

Atlanta Regional Commission
200 Northcreek, Suite 300
3715 Northside Parkway
Atlanta, Georgia 30327-2809



Harry West
Director

February 21, 1996

Hon. Wayne Hill, Chairman
Gwinnett County Commission
75 Langley Drive
Lawrenceville, GA 30245

RE: Development of Regional Impact (DRI) Review
Gwinnett County North Advanced Water Reclamation Facility

Dear Wayne:

I am writing to let you know that the ARC staff has completed the Development of Regional Impact (DRI) review of Gwinnett County's proposed North Advanced Water Reclamation Facility. Our finding is that the proposed facility is in the best interest of the State. As you are certainly aware, this facility is consistent with ARC's 1992 sub-area study for the Regional Water Quality Plan.

Enclosed is a copy of our complete review report on the facility. Also enclosed are copies of comments we received from the City of Suwanee, DeKalb County, and CRNRA during the review. Our notice to potentially affected agencies and their comments are an important part of our DRI review. Please feel free to call us if you have any questions at all about our review and report.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Harry West', is written over a horizontal line.

Harry West
Director

Enclosure

- c Mr. George Heckman, Gwinnett Public Utilities
Mr. Michael Williams, Gwinnett Planning & Development
Hon. Liane Levetan, DeKalb County
Hon. Richard Trice, City of Suwanee
Mr. Marvin Madry, CRNRA
Mr. Harold Reheis, Georgia EPD
Mr. Paul Radford, Georgia DCA

DEVELOPMENTS OF REGIONAL IMPACT

REVIEW REPORT

GENERAL

According to information on the review form or comments received from potentially affected governments:

Is the proposed project consistent with the host-local government's comprehensive plan? If not, identify inconsistencies.

Yes. Also, the proposal to build a new water reclamation facility in the northern section of Gwinnett County is consistent with the regional plans of the Atlanta Regional Commission. In 1992, ARC completed a sub-area study for the ARC Regional Water Quality Plan which evaluated a number of regional treatment options for the five most urban counties of the Atlanta Region. This study included Gwinnett County. The recommended plan from that study included the construction of a new plant in the general vicinity now proposed by Gwinnett County.

Is the proposed project consistent with any potentially affected local government's comprehensive plan? If not, identify inconsistencies.

No inconsistencies were identified in the review.

Will the proposed project impact the implementation of any local government's short-term work program? If so, how?

No impacts were identified in the review.

Will the proposed project generate population and/or employment increases in the Region? If yes, what would be the major infrastructure and facilities improvements needed to support the increase?

The County estimates the direct impact of the development to be 100 long-term and 200 short-term jobs.

What other major development projects are planned in the vicinity of the proposed project?

ARC has reviewed many major development projects proposed in this vicinity and many which might be served by the proposed facility. Those closest to this site are Shawnee Ridge (MUD), Horizon (IND), Bridgegate (SUB), Settles Bridge (MUD) and Hamilton Mill (SUB). Woodward Mill Apartments were previously reviewed for a portion of this site but the development was not approved by the County.

Will the proposed project displace housing units or community facilities? If yes, identify and give number of units, facilities, etc.

The proposed plant would displace five residential units.

Will the development cause a loss in jobs? If yes, how many.

No.

LOCATION

Where is the proposed project located within the host-local government's boundaries?

The site is located in NE Gwinnett County, bordered by I-85 and I-985, and bisected by Woodward Mill Road. 84°01'/34°04'

Will the proposed project be located close to the host-local government's boundary with another local government? If yes, identify the other local government.

The site is close, but not contiguous, to Suwanee, Sugar Hill and Buford.

Will the proposed project be located close to land uses in other jurisdictions that would benefit or be negatively impacted by the project? Identify those land uses which would benefit and those which would be negatively affected and describe impacts.

No negative impacts were identified. A number of major developments and smaller sites which previously had no sewer service will now have wastewater treatment available, provided these areas are sewered.

