



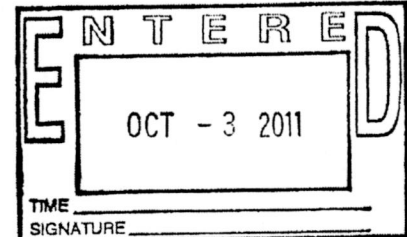
DEPARTMENT OF PUBLIC WORKS & UTILITIES HALL COUNTY, GEORGIA

Ken Rearden, P.E.
Public Works & Utilities Director

POST OFFICE DRAWER 1435
GAINESVILLE, GEORGIA 30503
Phone: 770/531-6800
Fax: 770/531-3945

September 29, 2011

Mr. Ade Oke
Manager, Surface Water Withdrawal Unit
Watershed Protection Branch
Georgia Environmental Protection Division
4220 International Parkway, Suite 101
Atlanta, GA 30354-3902



RE: Water Withdrawal Permit Applications
Hall County North Oconee River and Cedar Creek Reservoir Withdrawals
(Existing Permit #'s 069-0301-04 and 069-0301-05)
Hall County Glades Reservoir Project

Dear Mr. Oke:

Hall County proposes to incorporate its Cedar Creek Reservoir into a larger water system to supply 80 mgd to meet the County's 2060 water needs. The plan includes the proposed Glades Reservoir, the supporting water withdrawal from the Chattahoochee River and the existing Cedar Creek Reservoir system. The Section 404 application for this plan was submitted to the US Corps of Engineers on June 10, 2011. The water withdrawal applications and supporting documents for the Glades Reservoir and Chattahoochee River water withdrawals were submitted to EPD on September 9, 2011.

Hall County submits its water withdrawal application for the reissuance of its two Cedar Creek Reservoir permits (#069-0301-04 and #069-0301-05). These application forms should be considered in conjunction with our September 9, 2011 Glades Reservoir project application package since the Cedar Creek Reservoir is an integral part of this proposed raw water supply system.

Permit #069-0301-04 expires on August 1, 2012 and authorizes a water withdrawal of 20 mgd from the North Oconee River for the purpose of filling the Cedar Creek Reservoir. This withdrawal will not be changed by the Glades Reservoir Project. This permit can be reissued with some minor special condition modifications to recognize that the ultimate yield of the Cedar Creek Reservoir will be 80 mgd, of which 7.3 mgd is from the North Oconee River.

Permit #069-0301-05 expires on August 1, 2012 and will require major modifications from its current form. Currently, the permit authorizes a water withdrawal of 2.0 mgd (monthly average) from the Cedar Creek Reservoir for the purpose of municipal water supply. The permit has special conditions relating to instream flow protection and public drinking water supply. To incorporate this project into the overall Glades water system, modifications will be needed to

Engineering 770-531-6800 · Fleet Maintenance 770-531-7083 · Resource Recovery 770-531-7125
Road Maintenance 770-531-6824 · Solid Waste 770-531-6853 · Traffic Engineering 770-531-6797
Utilities 770-531-6800

authorize increased withdrawals from the Cedar Creek Reservoir once the Glades Reservoir and Chattahoochee River intakes are constructed.

The enclosed Cedar Creek withdrawal application forms are submitted as an addendum to the September 9, 2011 Glades application package to create the larger water system comprised collectively of the Cedar Creek and Glades Reservoirs.

We look forward to working with you throughout the EIS process in analyzing the proposed project.

Sincerely,



Ken Rearden P.E.
Director of Public Works and Utilities

Enclosures: Part C, North Oconee River Water Withdrawal Application Form
Part D, Cedar Creek Reservoir Water Withdrawal Application Form

CC: F. Allen Barnes – Director, EPD
Hall County Board of Commissioners
Randy Knighton – Hall County Administrator
✓ Kelly Randall- City of Gainesville
Harold Reheis- Joe Tanner & Assoc.
Tommy Craig-WT Craig & Assoc.
Pam Burnett- AECOM

Georgia Department of Natural Resources

2 Martin Luther King Jr. Dr., S.E., East Floyd Tower, Atlanta, Georgia 30334

Reply To:
Drinking Water Program
2 Martin Luther King Jr. Dr., S.E., Suite 1362 East
Atlanta, Georgia 30334

Chris Clark, Commissioner
F. Allen Barnes, Director
Environmental Protection Division

October 19, 2011

Mr. Elias W. Mageaes
JACOBS
6801 Governors Lake Parkway: Building 200
Norcross, Georgia 30071

