

Written Comments of Lee Becker. Oral version will be shortened to 10-12 minutes duration.

Members of the Commission:

My name is Lee Becker, 1050 Scott Terrace, and I thank you for this opportunity to speak to you tonight (SLIDE 1).

As agreed by the Chairman, the four members of the Board of Directors of Friends of Barber Creek have pooled our time so we can give a single presentation of 10 to 12 minutes duration. As part of that agreement, we have given the Board copies of these comments in advance, and of the visual presentation we are making to supplement the comments.

As you know, since December of 2006, the members of Friends of Barber creek have been seeking three specific actions to protect Barber Creek. Tonight, consistent with our past requests, we are asking the Board of Commissioners to (SLIDE 2):

1. **Agree to hold discharge water from the Rocky Branch sewage treatment plant in storage facilities when Barber Creek is flooding or threatening to flood, rather than discharge into the Creek;**
2. **Treat effluent from the Rocky Branch sewage treatment plant to the highest level possible with the technology available and, at a minimum, to the level of treatment at the Hill Plant in Gwinnett County for water being discharged into Lake Lanier; and**
3. **Set up a system of independent monitoring of the Rocky Branch sewage treatment plant, its effluent, and Barber Creek.**

We know that Oconee County needs added sewage capacity. We are **not** asking you to build this plant in somebody else's back yard. We believe that by honoring these three requests you can both provide sewage capacity you have promised to developers in the County and do much to protect Barber Creek.

As you know, we learned that the upgrade of the Rocky Branch plant would be on the agenda tonight only a week ago. Because of the short notice and the holiday weekend, we decided not to circulate petitions once again.

On December 12, 2006, at the hearing before state Environment Protection Division, we turned in more than 40 petitions supporting these requests. I believe you know from the attendance at that meeting and the comments made that there is considerable concern about this plant and its impact on Barber Creek.

I will comment on these three requests in order (SLIDE 3).

1. Agree to hold discharge water from the Rocky Branch sewage treatment plant in storage facilities when Barber Creek is flooding or threatening to flood, rather than discharge into the Creek.

The County should use data from the date of the decision on the Rocky Branch plant forward, as well as data from past monitoring of Barber Creek, to determine the normal water flow for the Creek.

We ask that Oconee County agree to hold water in storage facilities on any day when Barber Creek exceeds that month's average and only release water into the Creek so as not to exceed that average.

This should be easy for the County to do (SLIDE 4). The County already plans to build storage ponds on the site. It can build more if necessary, as there is adequate space available.

The County response to this request in the past has been to tell us that the additional water put into a flooding creek will make little difference.

I can tell you that those of us who live along the creek know that even a small amount of additional water is something we do not need when it floods (SLIDE 5).

2. Treat effluent from the Rocky Branch sewage treatment plant to the highest level possible with the technology available and, at a minimum, to the level of treatment at the Hill Plant in Gwinnett County for water being discharged into Lake Lanier.

The EPD permit issued to Oconee County for the Rocky Branch plant requires the County to meet "reuse quality" water standards. The standard is defined by Oconee County ordinance and by the EPD itself (SLIDE 6).

Oconee County passed in March of 2005 an ordinance that states that reuse water should NOT be used for the following: "drinking, food preparation, hand washing, automobile washing, or irrigation of fruits and vegetables" (SLIDE 7).

The state standard for "reuse quality" water, contained in the EPD document, Guidelines for Water Reclamation and Urban Water Reuse, Revised February 20, 2002 (on the web at <http://www.georgiaplanning.com/watertoolkit/Documents/WaterConservationDroughtManagement/GuidelinesforWaterReclamationandReuse.pdf>), recommends (pages 12 and 13) against any use that brings the water in contact with the skin (SLIDE 8). The state gives the following guideline for use of the water:

"The customer shall not allow reclaimed water to be used for consumption (human or

animal), interconnecting with another water source, sprinkling of edible crops (gardens), body contact recreation, filling of swimming pools, or sharing a common reclaimed service between properties.”

The EPD has issued a permit for the F. Wayne Hill Water Resources Center in Gwinnett County requiring Gwinnett County to meet a standard based on the highest level of plant technology, not the reuse standard.

