BOARD MEETING AGENDA

December 2, 2015 – 10:00 a.m.
Allen S. Hardin Amphitheater
R. Charles Loudermilk Center for the Regional Community
Level “C” - 40 Courtland Street, NE Atlanta, Georgia

I. Public Comment Period**

II. Approve Meeting Minutes (Action Item)

III. Chairman’s Report
   - Water Level/Litigation/ACF Water Control Manual Updates
   - BAC Chair Election Results
   - Education and Outreach Update
   - Schedule for 2016

IV. Executive Committee Report
   - 2015 Year End Budget Revision (Action Item)
   - Proposed Wastewater Plan Amendment
     o Forsyth County

V. Henry County’s Septic System Pollutant Hot Spot Analysis Tool (PHAT)
   - Jeb Holder and Chris Reagan, Henry County

VI. 2016 Water Resource Management Plan Update
   - Plan Update Status – Danny Johnson, Metro Water District
   - Governing Board Working Group Report – Katie Kirkpatrick, Vice Chair

VII. Adjourn

**A 10-minute period for public comments is designated as needed at each Governing Board meeting during a time deemed appropriate by the Chairman. Each speaker must sign-up at least two (2) days prior to the meeting start time. The 10 minute period will be divided by the number of people wishing to address the Board. No single speaker shall have more than five (5) minutes to address the Board. Comments should also be provided in writing, with supporting material. The Chairman reserves the right to limit or extend the speaking time or total number of speakers at any meeting.
Metropolitan North Georgia Water Planning District
GOVERNING BOARD
Minutes
August 26, 2015

The Metropolitan North Georgia Water Planning District Governing Board met on Wednesday, August 26, 2015 at 10:00 a.m. in the Allen S. Hardin Amphitheater at the R. Charles Loudermilk Center for Regional Community in Atlanta, Georgia.

Members Present
Hon. Boyd Austin, Chairman
Ms. Katie Kirkpatrick, Vice Chair
Hon. Buzz Ahrens
Hon. Greg Clifton
Hon. Tim Lee
Hon. Charlotte Nash
Hon. Richard Oden
Hon. Larry Owens
Ms. Pamela Burnett

Mr. Brad Currey
Ms. Kit Dunlap
Mr. Tim Thoms
Mr. Steven Woodruff
Clayton County Designee: Mr. Mike Thomas
Douglas County Designee: Mr. Gil Shearouse
Forsyth County Designee: Mr. Jon Heard
Hall County Designee: Mr. Kelly Randall
Henry County Designee: Mr. Tony Carnell

Members Not Present
Mr. Birdel Jackson, Secretary/Treasurer
Hon. Kasim Reed
Hon. Lee May
Hon. John Eaves

Mr. Mathew Santini
Mr. William Thomas Craig
Mr. Chuck Huling
Mr. Gerald Pouncey

Chairman Boyd Austin called the meeting to order.

Drought/Lake Level/Water Litigation Update
Katherine Zitsch gave a brief overview of what we can expect because of El Nino conditions across the southeast in the upcoming year. This causes Georgia weather to typically trend toward a wetter than normal winter and cooler than average temperatures. Lower hurricane activity is anticipated. During the 1997 El Nino, however, the southeast had higher precipitation but not cooler temperatures. In fact it was one of the warmest and wettest winters on record.

Ms. Zitsch noted that there is not much to update on the ACF Supreme Court case as all parties are currently in the discovery phase. In the ACT basin, multiple parties have filed lawsuits against the US Corps of Engineers. The courts are hearing motions to transfer the cases to Georgia. A decision is expected soon.
EPD is updating its triennial water quality rules. A fact sheet is available to board members upon request.

**New District Website Launch**
Sarah Skinner provided an overview of the new District website and highlighted the new key features that will make navigating meeting information and searching planning documents more user friendly. The web address will remain [www.northgeorgiawater.org](http://www.northgeorgiawater.org).

**Approve Meeting Minutes**
Chairman Austin called for a motion to approve the minutes. A motion to approve the June 16, 2015 meeting minutes was made by Ms. Kit Dunlap, seconded by Mr. Brad Currey and passed without opposition.