ECONOMY OF THE REGION

According to information on the review form or comments received from potentially affected governments:

What new taxes will be generated by the proposed project?

None.

How many short-term jobs will the development generate in the Region?

200, according to County estimates.

Is the regional work force sufficient to fill the demand created by the proposed project?

Yes.

In what ways could the proposed development have a positive or negative impact on existing industry or business in the Region?

The proposed facility is required in order to serve the rapidly growing northern portion of Gwinnett County. An April, 1993 Atlanta Region Sub-Area Future Wastewater Treatment Feasibility Study recommended a new facility in the vicinity of Suwanee Creek. (Ivy Creek flows into Suwanee Creek just downstream.)

NATURAL RESOURCES

Will the proposed project be located in or near wetlands, groundwater recharge area, water supply watershed, protected river corridor or other environmentally sensitive area of the Region? If yes, identify those areas.

The site includes some wetlands along Ivy Creek and is located in the large Chattahoochee water supply watershed. Portions of the discharge line within 2,000 feet of the Chattahoochee River will be subject to review under the Metro River Protection Act if new land disturbance is required.

In what ways could the proposed project create impacts that would damage or help to preserve the resource?

1. The proposal is to locate the treatment facility on less than 200 of the 700 acres at ultimate build out. The environmentally sensitive areas would be used for an environmental education center and associated recreational paths. Some parts of the site might be used for other community amenities.
2. The review material doesn't specify if the effluent discharges entering the Chattahoochee River will increase water temperatures. Thermal pollution has the potential to harm trout fisheries at the point of discharge.
3. The review material notes that the facility will have storage capacity to handle peak flows (during heavy rainstorms, for example), backup power systems, continuous monitoring and around-the-clock staffing. Due to the recreational water use downstream and the water plants located below the discharge point, we further recommend that a contingency plan should be developed for preventing the bypassing of untreated wastewater to the Chattahoochee River. In addition, the County should be required to provide a reliability

study on the proposed treatment plant design to insure that there is sufficient duplication of equipment and/or backup equipment to minimize the risk of inadequate treatment of wastewater prior to discharge to the river.

4. The proposed facility will help to allow the reduction of the interbasin transfer of water from the Chattahoochee River Basin. The reduction of interbasin transfer in Gwinnett County is important to the long-range management of the Region's water resources.
5. Gwinnett County has in place a stormwater pollution control program as required by the State of Georgia and the federal Clean Water Act. It is important that Gwinnett County reaffirm a commitment to this program and provide adequate ordinances, personnel and financial resources necessary to control the stormwater runoff pollution which will come from the development supported by the proposed treatment plant.
6. The proposed facility will not use any chlorine base compounds in their disinfection processes. We support this approach to protect the river fishery. The available literature on the facility doesn't specify what type of disinfection process is going to be used. The treatment level for fecal coliform discharges from the facility will be 25/100 ml. This high level of treatment should significantly reduce the chance of downstream recreationists from being exposed to fecal-borne bacteria and viral diseases.

HISTORIC RESOURCES

Will the proposed project be located near a national register site? If yes, identify site.

No, for the plant site. However, an historic bridge is located along the pipeline route, but the County plans to avoid the bridge.

In what ways could the proposed project create impacts that would damage the resource?

N/A

In what ways could the proposed project have a positive influence on efforts to preserve or promote the historic resource?

N/A

INFRASTRUCTURE

Transportation

How much traffic (both average daily and peak a.m./p.m.) will be generated by the proposed project?

<u>Land Use</u>	<u>Number of Employees</u>	<u>Weekday</u>	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
			<u>Enter</u>	<u>Exit</u>	<u>Enter</u>	<u>Exit</u>
Utility	100	106	44	5	5	35

The above trip generation figures were calculated using the Institute of Traffic Engineers Trip Generation (5th Edition) manual. Trips generated are for the water reclamation facility only. No figures were calculated for the nature center, environmental education facility or other community facilities on the property because no information was provided for these facilities.