At a minimum, the Rocky Branch plant should meet the standard of the EPD permit for the F. Wayne Hill Water Resources Center in Gwinnett County. The chart below compares the permit discharge limitations for Rocky Branch with the permit discharge limitations for the Gwinnett sewage plant (SLIDE 9).

Characteristic	Monthly Average	
	Gwinnett	Rocky Branch
Total Suspended Solids	3 mg/l	5 mg/l
Ammonia (as N)	0.4 mg/l	6.4 mg/l
Fecal Coliform Bacteria (#/100 ml)	2/100 ml	23/100 ml
Total Phosphorus as P	0.8 mg/l	1 mg/l
Turbidity (NTU)	0.5 mg/l	3 mg/l

The County can meet this standard (SLIDE 10). A presentation that Precision Planning Inc. and Jordan Jones & Goulding prepared for the December 12, 2006, meeting before the EPD, shows that the Calls Creek plant is producing water with Total Suspended Solids of 1.0 per milligrams per liter, or 2 milligrams per liter lower than the Gwinnett standard. The Calls Creek plant, again according to the presentation, produces water with 2 fecal coliform units per 100 milliliters, which is the Gwinnett standard.

The Calls Creek plant uses the membrane filtration technology that is used at Gwinnett and that was called for in the Request for Proposal that Oconee County issued for the upgrade for the Rocky Branch plant.

If the County really is serious about getting citizens of Oconee County to use water from the Rocky Branch plant for watering their lawns, it will be aided by being able to say the discharge meets the standard for water that goes into Lake Lanier, which is used for recreation and as a source of drinking water (SLIDE 11).

To date, the County Utility Department’s response to this request has been inadequate (SLIDE 12).

At the August 7, 2007, BOC meeting, then Utility Department Director Gary Dodd repeated his statement that Barber Creek is already badly polluted and that the reuse water the

County proposes to discharge into it will make it cleaner.

“The Solution to Pollution is Dilution,” Mr. Dodd said.

A simple search of the internet for this phrase, which Mr. Dodd did not claim he authored, shows how little favor this dictum receives today.

The solution to pollution is not dilution, it is prevention. And while cleaner water from Rocky Branch would mix with the dirtier water in Barber creek and produce samples of water that would be cleaner, the stream as a whole would contain more pollutants.

If the treated water has a higher level of dissolved oxygen—as could be the case at certain times of the year--the cleaner water would have the chance to improve the overall quality of the stream by aiding the bacteria that digest certain types of pollutants, according to Paul Lamarre, an EPD scientist who specializes in the theoretical models the EPD uses to estimate pollutants.

This benefit would be most likely to come when the creek is slow moving and the water is low--exactly when the County is unlikely to be discharging water into Barber Creek from Rocky Branch if it is successful in building a reuse market for the water.

Otherwise, any pollutants in the discharge would simply increase the amount of such pollutants in the stream.

Dilution as a **response** to pollution is considered to be important in emergency management of discharges, such as when a plant fails or when the feeder pipes and pumps that lead to the plant fail.

This is why JJ&G recommended that the County move its plants to larger streams in its Wastewater Master Plan. The County seems to be ignoring that advice.

We ask that the Board of Commissioners mandate that the Utility Department employ a membrane filtration system or some other system that will allow it to meet or exceed the Gwinnett standard.

3. Set up a system of independent monitoring of the Rocky Branch sewage treatment plant, its effluent, and Barber Creek.

The EPD acknowledged, in response to our request that it monitor the Rocky Branch plant on an unannounced basis at least once every three months during the year, that it had inadequate resources to do so (SLIDE 13).

An examination of the records of EPD shows that it monitored Calls Creek, to which the County’s other sewage plant discharges treated wastewater, only two times between 2001 and

2006.

We ask Oconee County to agree to create an annual fund to be used for independent monitoring of the plant, its effluent, and Barber Creek itself (SLIDE 14). The fund shall be managed by a citizen committee appointed by a vote of the Board of Commissioners and made up of three citizens of the County. At least one of those citizens must live in a subdivision or individual house along Barber Creek below the Rocky Branch sewage treatment plant, and at least one of those citizens must have some experience with community and environmental health issues. None of the citizens can be an elected official, work for the Oconee County government, or have an immediate family member who works for the County.