**2015 Middle School Essay Contest**
Chairman Austin announced the 2015 Middle School Essay Contest. Students will be asked “Why is stormwater pollution a problem and what can you do to prevent it?” The City of Atlanta and each County winners’ prize is $100. The entry deadline is October 16th. An awards reception will be held in the South Wing of the Georgia Capitol on Wednesday, December 16th from 10 am -12 pm. District-wide winner and runner-up will be announced at the awards reception.

**Water Sense Sales Tax Holiday**
Chairman Austin noted that Friday, October 2nd to Sunday, October 4th is a sales tax holiday for WaterSense and ENERGY STAR labeled products. All WaterSense and ENERGY STAR labeled products with a sales price of $1,500 or less purchased for non-commercial home or personal use will be Georgia state and local sales tax-free. The current sales tax holiday will be sun setting this year so new legislation will be needed in the 2016 session.

Vice Chair Kirkpatrick asked if the state knows how much state tax is not collected during the sales tax holiday weekend.

**Schedule for 2015 and 2016**
Chairman Austin noted the scheduled dates for District Board Meetings in 2015 and 2016 as follows:

- December 2, 2015
- February 24, 2016
- June 1, 2016
- August 24, 2016
- December 7, 2016

**State Grant Opportunity**
Chris Faulkner provided an update on a recent grant opportunity for the District. Georgia EPD has issued a request for proposals for 319h grant funds that will provide up to $400,000 to communities with a 60:40 cost share requirement. District staff will explore opportunities to
apply for funding to meet District initiatives. Additionally, District staff is available for technical assistance to help communities with their applications. The deadline for proposals is November 2, 2015.

**Water Demand Forecasting**

Ms. Zitsch provided an overview of the water demand forecasts prepared for the 2016 Water Management Plan Update. The forecasts for the year 2050 align with the same timeframe as being prepared by the other 10 regional water planning councils. Two inputs for population projections were used including the ARC projection that was completed for the entire 15 county District and projections provided by the Georgia Office of Planning and Budget. When compared to the 2009 water forecasts for 2050, the 2050 forecasted demands are 25 percent lower. The forecasts included an uncertainty factor of 13 percent for 2050 that was generated from a 65 percentile demand forecast. The new estimates assume a region wide 2016 per capita water use of 108 gallons per day.

The following questions were received:

**Q:** Do the per capita numbers include commercial?
**A:** Yes, and industrial if supplied by municipal facilities.

**Q:** Does this mean that we are attracting a less water intensive industrial mix?
**A:** This is generally a function of efficiency and conservation driving down water usage.

**Q:** What impact will this have on the ACF Supreme Court case?
**A:** We can’t speculate how the case will play out. This update was performed because we are required by state law to update the projections with the plan update.

**Q:** Do these numbers consider return flows?
**A:** No, but note that in 2009, we returned 82 percent of our withdrawn water to surface waters.

Board member statement – I am concerned with the baseline population numbers. Additionally, to generate water availability for newer systems, we need to push on older systems to do more to conserve water. The challenge is to get more efficiency with jurisdictions that are above the average with efficiency.

**Q:** Do these numbers consider lost water?
**A:** Yes. We looked at both water withdrawals and the amount of water sold.

**Q:** Are we looking for any compensation to address old infrastructure?
**A:** There is a new state requirement that all communities over 3,300 in population perform a water system audit. The audit helps those utilities identify their greatest contributing factors to system losses. There is an inherent bottom line of system loss percentage that can be attained. The District can play a role in helping communities achieve reductions in system loss.
Board member statement – I think we should all give ourselves a big pat on the back based on these results. We need to tell the Governor that we have spent our money wisely. As there is still room for conservation, we can continue to make ourselves a leader in wise water use.

Board member comment – The 65 percent uncertainty factor seems low. If we are trying to hit a reasonably conservative mark, we should consider using a higher factor.

Q: Could we look at updating the forecasts on an annual basis?
A: We could do as the Board wishes, but consider it takes significant resources to update water demand forecasts.

Q: What do we know about available supply?
A: We have not quantified available supply because of the uncertainty of supply due to the lawsuits, but without uncertainty due to lawsuits we expect there is ample supply available to meet these needs and beyond.

Board Member comment – What level of contingency do we need? We will eventually need the supply that was planned for in past years, but the date may be further into the future.