What are the existing traffic patterns and volumes on the local, county, state and interstate roads that serve the site?

<u>Facility</u>	<u>1994</u>	<u>1994</u>	<u>1994</u>	<u>2010</u>	<u>Forecast</u>	
	<u>Number of Lanes</u>				<u>2010</u>	<u>2010</u>
		<u>Volume</u>	<u>V/C Ratio</u>	<u>Number of Lanes</u>	<u>Volume</u>	<u>V/C Ratio</u>
I-985 from I-85 to SR 20	4	37,191	0.52	4	57,165	.75
I-85 from I-985 to SR 20	4	39,953	0.55	4	47,838	.63
SR 20 from I-985 to Gravel Springs Road	2/4*	23,711	1.03	4	19,999	.56
SR 20 from Gravel Springs Road to I-85	2	17,259	.75	4	21,780	.61

The table shows that I-85 and I-985 operate well within their respective carrying capacities. SR 20, from I-985 to Gravel Springs Road, is operating above capacity. However, SR 20, from I-85 to the existing four-lane segment beginning between Gravel Springs Road and I-985, is scheduled for widening with construction in FY '98. This should alleviate congestion in this area. Future volume forecasts indicate that the local road network will be able to accommodate future traffic growth.

*V/C Ratio calculated using two lanes.

What transportation improvements are under construction or planned for the Region that would affect or be affected by the proposed project? What is the status of those improvements (long or short range or other)?

The ARC's adopted Atlanta Regional Transportation Improvement Program FY 1996 - FY 2001 (TIP) includes the following proposed transportation projects in the vicinity of this development:

GW 014 - Widening SR 20 from I-85 to existing four-lane road. Preliminary engineering has already been authorized. Right-of-way acquisition is scheduled for FY '96 and construction is scheduled for FY '98.

GW-R 068 - I-85 at SR 20/Lawrenceville Highway interchange project has preliminary engineering and right-of-way acquisition already authorized. Construction is scheduled for FY '96.

GW-R 069 - I-985 at SR 20 interchange project has preliminary engineering already authorized. Right-of-way acquisition is scheduled for FY '97 and construction is scheduled for FY '99.

Also in the project vicinity is the preliminary alignment for one segment of the proposed Outer Perimeter highway. This particular segment of the Outer Perimeter is listed in the Atlanta Regional Transportation Plan in the State Fund (100 percent) category and appears below.

R 023 - Construct the four-lane Outer Loop from SR 371 in Forsyth County to Alcovy Road in Gwinnett County. Preliminary engineering is ongoing; however, right-of-way and construction activities are not currently scheduled for the TIP period (FY 1996 - FY 2001).

In January of 1994, at the direction of its Board, the Atlanta Regional Commission staff began a 10-month study of the potential impacts of the proposed Outer Loop. After a review of the results of the study, the ARC Board, on November 23, 1994, adopted a four-part policy position that includes the following: "ARC staff will analyze the section from 411/I-75 on the north, easterly to SR 316 for air quality conformity. Additionally, staff will work with the Georgia Department of Transportation to develop a financial plan for that section. This work should be accomplished as part of the next comprehensive update of the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP)."

Georgia DOT will soon begin a major investment study in the Outer Loop corridor, which will examine environmental impacts and develop cost estimates for different alignments. To maintain the integrity of the wastewater treatment plan, County officials should be aware that the exact alignment of the Outer Loop has not been decided and may encroach on the project site.

Will the proposed project be located in a rapid transit station area? If yes, how will the proposed project enhance or be enhanced by the rapid transit system?

No.

Is the site served by transit? If so, describe type and level of service.

No.

Are there plans to provide or expand transit service in the vicinity of the proposed project?

No.

What transportation demand management strategies does the developer propose (carpool, flex-time, transit subsidy, etc.)?

None.

What is the cumulative trip generation of this and other DRI's or major developments? Is the transportation system (existing and planned) capable of accommodating these trips?