The amount of money transferred to the fund shall be \$60,000 the first year and shall grow each year to adjust for inflation, using the federal CPI-U index of inflation, so that the amount remains constant at \$60,000 in real purchasing power. The fund shall be provided by the Utility Department and be derived from fees charged to users of the Rocky Branch sewage treatment plant. Unspent money for any given year shall roll over to the next.

The citizen committee shall disburse these funds to citizens or citizen groups in the County to monitor the quality and quantity of water in Barber Creek, to distribute information about Barber Creek, and/or to engage in or encourage activities that improve the quality of Barber Creek.

We also ask the County to agree to post on the County web site all data it gathers about operation of its Rocky Branch sewage treatment plant, including but not limited to data the County submits to the state EPD. The County also shall publish on its web site all reports it makes to the state EPD, including but not limited to reports on malfunctions at Rocky Branch sewage treatment plant or any part of the County sewage system that feeds to Rocky Branch sewage treatment plant.

We also ask the County to agree to make its reports and the data it publishes on its web site easily downloaded by citizens.

When there is any malfunction at the Rocky Branch plant that requires notification of the EPD, we ask the County to agree to post a notice of that fact on the home page of the County's web site and use such techniques such as flashing signals to make prominent this notification.

These are simple actions that would cost the county little (SLIDE 15).

Again, the Utility Department's response to our request has been inadequate (SLIDE 16). We have been told repeatedly that the plant will be monitored by the operators, and that is sufficient.

Quality control involves both self monitoring and monitoring by those independent of the

production. We believe citizens are ready and able to provide that independent monitoring to supplement the infrequent monitoring provided by the EPD.

In sum, we believe our request that the Board protect Barber Creek from any contribution to flooding as a result of the upgrade of the Rocky Branch plant, that it provides the cleanest effluent technology allows, and that provides for independent monitoring is reasonable and fair.

We ask the BOC to adopt these as the policies of Oconee County and ask that they be implemented should the BOC decide to upgrade the Rocky Branch facility and begin discharging treated water into Barber Creek (SLIDE 17).

Thank you for considering these requests.

Rocky Branch Upgrade

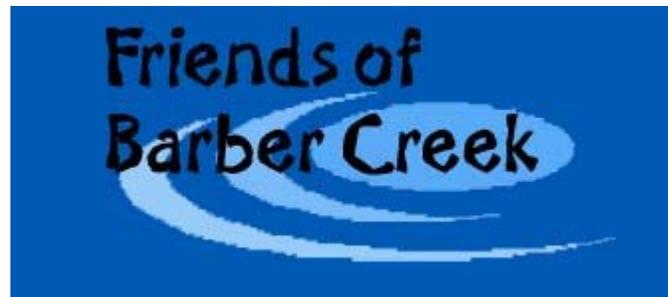
Presentation by

Lee Becker, President (Welbrook Farms)

Karen Kimbaris, Secretary-Treasurer (Lake Wellbrook)

Tim Price, Vice President (Oak Ridge)

Joe Block, Board Member (Founders Grove)



Three Requests

1. Agree to hold discharge water from the Rocky Branch sewage plant in storage facilities when Barber Creek is flooding or threatening to flood, rather than discharge into the Creek;
2. Treat effluent from the Rocky Branch sewage plant to the highest level possible with the technology available and, at a minimum, to the level of treatment at the Hill Plant in Gwinnett County for water being discharged into Lake Lanier; and
3. Set up a system of independent monitoring of the Rocky Branch sewage treatment plant, its effluent, and Barber Creek.

