

Flint River Basin  
Regional Water Development and Conservation Plan

March 18, 2005  
Meeting Summary

**Attendees – Stakeholder Advisory Committee (SAC):**

James Lee Adams  
Lucius Adkins  
Dan Bolinger  
John Bridges  
Thomas Chatmon, Jr.  
Vince Falcione  
Tommy Greggors  
Hal Haddock  
Chris Hobby  
Bubba Johnson  
John Leach, III  
Mike Newberry  
Kim Rentz  
Steve Singletary  
Marcus Waters  
Jimmy Webb  
Joe Williams

**Georgia Environmental Protection Division:** Rob McDowell, Alice Miller Keyes, Cliff Lewis, David Hawkins, Wei Zeng, Yi Zhang, and Wen Menhong.

**Technical Advisory Committee Members (TAC):** Woody Hicks, Mark Masters, Jim Hooks, Kerry Harrison, Rob Weller, Steve Galloway, Rad Yeager

**Facilitators:** Dennis Epps (Community and Regional Development Division, Carl Vinson Institute of Government, University of Georgia), Louise Hill (Fanning Institute for Leadership, University of Georgia)

**Not in attendance – Stakeholder Advisory Committee**

Charles (Chop) Evans  
Janet Moehle-Sheldon

## **Introduction**

Rob McDowell introduced the EPD staff attending the meeting, including Cliff Lewis, who will be directing the agriculture permitting service from his South Georgia office. Joe Williams provided a report based upon his attendance at the March 8-9 Technical Advisory Committee (“TAC”) meeting. A copy of his summary is available at the projects website at <http://www.dnr.state.ga.us/dnr/environ/>. Mr. Williams emphasized that the TAC meeting centered on issues of the surface water model and the coordination of that model with the ground water model.

A draft meeting summary from the February 18, 2005 meeting was distributed, and SAC members were asked to provide corrections to the meeting facilitators at their convenience.

## **Application Backlog Questionnaire**

Rob presented the questionnaire that EPD developed based on the Feb 18, 2005 Stakeholder Advisory Committee (“SAC”) discussion regarding the current application backlog. SAC members gave recommendations to EPD on how to best reduce the current backlog of applications (over 1,700), and one of the recommendations was to send a letter with a questionnaire to determine current interest in the application and the circumstances surrounding each application.

After gathering the groups’ additional suggestions for revisions on the questionnaire, Rob committed to incorporate the suggestions and promised to send a revised copy to SAC members. The goal is to begin mailing the questionnaire as soon as possible.

## **Ag Water Pumping Report**

Jim Hooks presented an overview of the Ag Water Pumping Study, the results of which are reported in *Ag Water Pumping, Project Report 52, Final Report*, which is available online at <http://www.nespal.org/AWP>. The presentation specifically addressed monitoring rates, annual irrigation rates, monthly irrigation rates, annual water withdrawals,

On an annual basis, more water is being absorbed into the ground than withdrawn. The report also addresses individual watershed areas, and it provides a series of area maps showing concentrations of irrigation, irrigation density of both ground and surface water withdrawals, and new (potentially irrigatable) land . SAC members observed that other economic factors influence the level of water pumping such as the cost of diesel fuel

Rob provided the names and locations of the watersheds and discussed the unit divisions. He also explained the relationships of HUCs (Hydrologic Unit Codes) within the watershed areas.

The full presentation has been posted to the Flint River Water Management Plan website at <http://www.dnr.state.ga.us/dnr/environ/>.

### **Surface Water Models**

Rob introduced the discussion of the surface water model development.

David Hawkins presented an overview of the surface water model process and considerations. The presentation has been posted to the Flint River Water Management Plan website at <http://www.dnr.state.ga.us/dnr/environ/>.

A question was asked as to how drought conditions, tropical storms or other unique environmental events were factored into the models. David responded by saying most of the data to this point is collected by reviewing historical data.

Rob clarified that the reason for modeling is the natural system is so complex that the mathematical models are the best way to simulate this extremely complex natural system. He explained calibration of models is a way of matching calculations to observed data. It is important that the scenarios used in the modeling need to be as accurate as possible to make the models effective.

A question was asked regarding the different models and the current availability of the models mentioned in David's presentation. David responded by saying none of them are ready today. Several are getting close by being in the calibration stage. The Stella model is developed for the sub basins north of Montezuma, but the data for lower sub basins needs to be refined. The Ground Water Model will be completed by June 1. EPD staff will be working closely with US Geologists in ensuring the ground water and surface water models are compatible. A clarification question was asked on the calculation indices of successful calibration. Anything above .5 is considered acceptable.

A question was asked if the plan would address low flow issues and whether or not irrigation shut-down might occur. Rob responded by saying that the plan should be developed so that these situations can be avoided.

A question was then asked if ground water usage is sustainable today. The answer was that it depends on the area and because the models are not complete, an answer to that question can not yet be provided.