The only DRI reviewed in this area was an apartment complex application that was withdrawn before a decision was made by the County. Besides the proposed apartment complex, there have not been any other DRI's reviewed in the immediate vicinity of the proposed development.

In order to ensure the integrity of the transportation system, County officials should work with the Georgia Department of Transportation to identify roadways that will ultimately become congested so that any appropriate expansion projects can be formulated and programmed. County officials should also carefully consider the coordination of new growth spurred by this plan with their ability to provide adequate transportation infrastructure to prevent congestion and poor operating conditions, not only in the immediate project area but also on a county-wide basis.

INFRASTRUCTURE

Wastewater and Sewage

How much wastewater and sewage will be generated by the proposed project?

The proposed project is a 20 MGD wastewater treatment plant.

Which facility will treat wastewater from the project?

N/A

What is the current permitted capacity and average annual flow to this facility?

N/A

What other major developments will be served by the plant serving this project?

The proposed facility will treat wastewater generated by major and other developments in northern Gwinnett.

INFRASTRUCTURE

Water Supply and Treatment

How much water will the proposed project demand?

0.01 MGD.

How will the proposed project's demand for water impact the water supply or treatment facilities of the jurisdiction providing the service?

It will have almost no impact.

INFRASTRUCTURE

Solid Waste

How much solid waste will be generated by the project? Where will this waste be disposed?

9,670 tons per year.

Other than adding to a serious regional solid waste disposal problem, will the project create any unusual waste handling or disposal problems?

The vast majority of the solid waste generated by this project will be sludge, both biological and chemical (mainly lime). There are a few pilot composting operations in the County using some of the biological sludge and there is some recycling of the chemical sludge. In addition, the County has underway a solids handling master plan to deal with solid handling, disposal, and beneficial re-use from all the County treatment plants.

Are there any provisions for recycling this project's solid waste.

See above.

INFRASTRUCTURE

Other facilities

According to information gained in the review process, will there be any unusual intergovernmental impacts on:

- | | |
|--|-------------------------------------|
| ▪ Levels of governmental service? | ▪ Administrative facilities? |
| ▪ Schools? | ▪ Libraries or cultural facilities? |
| ▪ Fire, police or EMS? | ▪ Other government facilities? |
| ▪ Other community services/resources (day care, health care, low income, non-English speaking, elderly, etc.)? | |

No.

HOUSING

Will the proposed project create a demand for additional housing?

No

Will the proposed project provide housing opportunities close to existing employment centers?

No.

Is there housing accessible to the project in all price ranges demanded?

Yes.

Is it likely or unlikely that potential employees of the proposed project be able to find affordable* housing?

Likely.

* Defined as 30 percent of the income of a family making 80 percent of the median income of the Region 1990 median family income of \$41,500 for Atlanta MSA.

DEVELOPMENTS OF REGIONAL IMPACT

Comments from Affected Parties Form

Project I.D.: AWRF SITE
(From Request for Comments Form)

Name of Commenting Organization: CITY OF SUWANEE

Address: 323 HWY 23

P.O. Box 58

Suwanee, Georgia 30174

Contact Person: Kathryn R. Lewis

Telephone Number: 770-945-8996

Do you believe your jurisdiction will be affected by the proposed development? Yes No

Please describe the effects (positive and/or negative) the proposed project could have on your jurisdiction:

The City Council did not feel they had received sufficient
information to make comments at this time.