Board Member comment – We have a great story to tell. We still project strong economic growth. We can see that conservation is starting to take effect and all of the elements of withdrawals and returns play a part.

**Utility Climate Resiliency Study Results**
Shayne Wood and Kirk Westphal, with CDM Smith, provided an overview of the Utility Climate Resiliency Study results. Mr. Wood noted that the goal of the study was not to be predictive of future climate conditions but to assess the potential vulnerability of water resources and related infrastructure given a range of potential climate conditions in the future. The range of future climate conditions included historic trend patterns as well as multiple global climate models. Trends ranged from an increase in temperature between 1 to 7 degrees F and changes in precipitation between -2 to +11 inches per year. Generally, the climate trends depicted a tendency toward increased drought conditions coupled with more intense rainfall events.

Mr. Westphal provided examples of the risk assessment for various types of water resources and infrastructure and demonstrated how adaptation recommendation were presented for each. The report recommends communities and utilities incorporate preemptive adaptation measures such as drought management planning and installation of green infrastructure. Additionally, the report recommends that utilities consider recommendations from the study when updating local master plans. The report also recommends that communities and utilities establish climate tracking protocols and identify trigger levels for adaptive measures.

**2016 Water Management Plan Update Status**
Rick Brownlow with CH2M provided an update on the status of the 2016 Water Management Plan update. Mr. Brownlow presented the schedule for plan completion and explained that District Staff and CH2M have just completed a round of TCC and BCC stakeholder meetings.
where the updated, revised, consolidated and new action items were presented for discussion. Additionally, a Septic TCC subcommittee has been formed to perform a deeper dive into septic planning issues of interest such as finding ways to encourage maintenance of septic systems, assessing available facility capacity to accept septage, and discussing future septic system planning and coordination. A Board Working Group has also been formed to discuss District initiatives and discuss specific issues of interest to the Board. The plan update is on track for board approval and submission to EPD by November 2016.
MEMORANDUM

Date: November 16, 2014

To: Executive Committee

From: Birdel Jackson, Finance Committee Chair

RE: Proposed 2015 Year End Budget Revision

2015 Year End Budget Revision

The attached 2015 year end budget revision is being proposed as a revision to the budget adopted on December 3, 2014. This proposed revision incorporates adjustments for actual experience and projected expenditures for the remainder of the year.

The District began work on the Water Resource Management Plan Update contract in March 2015. Work on this project is anticipated to continue into the fourth quarter of 2016. Contract expenses were budgeted across both 2015 and 2016, however, actual expenses in 2015 exceeded the budgeted split, therefore total contract expenses went up by $200,000. The 2016 budget will be revised in 2016 to reflect the $200,000 reduction in anticipated 2016 contract expenses.

Miscellaneous Operating Expenses were higher in 2015 due to additional costs associated with the Water Resource Management Plan Update including additional printing, website expenses, travel, and the regional economic model development needed for the ARC population projections.

Note that in June 2011 the Board adopted the following financial policy: the District will establish and strive to maintain a minimum fund balance of $300,000 for operating contingencies.

The Finance Committee approved the attached 2015 year end budget revision via conference call on Monday, November 16, at 4:00 p.m.
## 2015 Budget Revision

**Metropolitan North Georgia Water Planning District**

*Dues = $0.265 per capita*

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Beginning Fund Balance (Estimated)</strong></td>
<td>679,744</td>
<td>977,620</td>
<td>990,122</td>
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<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct State Funding</td>
<td>250,000</td>
<td>250,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Local Dues (2010 Census at $0.265 per capita)</td>
<td>1,280,677</td>
<td>1,280,677</td>
<td>1,280,677</td>
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<tr>
<td>Interest Income</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Misc. Fees</td>
<td>60,000</td>
<td>60,000</td>
<td>60,000</td>
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<tr>
<td><strong>Total Revenues</strong></td>
<td>1,592,677</td>
<td>1,592,677</td>
<td>1,592,677</td>
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<tr>
<td><strong>Expenses by Type</strong></td>
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<td></td>
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<tr>
<td>Chairman's Allowance</td>
<td>3,000</td>
<td>3,000</td>
<td>350</td>
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<tr>
<td>District Planning Function</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>408,900</td>
<td>408,900</td>
<td>408,900</td>
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<tr>
<td>Fringe Benefits</td>
<td>241,251</td>
<td>216,850</td>
<td>216,850</td>
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<tr>
<td>Contracts**</td>
<td>800,000</td>
<td>800,000</td>
<td>1,000,000</td>
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<tr>
<td>Overhead</td>
<td>260,060</td>
<td>242,977</td>
<td>242,977</td>
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<tr>
<td>Miscellaneous Operating***</td>
<td>96,000</td>
<td>96,000</td>
<td>150,000</td>
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<tr>
<td>Public Awareness / Education</td>
<td>160,000</td>
<td>200,000</td>
<td>120,000</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>1,969,211</td>
<td>1,967,727</td>
<td>2,139,077</td>
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<tr>
<td><strong>Projected Ending Fund Balance</strong>*</td>
<td>303,210</td>
<td>602,570</td>
<td>443,722</td>
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</tbody>
</table>