RE: Plan Approval
Cedar Creek 12 MGD Membrane Water Treatment Plant
Eastern Hall County at Cedar Creek Reservoir
City of Gainesville, Georgia Water System (WSID# GA 1390001)
DWSRF Project No. DWSRF-10-0-16

Dear Mr. Mageaes:

Plans and specifications and associated revisions for the above referenced project that were submitted by JACOBS, have been reviewed and are hereby approved by the Drinking Water Program of the Environmental Protection Division (EPD), contingent upon:

1. Steps must be taken to insure that the operators of the new membrane water treatment plant are fully trained by the manufacturer's technical representatives. Furthermore, additional long-term plans include regular operational and maintenance inspections by the manufacturer to insure continued proper operation of each treatment unit processes.
2. Procedures for the plant "start-up" should be prepared for the EPD review and comment. We request that our office be notified at least one month prior to the planned plant start-up date so that a thorough inspection of the facilities can be conducted. EPD recommends that the treatment process include flocculation and sedimentation for operational flexibility.
3. Special conditions will be included in the permit for the membrane plant. Those conditions are stated below for your information:
 - A. The membrane process must continuously reject particulate matter larger than one micron (1 μ m) through a size exclusion mechanism and has a measurable removal efficiency of not less than 2.5 logs, that is verified through the application of a direct integrity test, while it is in operation:
 - B. In order to demonstrate continued removal performance of at least 2.5 logs, direct integrity testing must be conducted on each membrane unit at a frequency of not less than once every 24 hours while the plant is in operation the following are recommended.
 - i. The direct integrity testing must be conducted in accordance with the established performance standards (control limits) and methods acceptable to the Division.

- ii The direct integrity test shall have a resolution of three micron (3 μm) or less.
 - iii The sensitivity of the direct integrity test must verify maximum log removal value of not less than 2.5 logs for the membrane process.
 - iv If at any time the established control limits for the direct integrity test is exceeded, the membrane unit shall be taken off-line for diagnostic testing and repair(s). The membrane unit shall not be returned to service until the repair(s) had been completed and confirmed through the application of a direct integrity test.
 - v. All excursions above the control limit for the direct integrity test shall be reported to the Division on a monthly basis, along with the required monthly operating report forms.
- C. Continuous monitoring and recording of the plant filtrate must be performed, using a particle counting device, in the size range between 2 μm and 15 μm , while the plant is in operation.
- D. Continuous indirect integrity monitoring, using turbidity meters, must be conducted on each membrane unit. This is in addition to the required direct integrity testing.
- i. Continuous monitoring of filtrate turbidity must be conducted on each membrane unit, using turbidity meters, defined as readings and recordings every 15 minutes.
 - ii. Continuous monitoring must be independently conducted on each membrane unit. Multiplexing of monitoring equipment may be allowed to reduce the number of monitoring units required for plants using not more than two units.
 - iii. The filtrate turbidity from each membrane unit must be less than or equal to 0.10 NTU in at least 95% of individual samples taken each month.
 - iv. Two consecutive 15-minute filtrate turbidity readings above 0.15 NTU shall trigger direct integrity testing and subsequent diagnostic testing to verify and isolate the integrity breach.
 - v. Report the 95th percentile of monthly turbidity values for each membrane unit along with a summary of all excursions above 0.15 NTU to the EPD on a monthly basis, along with the required monthly operating plant forms.
4. Effluent from the Membrane Filtration
- i. The finished water effluent from the membrane train shall be monitored for meeting the filtrate turbidity water quality standards.

- ii The finished water effluent from the conventional existing media filter shall be monitored for meeting the filtrate turbidity water quality standards before the water is combined with the finished water effluent from the membrane train filtered water.

5. New Water Treatment Plant Inspection

a. Upon completion of the new plant construction, the City shall send EPD, a statement from the engineer who prepared the plans and specifications that the new plant was installed, in accordance with the approved plans and specifications, as required under the Georgia Rules for Safe Drinking Water Chapter 391-3-5-.05(6)

b. The City shall develop Operations and Maintenance Plan (O & M Plan) for the new membrane treatment plant.

c. The City shall disinfect the new water treatment plant before being placed into service by the following methods:

- i. Finished water lines: Any new or repaired finished water lines must be disinfected in accordance with the latest edition of American Water Works Association (AWWA) Standard C651
- ii. New storage tanks and clearwells: Any new or repaired finished water tanks or clearwells must be disinfected in accordance with the latest edition of AWWA Standard C652.
- iii. New water treatment plants: Any new or repaired portion of a water treatment plant must be disinfected in accordance with the latest edition of AWWA Standard C653.

iv. The membrane media shall be backwashed and prepared for service in accordance with AWWA B100. The finished water shall be tested for satisfactory microbiological quality, prior to placing the filters into service. Records of microbiological analysis shall be kept.

d. The City shall apply for a permit to modify permit GA1370003 to include new membrane water treatment plant and/or a separate permit.