(Attach Additional Pages if Necessary)

Form Completed By: Kathryn R. Lewis

Title: City Clerk

Signature: Kathryn R. Lewis

Date: 02-09-96

RETURN TO: ATLANTA REGIONAL COMMISSION
3715 Northside Parkway
200 Northcreek, Suite 300
Atlanta, Ga. 30327

ATTENTION: REVIEW OFFICE

FAX NO. 404-364-2599

DCA/OCP 10/7/91

DeKalb County

Manuel J. Maloof Center / 1300 Commerce Drive / Decatur, Georgia 30030 / 404-371-2881 / Fax 404-371-7004

Liane Levetan
Chief Executive Officer

February 5, 1996

Ms. Beverly Rhea
Review Coordinator
Atlanta Regional Commission
200 Northcreek, Suite 300
3715 Northside Parkway
Atlanta, GA 30327-2809

Re: Development of Regional Impact (DRI): North Advanced Water Reclamation Facility

Dear Ms. Rhea:

This will acknowledge receipt of your January 30, 1996 letter regarding the above. I am referring this to Tom Black, Acting Public Works Director, for review and response.

Sincerely,



Liane Levetan
Chief Executive Officer

LL/lm

cc: Tom Black, Acting Public Works Director
Rick Daniel, Associate Director Public Works/Water and Sewer



recycled paper



**PUBLIC WORKS DEPARTMENT
WATER AND SEWER DIVISION**

1580 Roadhaven Drive

Stone Mountain, Georgia 30083

(770) 621-7200
FAX (770) 621-7271
TDD (770) 621-7237

February 7, 1996

Ms. Beverly Rhea
Review Coordinator
Atlanta Regional Commission
200 Northcreek, Suite 300
3715 Northside Parkway
Atlanta, Georgia 30327-2809

RE: Development of Regional Impact (DRI): North Advanced Water Reclamation Facility

Dear Ms. Rhea:

As requested, enclosed is the completed Comments from Affected Parties Form for the Development of Regional Impact which ARC is conducting on Gwinnett County's proposed North Advanced Water Reclamation Facility.

If you have any questions or require further assistance, please contact Margaret Howse, Deputy Director, at telephone (770) 621-7213.

Sincerely,

Richard P. Daniel, P.E.
Associate Director

RPD/mah

Enclosure

cc: Liane Levetan, Chief Executive Officer
Russ Crider, Executive Assistant

Comments from Affected Parties Form

Project I.D.: Gwinnett County-
(From Request for Comments Form) North AWRP

Name of Commenting Organization: DeKalb County

Address: Public Works- Water & Sewer

1580 Roadhaven Drive

Stone Mountain, Georgia 30083

Contact Person: Richard P. Daniel, P.E.

Telephone Number: 770-621-7274

Do you believe your jurisdiction will be affected by the proposed development? _____ Yes ☒ No

Please describe the effects (positive and/or negative) the proposed project could have on your jurisdiction:

In the design as presented, the discharge from the proposed North Advanced
Water Reclamation Facility will be piped to an outlet to the Chattahoochee River

downstream from DeKalb County's drinking water intake at Holcomb Bridge Road. As
long as the project is constructed and operated in accordance with this design and
plan, there should be no negative effects on DeKalb.

(Attach Additional Pages if Necessary)

Form Completed By: Richard P. Daniel, P.E.

Title: Associate Director

Signature: Richard P. Daniel

Date: 2/7/96

RETURN TO: ATLANTA REGIONAL COMMISSION
3715 Northside Parkway
200 Northcreek, Suite 300
Atlanta, Ga. 30327

ATTENTION: REVIEW OFFICE

FAX NO. 404-364-2599

DCA/OCP 10/7/91

DEVELOPMENTS OF REGIONAL IMPACT

Comments from Affected Parties Form

Project I.D.: _____
(From Request for Comments Form)

Name of Commenting Organization: Chattahoochee River NRA, National Park Service

Address: 1978 Island Ford Parkway
Atlanta, GA 30350-3400

Contact Person: Ted Waters Telephone Number: 770-399-8089

Do you believe your jurisdiction will be affected by the proposed development? _____ Yes _____ No

Please describe the effects (positive and/or negative) the proposed project could have on your jurisdiction:

Gwinnett County wishes to place a wastewater treatment plant within the greater Atlanta watershed at or near the intersection of Interstates 85 and 985. The National Park Service concerns to establish another treatment plant within the region are as follows:

Our primary concern are the collective effects of three treatment plants in close proximity to each other. Crooked Creek WWTP is located at river mile 325.15, Johns Creek WWTP at 324.00 and further downstream Big Creek WWTP at 315.11. Sewage treatment plants can not remove all nutrients such as nitrogen, phosphorus or suspended organic matter and reduce dissolved oxygen in the water. By placing three large plants together and increasing the capacity of one, we feel this will further degrade water quality within this short stretch of river.