### 2015 NOTES

*The District will strive to maintain a minimum fund balance of $300,000 for operating contingencies.

**Contracts:** Includes the District Plan Updates and the Utility Climate Resiliency Study and other contracts

***Misc. Operating:** This category includes operating supplies, publications, printing and photocopying, meeting expenses, postage, contractual operating services such as audit, seminar trainers and other misc.
The Metropolitan North Georgia Water Planning District received a request from Forsyth County to modify the Wastewater Management Plan. According to the Plan Amendment Guidelines adopted by the Board on August 28, 2013, District staff is required to provide the Executive Committee a category recommendation concerning the plan amendment request prior to the meeting. The staff recommends the following change outlined below:

**Amendment Request:** Wastewater Management Plan  
**Local Jurisdiction:** Forsyth County  
**Description:** Modification consists of the decommissioning of the Windermere Urban Reuse LAS and the transfer of the 0.55 MGD capacity to the James Creek WRF between 2016 and 2035 planning horizon within Appendix B. Both facilities currently discharge into James Creek, a tributary to the Chattahoochee Basin.  
**Staff Recommendation:** District staff recommends this request be categorized as a minor amendment because modification of the plan is local in nature.
### Forsyth County

**Summary of Needs**

<table>
<thead>
<tr>
<th>Wastewater Flows &amp; Capacities</th>
<th>2010 Maximum Month Average Daily Flow (MMF-MGD)</th>
<th>2015 Maximum Month Average Daily Flow (MMF-MGD)</th>
<th>2025 Maximum Month Average Daily Flow (MMF-MGD)</th>
<th>2035 Maximum Month Average Daily Flow (MMF-MGD)</th>
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</thead>
<tbody>
<tr>
<td>Forsyth County Needs</td>
<td>22</td>
<td>29</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>Total Projected Flow to Plants</td>
<td>22</td>
<td>29</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>Treatment Capacity</td>
<td>19.56</td>
<td>37.41</td>
<td>44.41</td>
<td>60.81</td>
</tr>
</tbody>
</table>

**Capital Projects**
- New treatment capacity will be provided by constructing the new Shakerag facility and two new facilities discharging to Lake Lanier and expanding the Fowler WRF. Apportionment of capacity between the Forsyth County and City of Cumming should be based on the needs and growth of their respective service areas. Allocation of proposed treatment capacity between Forsyth County and the City of Cumming will be agreed upon by both jurisdictions in accordance with the local wastewater master plan prior to requesting wasteload allocations or seeking permits. The local wastewater master plan will also include an analysis of the feasibility of constructing a combined facility between the City and County.

**Basin Considerations**
- The City of Cumming will construct a new AWRF that will discharge to Lake Lanier and return flow to the Lake. Forsyth County will construct a new AWRF that will discharge to Lake Lanier (Note 1). Treated flow from the New South Forsyth WWTP / Fowler Reuse System will be land applied and/or discharged into the Chattahoochee River.