139000

per Peter Nwogu
TELLOS 11-4-11

e. Continuous online turbidimeters shall be installed on the effluent of each of the proposed membrane filtered water. The Division would prefer that the turbidity sampling location be selected to also measure filter - to - waste.

f. All chemical storage tanks must be located above ground and must provide protection

from freezing and/or crystallization.

Please be reminded that all materials and products that come into contact with drinking water during its treatment, storage, transmission or distribution shall be certified for conformance with American National Standards Institute/National Sanitation Foundation Standard 61 (ANSI/NSF Standard 61) by an American National Standards Institute (ANSI) approved third-party certification program or laboratory. In addition, any pipe, solder, or flux which is used in the installation or repair of the public water distribution system shall be lead free with not more than 8.0% lead in pipes and fittings and not more than 0.2% lead in solders and flux. Finally, if applicable, a land disturbing activity permit must be obtained (either from local government or EPD) prior to the start of any construction.

The Division's approval includes, but are not limited to the following: a proposed new 12.0 MGD membrane treatment plant to including: (1) Treatment building, (2) Membrane treatment equipment, (3) Clearwell (4) Chemical storage tanks, (4) Chemical metering pumps, (5) Wash water lagoons, (6) Finished water pumps and (6) installation of related appurtenances conforming to the latest AWWA standards.

The Division's approval is valid for one year from the date of this letter. If the construction has not begun by that date, the Division may choose to reevaluate the project with regard to the Rules and Regulations in effect at that time. The approval of the new water treatment plant is contingent to an appropriate modification of the City's existing surface water withdrawal permit. One set copy of the specifications, one set copy of the drawings and one copy of the schematic design report are returned herewith.

If you have any questions concerning this letter, please contact this office at the number below.

Sincerely,



Peter C. Nwogu
Environmental Engineer
Drinking Water Permitting & Engineering Program
Phone: (404) 651- 8427

cc: ✓ Mr. Matt Henderson, Director, City of Gainesville Public Utilities
Mr. Napoleon Caldwell/Georgia Environmental Protection Division DWPEP
Mr. Kirk Chase/Georgia Environmental Protection Division DWPEP
Mr. Pete Zorbanos/Georgia Environmental Protection Division DWPEP
Mr. Clay Burdette/Georgia Environmental Protection Division Water Withdrawal
Permitting Program
File: WSID# 1390001



CITY OF GAINESVILLE
•
**PUBLIC UTILITIES
DEPARTMENT**
•

757 Queen City Parkway, S.W.
Gainesville, Georgia 30501
Telephone 770.538.2466
Fax: 770.535.5634
Web Site: www.gainesville.org

November 23, 2011

Ms. Linda MacGregor, P.E.
Watershed Protection Branch Chief
Georgia Environmental Protection Division
4220 International Parkway, Suite 101
Atlanta, Georgia 30354

RE: Cedar Creek 12 MGD Water Treatment Plant
City of Gainesville, Georgia (WSID#1390001)
DWSRF Project No. DWSRF-10-0-16

Dear Ms. MacGregor:

This letter is written in response to Peter Nwogu's letter dated October 19, 2011 to Elias Mageaes of Jacobs Engineers. The letter concerned the above referenced Treatment Plant design. My letter is also in response to a letter dated September 29, 2011 from Mr. Ken Reardon of Hall County to your staff, particularly Mr. Ade Oke, requesting to increase the County's withdrawal from, and discharge into, the Cedar Creek Reservoir. I have attached both letters for ease of reference.

The letter to Mr. Mageaes formally notified us the design and specifications for the construction of the Cedar Creek Water Treatment Plant have been reviewed and approved by GaEPD. Mr. Reardon's letter requests the County be allowed to discharge water from the Chattahoochee basin into the reservoir from which we will be withdrawing, treating, and distributing Oconee River waters.

First, we appreciate the time and effort your staff has spent consulting with our engineers and reviewing our proposed design. Membrane technology, though state-of-the-art, presents certain challenges requiring staff and engineers to be attentive and up on the latest advances. We are glad to have cleared this hurdle and await the issuance of our withdrawal permits, which are still under review, so we can proceed as deemed appropriate.