While all of the larger wastewater treatment plants are supposed to meet levels more stringent than secondary treatment, this is not necessarily the case. The city of Atlanta is currently paying huge fines daily for not meeting Clean Water Standards. The pressures being placed upon the river by non-point discharges, silt and sediment from nearby development and now more effluent from wastewater treatment plants could harm our primary drinking water source. There is also a request from Forsyth County to place yet another wastewater treatment plant upstream at river mile 340, at what point do we reach the carrying capacity of the river for wastewater?

A second concern is for the cold water fishery which currently exists within this stretch of river. Dumping millions of gallons of treated water daily into the river, especially during the hot summer months, might affect water temperature within the water column. As you know, temperature of over 70 degrees can produce fish kills.

While the National Park Service does not specifically oppose this plan, steps need to be taken to find alternative methods to dumping our effluent directly into the Chattahoochee River.

Form Completed By: Ted Waters Title: Resource Management Specialist

Signature: Tharun Maday Date: 2/13/96

RETURN TO: ATLANTA REGIONAL COMMISSION
3715 Northside Parkway
200 Northcreek, Suite 300
Atlanta, Ga. 30327

ATTENTION: REVIEW OFFICE

FAX NO. 404-364-2599

DCA/OCP 10/7/91

**Gwinnett County North Advanced Water Reclamation Facility
ARC Environmental Planning Division Review Comments**

- 1) The proposal to build a new water reclamation facility in the northern section of Gwinnett County is consistent with the regional plans of the Atlanta Region Commission. In 1992, ARC completed a sub-area study for the ARC Regional Water Quality Plan which evaluated a number of regional treatment options for the five most urban counties of the Atlanta Region. This study included Gwinnett County. The recommended plan from that study included the construction of a new plant in the general vicinity now proposed by Gwinnett County.
- 2) The review material doesn't specify if the effluent discharges entering the Chattahoochee River will increase water temperatures. Thermal pollution has the potential to harm trout fisheries at the point of discharge.
- 3) The review material notes that the facility will have storage capacity to handle peak flows (during heavy rainstorms, for example), backup power systems, continuous monitoring, and around the clock staffing. Due to the recreational water use downstream and the water plants located below the discharge point, we further recommend that a contingency plan should be developed for preventing the bypassing of untreated wastewater to the Chattahoochee River. In addition, the County should be required to provide a reliability study on the proposed treatment plant design to insure that there is sufficient duplication of equipment and/or back up equipment to minimize the risk of inadequate treatment of wastewater prior to discharge to the river.
- 4) The proposed facility will help to allow the reduction of the interbasin transfer of water from the Chattahoochee River Basin. This reduction of interbasin transfer in Gwinnett County is important to the long-range management of the Region's water resources.
- 5) Gwinnett County has in place a stormwater pollution control program as required by the State of Georgia and the federal Clean Water Act. It is important that Gwinnett County reaffirm a commitment to this program and provide adequate ordinances, personnel and financial resources necessary to control the stormwater runoff pollution which will come from the development supported by the proposed treatment plant.
- 6) The proposed facility will not use any chlorine base compounds in their disinfection processes. We support this approach to protect the river fishery. The available literature on the facility doesn't specify what type of disinfection process is going to be used. The treatment level for fecal coliform discharges from the facility will be 25/100 ml. This high level of treatment should significantly reduce the chance of downstream recreationists from being exposed to fecal borne bacteria and viral diseases.

7) The portion of the sewer line within 2000 feet of the Chattahoochee River will be subject to review under the Metropolitan River Protection Act.