moderate, and high growth scenarios, in line with the 2003 plan.
- Inflated water demand projections aside, explain why future water supply vastly overshoots future water demand (draft 2008 WSWC Plan, ES-6, 6-1, & 6-2). Please explain the extent to which the difference is going to be made up through water conservation as opposed to reservoirs and interbasin transfers. Also, estimate the incremental cost of providing for the excessive water supply.

Other Deficiencies in Water Conservation Plan

Several aspects of the water conservation plan remain deeply flawed and we strongly recommend that the Metro District go back and address these deficiencies. Specifically, we recommend that the Metro District

- Examine a more reasonable range of alternative water conservation programs. The plan currently considers three programs that differ little in terms of actual water savings (7%, 8%, and 8%) (draft 2008 WSWC Plan, 4-13). The plan does not make a persuasive case (economically or in terms of water savings) for the weakened conservation goal of 13%. Instead, the Metro District asserts it “uses water efficiently with a relatively low adjusted per capita water use.” (draft 2008 WSWC Plan, 4-13). We find this statement incredulous given the average indoor per capita water use of 151 gpd (Table 3-2, draft 2008 WSWC Plan, 3-7). Before committing to the weakened goal of 13% water savings, the Metro District should perform a transparent cost-benefit analysis that
 - looks at a wider range of programs, yielding 15%, 20%, and 25% active water savings in addition to the passive savings of 5% for a total of 20%, 25%, and 30% water savings by 2035;

- looks at 2-3 suites of conservation actions which can yield each water savings goal;
- accurately reflects the true costs associated with the Metro District's proffered alternative to increasing water conservation and efficiency—namely, the expense of increasing water supply through more instream reservoirs, off-stream reservoirs, and interbasin transfers; and
- includes a sensitivity analysis to determine which conservation measures drive the results, both in terms of costs *and* water savings.

Promote Energy Conservation and Efficiency

We believe the Metro District plans do not properly acknowledge the considerable water savings that can be generated through energy conservation and efficiency. At a minimum, we recommend local governments provide rebates to encourage the installation and use of EnergyStar appliances, light bulbs, and home improvement products.

Conclusion

More can and must be accomplished through water conservation, the most cost-effective means of extending Metro Atlanta's water supply, before investments in reservoirs and interbasin transfers. Water efficiency investments save money and help insure enough clean water for downstream communities. The District should:

1. Implement more aggressive conservation measures that will yield greater than 13 percent conservation savings.
2. Consider the impacts of upstream reservoirs on the yield of Lake Allatoona.
3. Re-evaluate interbasin transfer calculations and invest in infrastructure that will reduce consumptive losses from the Etowah River and Lake Allatoona resulting from interbasin transfers
4. Re-evaluate demand and population projections and consider scenerios in which less than 22 percent of Lake Lanier's storage capacity will be dedicated for water supply.

Thank you for the opportunity to participate in this planning process. Should you have any questions, please contact me at 706-232-2724 or via e-mail at jcook@coosa.org.

Sincerely,

Joe Cook
Executive Director & Riverkeeper