**Phasing Plan**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Cumming Bethelview Road WPCP</td>
<td>No expansions</td>
<td>8.0</td>
<td>No expansions</td>
<td>8.0</td>
<td>No expansions</td>
<td>8.0</td>
<td>No expansions</td>
<td>8.0</td>
</tr>
<tr>
<td>Cumming Lake Lanier WRF (Note 2)</td>
<td>Initial construction</td>
<td>7.5</td>
<td>No expansions</td>
<td>7.5</td>
<td>Expand</td>
<td>7.5</td>
<td>Exp 7.5</td>
<td>15</td>
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<tr>
<td>Forsyth Lake Lanier WRF (Note 2)</td>
<td>Initial construction</td>
<td>3.0</td>
<td>Expand</td>
<td>2</td>
<td>5</td>
<td>Expand</td>
<td>5</td>
<td>10</td>
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<tr>
<td>Forsyth Shakerag/Fowler WRF (Note 3)</td>
<td>Expand</td>
<td>4.5</td>
<td>Expand</td>
<td>7.5</td>
<td>16</td>
<td>Expand</td>
<td>4</td>
<td>24</td>
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<tr>
<td>Forsyth Dick Creek WRF</td>
<td>No expansions</td>
<td>0.76</td>
<td>No expansions</td>
<td>0.76</td>
<td>No expansions</td>
<td>0.76</td>
<td>No expansions</td>
<td>0.76</td>
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<tr>
<td>Cumming Lanier Beach South</td>
<td>No expansions</td>
<td>0.04</td>
<td>Decommission</td>
<td>-</td>
<td>No expansions</td>
<td>0.04</td>
<td>Decommission</td>
<td>-</td>
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<td>Cumming Habersham WPCP (Note 5)</td>
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<tr>
<td>Forsyth Windemere Urban Reuse LAS</td>
<td>No expansions</td>
<td>0.55</td>
<td>No expansions</td>
<td>0.55</td>
<td>Decommission</td>
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<td>No expansions</td>
<td>0.50</td>
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<tr>
<td>Forsyth Manor Water Reuse Facility</td>
<td>No expansions</td>
<td>0.50</td>
<td>No expansions</td>
<td>0.50</td>
<td>No expansions</td>
<td>0.50</td>
<td>No expansions</td>
<td>0.50</td>
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<tr>
<td>Forsyth Parkstone at the Bridges LAS</td>
<td>No expansions</td>
<td>0.10</td>
<td>No expansions</td>
<td>0.10</td>
<td>Decommission</td>
<td>-</td>
<td>No expansions</td>
<td>0.10</td>
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<tr>
<td>James Creek WRF</td>
<td>No expansions</td>
<td>1.0</td>
<td>No expansions</td>
<td>1.0</td>
<td>Expand</td>
<td>1.55</td>
<td>2.55</td>
<td>No expansions</td>
</tr>
<tr>
<td>Total Capacity (MMF-MGD)</td>
<td>19.56</td>
<td>37.41</td>
<td>44.41</td>
<td>60.81</td>
<td></td>
<td></td>
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</tbody>
</table>

Notes:
1. The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
2. The proposed Cumming and Forsyth AWRFs that will discharge to Lake Lanier may be built as separate facilities, or may be combined into one facility.
3. The Shakerage / Fowler reuse system consist of two and potentially more facilities pumping into one reuse system with combined flows being land applied and discharged into the river.
4. The City and County may acquire private wastewater systems that result in minor changes and possible additions to discharge permits.
5. The City of Cumming is currently in negotiations to acquire the private Habersham facility.

**Non-Capital Programs**
- The following non-capital programs are specific to Forsyth County. These programs are in addition to those that apply to all counties within the Metro Water District.
  - Make provisions to return reclaimed water to Lake Lanier, the source of the area’s drinking water.
November 23, 2015

Mr. Daniel E. Johnson, P.E.
Atlanta Regional Commission
40 Courtland Street, NE
Atlanta, GA. 30303

RE: Request to Amend District Wastewater Management Plan

Dear Danny,

As we discussed recently, Forsyth County is in the permitting process with GA EPD for the following wastewater permit: James Creek WRF – Expansion to 2.55 MGD

GA EPD has informed us that a revision to the District Plan will be required to permit the expansion. We are requesting that the District Plan for Forsyth County be revised to show a 1.55 MGD Expansion at James Creek WRF (for a total treatment capacity of 2.55 MGD) in the 2016 to 2025 timeframe. Additionally, we request that the plan be revised to show the Windermere WRF as decommissioned in the same 2016 to 2025 timeframe.

Thank you for your consideration and please let me know if you need any additional information.

Sincerely,

Barry H. Lucas, P.E.
Deputy Director