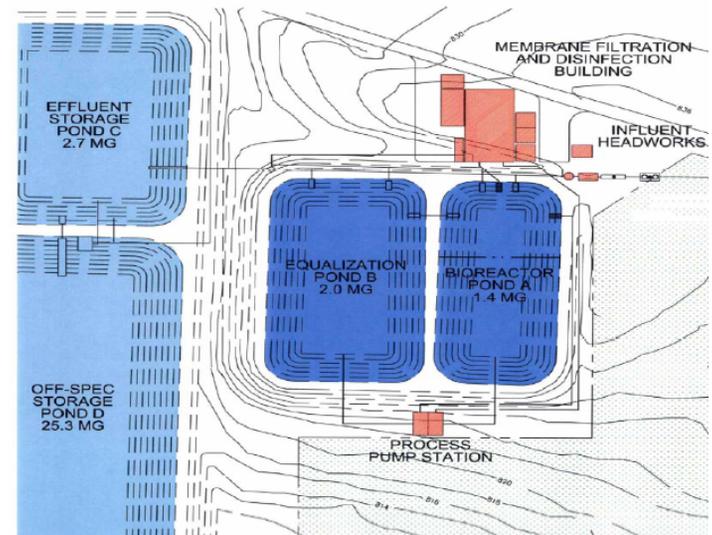
2. Hold Discharge Water

- Using data from the date of the decision on the Rocky Branch plant forward, as well as data from past monitoring of Barber Creek, the County should determine the normal water flow for the Creek.
- We ask that Oconee County agree to hold water in storage facilities on any day when Barber Creek exceeds that month's average and only release water into the Creek so as not to exceed that average.

Request Easy to Grant

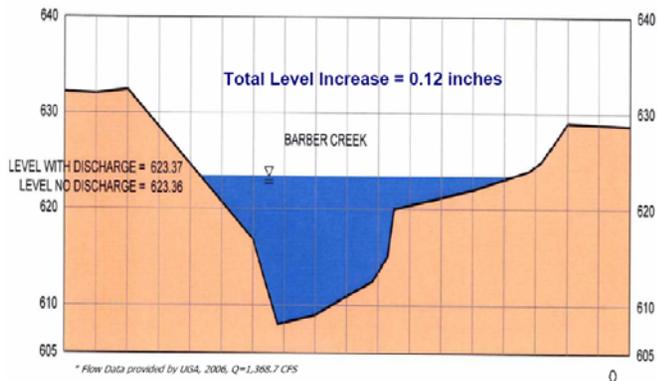
Site plan that is part of the Request for Proposal shows four ponds, two of which are identified as storage ponds. If these are not adequate for holding water, they should be enlarged or more ponds should be created.

Site Plan



County's Response Inadequate

Barber Creek @ Daniels Bridge Road
2-Year Flood Conditions



We're told the increased volume of water coming from the sewage plant is insignificant. Once the creek leaves its banks, the impact would hardly be noticeable.

7/7/2005; 4.06 inches of rain



When the creek looks like this, we don't need any additional water put into it.



9/5/2004; normal



2. Treat Water to Highest Level Possible

- The EPD permit is for treatment to “discharge” standards.
- The standard is defined by Oconee County ordinance and by the EPD.

Oconee County Ordinance

- Oconee County passed in March of 2005 an ordinance that states that reuse water should NOT be used for the following:
“drinking, food preparation, hand washing, automobile washing, or irrigation of fruits and vegetables.” The ordinance is based on state standards for use of the water.

EPD Specifications

- The state standard for “reuse quality” water recommends against any use that brings the water in contact with the skin. The state gives the following guideline for use of the water:
- “The customer shall not allow reclaimed water to be used for consumption (human or animal), interconnecting with another water source, sprinkling of edible crops (gardens), body contact recreation, filling of swimming pools, or sharing a common reclaimed service between properties.”

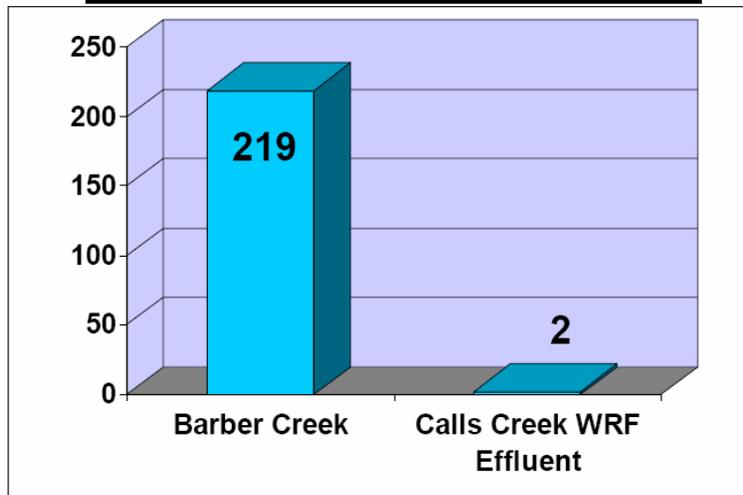
Gwinnett and Rocky Branch Standards Compared