Second, regarding the Hall County request please be aware that we still have not resolved our dispute with the County over the ownership and future operation of Cedar Creek Reservoir. Gainesville and the County entered an intergovernmental lease and management agreement concerning the Hall County Water System, including Cedar Creek Reservoir, in 2006. Among other commitments, Hall County agreed that "all facilities constructed...after the date of execution of this agreement...shall be dedicated to and therefore owned by Gainesville." Hall County further agreed to "automatically transfer ownership of 1/25th of its existing Water System to Gainesville each year on the anniversary of the agreement." Therefore, Gainesville will own a majority share of the existing Hall

County Water System by 2019, and it owns 100% of any new facilities that may be added to the system after January 2006.

With respect to Mr. Reardon's specific request, our concern is that Hall County is proposing to use *facilities owned and operated by the City of Gainesville* in a manner that could render the design plans that you just approved effectively worthless. The design was based on extensive and expensive pilot testing of water in the Oconee River that is used to fill the reservoir. If the reservoir is filled with Chattahoochee River water instead, as Hall County now proposes, this could have a substantial impact on water quality, temperature, and siltation within the reservoir.

As I am sure you will recall, the City and County both made a commitment to the Director to enter into mediation to resolve these issues. We are still willing to pursue that course and will be discussing it with the County. We had hoped that the decision of the Eleventh Circuit would allow us to put this matter on the back burner, but it appears we do not have the luxury. In the meantime, we request that you withhold action on Mr. Reardon's request.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Kelly J. Randall". The signature is fluid and cursive, with the first name "Kelly" being more prominent.

Kelly J. Randall, P.E.
Public Utilities Director

Cc: F. Allen Barnes, GaEPD Director
Jason Bodwell, Georgia Environment Finance Authority
Mayor and Council
Kip Padgett, City Manager
Ken Reardon, Hall County Public Works



DEPARTMENT OF PUBLIC WORKS & UTILITIES HALL COUNTY, GEORGIA

Ken Rearden, P.E.
Public Works & Utilities Director

POST OFFICE DRAWER 1435
GAINESVILLE, GEORGIA 30503
Phone: 770/531-6800
Fax: 770/531-3945

December 9, 2011

Ms. Linda MacGregor, P.E.
Watershed Protection Branch Chief, Georgia EPD
4220 Industrial Parkway, Suite 101
Atlanta, GA 30354

RE: Cedar Creek Reservoir and Proposed Water Treatment Plant, Hall County

Dear Ms. MacGregor:

Hall County is in receipt of Mr. Kelly Randall's (City of Gainesville) November 23, 2011 letter to you and wishes to clarify several positions raised in Mr. Randall's letter.

If EPD agrees to revise the water withdrawal permits as requested in Hall County's September 29, 2011 letter to Mr. Ade Oke of EPD and approves the water withdrawal permits associated with the Glades Reservoir, then eventually Cedar Creek Reservoir would have more Chattahoochee River water in it than Oconee River Basin water. Hall County concedes that under these circumstances, Gainesville's proposed 12 mgd Cedar Creek Water Treatment Plant design may or may not perform as designed, since there are likely to be some physical or chemical differences in Chattahoochee and Oconee water. More pilot testing would be needed to determine any impacts for certain, and Hall County stands ready to cooperate with Gainesville in this endeavor.

Hall County still owns the Cedar Creek Reservoir and its associated pumping stations as no deed conveying the property by legal description has been tendered to the City. Hall County acknowledges that it must work with the City of Gainesville to resolve the any disputes regarding the Cedar Creek Reservoir before EPD can take action on the requests before it.

By mutual agreement, Hall County and Gainesville officials suspended the proposed mediation on the Cedar Creek Reservoir in May 2011, to wait on the decision of the 11th Circuit Court regarding water supply from Lake Lanier. We are pleased that the City of Gainesville is still willing to pursue mediation and the County will contact the City to discuss commencing mediation proceedings in the near future.

We recognize that Hall County and the City of Gainesville must resolve these issues so that EPD can move forward with its decisions on our requests.

Sincerely,



Ken Rearden, P.E.
Public Works Director

cc: Mr. Jud Turner
Hall County Board of Commissioners
Mr. Randy Knighton
✓ Mr. Kelly Randall
Mr. Kip Padgett



CITY OF GAINESVILLE
OFFICE OF THE MAYOR

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GAINESVILLE CITY COUNCIL

C. Danny Dunagan, Jr.
Ward One

Robert L. (Bob) Hamrick
Ward Two

Myrtle W. Figueras
Ward Three

George Wangemann
Ward Four

Ruth Bruner
Ward Five

December 13, 2011

The Honorable Tom Oliver
Hall County Chairman
PO Box 1435
Gainesville, GA 30503

Dear Chairman Oliver:

I am writing to renew our discussions about Cedar Creek Reservoir. On September 29, 2011, Ken Reardon wrote to Georgia EPD to request certain permit amendments based on assertions that Cedar Creek will be used by the County as a component of the Glades Farm Reservoir project. This raises a question about the ownership and future operation of Cedar Creek Reservoir that must be resolved before the County's plans progress any further.

As you know, the City and County jointly agreed to mediate this dispute last year. We had hoped that recent developments in the legal case involving Lake Lanier would allow us to put this issue on the back burner, but it appears we do not have that luxury. Therefore we propose to proceed with the mediation as soon as possible.

We believe the terms negotiated for the confidential mediation agreement we negotiated last fall are still adequate. I assume this is still acceptable to the County. The City has already appointed Mayor Bruner and Mayor Pro-Tem Dunagan as its representatives. We understand that you and Commissioner Gibbs will represent the County.

As for the subject matter of the mediation, we believe it should focus on the validity of the attached Intergovernmental Lease and Management Agreement concerning the Hall County Water System, which was executed on January 17, 2006. The agreement provides for the City to assume operation and maintenance of the entire Hall County Water System, including Cedar Creek Reservoir and Pump Station. In exchange, the County agreed to lease these facilities to Gainesville effective January 2006 and to transfer 1/25th of the ownership of the system to Gainesville each year on the anniversary of the agreement. In addition, Hall County further agreed that "all facilities constructed . . . after the date of execution of this agreement . . . shall be dedicated to and therefore owned by Gainesville."

Based on the County's letter to Georgia EPD, it appears the County may wish to terminate or modify the Intergovernmental Agreement and thus to reclaim ownership and control of Cedar Creek. If so, I would direct your attention to paragraph 14, which states:

The parties shall have the right to terminate this agreement upon completion of the following:

- A mutual written agreement between Hall County and Gainesville;
- A written approval from Georgia EPD, provided by certified mail;
- Payment shall be made by Hall County to Gainesville for all costs associated with the capital improvements made to the System after the date of execution of this agreement. Said payment shall be prorated based on the consumer price index at the time this agreement is terminated. The base point for all expenses prorated shall be from the date of the execution of this agreement, regardless of when the expenditure actually occurred;
- Payment shall be provided by Hall County to Gainesville for portion of the System transferred to Gainesville as described in paragraph 13 [providing for transfer of 1/25th ownership per year]. The value of the System shall be the assessed fixed asset value of the System as of the date of execution of this agreement.

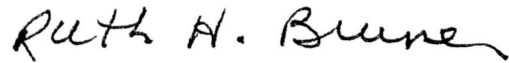
As can be seen, the agreement can only be terminated based on the *mutual* agreement of the City and County—and only after the County has made payments to the City as described in the third and fourth bullets above. We understand the County may have a different view and look forward to hearing about it in the context of the mediation.

Since we have decided that we do need to proceed with this process, our objective is now to have this issue fully and finally resolved by September 2012, which is the Corps' deadline for answering the legal questions posed by the Eleventh Circuit. To meet this deadline, we will need to proceed expeditiously, and we will need to pursue other avenues if we have not made substantial progress toward an amicable resolution before the end of February, 2012. In the meantime, we ask that you refrain from making any further representations to any state or federal agencies or other parties concerning the ownership and future operation of Cedar Creek Reservoir. Finally, please be advised that we will consider any future communications by the County to state or federal officials that could prejudice the City's interest in Cedar Creek Reservoir as an indication that we have reached an impasse and that the City has no choice but to seek a judicial resolution.

Mr. Tom Oliver
December 13, 2011
Page Three

Please do not hesitate to call me if you have any questions or concerns.
Meanwhile, I look forward to a productive mediation and trust that we can put
this matter behind us.

Best Regards,

A handwritten signature in black ink, reading "Ruth H. Bruner". The signature is written in a cursive style with a long, sweeping underline.

Ruth H. Bruner
Mayor

cc: Allen Barnes
Jud Turner
Gainesville City Council
Hall County BOC
Kip Padgett
Randy Knighton