	Monthly Average	
Characteristic	Gwinnett	Rocky Branch
Total Suspended Solids	3 mg/l	5 mg/l
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Total Phosphorus as P	0.8 mg/l	1 mg/l
Turbidity (NTU)	0.5 mg/l	3 mg/l

Rocky Branch Can Meet These Standards

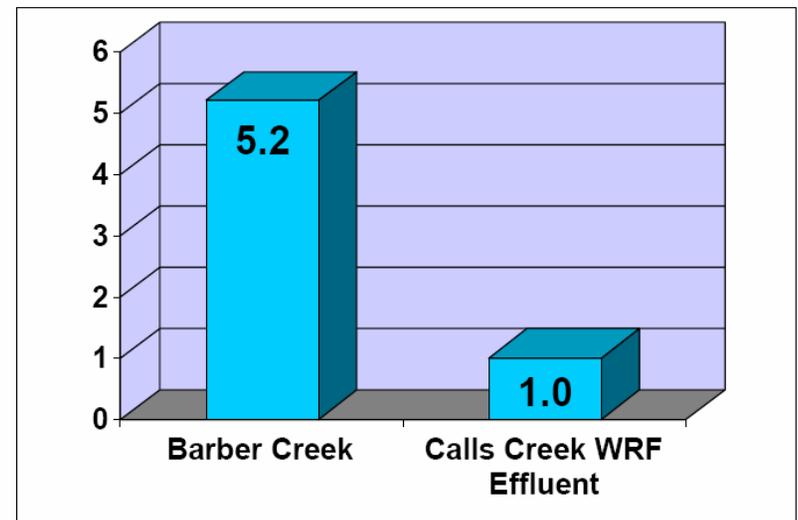
Comparison of Fecal Coliform Levels

Fecal Coliform, CFU per 100 ml



Comparison of Total Suspended Solids

TSS, mg/l



Source: Precision Planning and Jordan Jones & Goulding presentation for Dec. 12, 2006, EPD hearing on Rocky Branch permit.

Higher Standards Will Help Reuse Market

- Gwinnett plant discharges into Lake Lanier, which is used as a water supply and for recreation.
- “Reuse” water should not come into contact with skin.

County's Response Inadequate

- “The Solution to Pollution is Dilution”--Gary Dodd, August 7, 2007
- This dictum is not in favor today.
- The solution to pollution is not dilution, it is prevention.
- Only in the case of dissolved oxygen would the cleaner water have the chance to improve the overall quality of the stream by aiding bacteria that digest certain types of pollutants.
- Dilution is considered to be particularly important in emergency management of discharges, such as when a plant fails.
- This is why JJ&G recommended that the County move its plants to larger streams.

3. Independent Monitoring

- State does not have adequate resources to monitor.
- Between 2001 and 2006, the EPD sampled Calls Creek only twice.

Independent Monitoring

- Create annual fund to be used by citizens to monitor the plant.
- Post on the County's web site all data it gathers about operation of Rocky Branch.
- Provide notices on web site of any malfunction at the plant.

County Can Set up Monitoring

- Costs for web posting would be minimal.
- Costs for citizen group would be small and would be paid only by those using the Rocky Branch treatment facility.

County Response Inadequate

- We've been told the plant will be monitored by the operators.
- Quality control involves both self monitoring and independent monitoring.

In Summary

- We ask the BOC to adopt these three activities—holding the water during flooding, using the highest standards, providing for independent monitoring--as the policies of Oconee County.
- Thank you for your consideration of these requests.