Rob clarified the status of the ground water and surface water models and how these models intersect with each other. He stated that additional details regarding the models will be presented at the SAC's June meeting.

The group was divided into small work groups to review and discuss concerns or questions about the surface water model discussion and Ag Water Pumping Study report.

## Report from Group Work:

### Group A:

1. Can we use the models to customize recommendations for different watersheds? If so, how small a unit can be considered (water districts)?
2. Montezuma, Newton and Bainbridge is where ground water is monitored. The model is calibrated based on information from these three sites. Are these three data points sufficient to give statistically valid information for the entire basin?
3. Rainfall amounts vary dramatically across the Flint River Basin, should we collect rainfall data in more locations?

### Group B:

1. Use localized data
2. Go with median use data
3. Use multiple rainfall amounts
4. Use the smallest areas the models allow

### Group C:

1. What is the period of time for revisiting the plan?
2. Can models accommodate change without redesign of calibration?
3. Is the Florida plan adaptable to Georgia
4. What information are we missing?

### Group D

1. Worst case scenario for model – change in crop patterns to high water use crops (turf and vegetables)
2. How do we structure a plan to accommodate different available amounts of water – basin/sub-Basin

### Group E

1. Good maps, consistent terms:  
Flint Basin/sub-basins/watersheds with a county overlay  
Which level (watersheds) best for permit regulation
2. Which of the units (above):  
Have enough water (surface/ground)  
Are over irrigated  
Are ecological “hot spots”
3. We are concerned that current users with heavy investment be protected
4. What crops are problems?  
Cost of irrigation per crop?
5. Will current legislation allow sub-basin permit management?
6. Local control of permitting is best

7. Major issues: grandfathered permits; early notification (Dec.) of water problems, take into account efficient water use

A group member suggested that a helpful analogy to water management might be a banking situation. In essence, how much water is in the bank?

An observation was made that in some regards a banking analogy is helpful, but that there are differences that must be considered because the impact of water withdrawal from the upper part of the aquifer on the lower part of the aquifer has not been modeled or studied. It is not quite as simplistic as ‘water in’ and ‘water out’ in managing on a subunit basis, as withdrawals from one ‘bank’ in the upper part of the region may impact the availability of water in subunits in the lower part of the basin over time.

Questions regarding legal and legislative changes that might be necessary in developing the water management plan were discussed.

Members of the committee discussed aspects of the Florida Water Management Plan, and Rob asked for clarification on what they were referring to specifically in referencing this plan. The group suggested that they were talking about parts of the Florida plan, not adaptation of the plan in its entirety. Several committee members expressed the view that we need to tap the experiences learned in the state of Florida in developing their plan.

Rob stated that he was comfortable proceeding with the planning process knowing that the data and model development process was still evolving. The group responded that they wanted to see the developed model, the data and assurances of the calibration, as they proceeded with the development of the water management plan.

### **Plan Outline Discussion**

Dennis reviewed Part II of the plan outline and asked the group to work in small groups to determine the next steps in developing the content of the plan.

From the group work, the following suggestions were made

- Rob asked group to consider evaluation of questionnaire responses
- Request Rob to draft a “first crack” of section B
- Conservation topic should be the bulk of the next meeting
- Conservation topic resources/information needed for the next meeting should include new information on the peanut and cotton data
- Develop subunit overlays of relevant data
- Rob volunteered to develop a “straw man” draft of scenarios to provide the SAC a starting point for discussion

## **Public Comments**

The floor was opened to any members of the public to ask questions or make comments. No comments were received that day, but the following e-mail was received by EPD after the meeting and is posted here as public comment:

“I wanted to make a comment in the wake of last week's meeting. During a discussion about whether to import any part of Florida's regulatory scheme to Georgia, Mr. John made the comment that he didn't think that was a good idea because in Florida the state owns all the water, and he didn't think that would ever be accepted in south Georgia. The implication of Mr. John's comment, as I took it, was that folks in Georgia who have a withdrawal permit "own" that water.

My concern is that no one stepped forward to reiterate to Mr. John and others that, in fact, in Georgia individuals don't own the water. Under our regulated riparian system, riparian owners have the right to reasonable use of the water, but they don't own it. While we might not say, as Florida does, that Georgia "owns" the water here, the state does manage the water for the benefit of everyone. Bob Bomar explained the regulated riparian system plainly, as I recall, when he spoke to the group. Mr. Bomar also explained to the group that the state currently has the right to change and re-allocate agriculture water permits when there are more users than available water. While that has never happened, it is key to understanding the concept that the state manages our water and individuals can use it but do not own it.

I would ask that, in the future, you or the facilitators correct or clarify statements like this when they occur. A clear understanding of the legal framework is so important for the work of this group, and the stakeholders should not continue their work under a cloud of misunderstanding and uncertainty. I realize you don't have legal experts on hand as you have technical experts, but I think someone needs to try to play that role.

Thanks for taking this comment into consideration. I won't be at the next two meetings, but I look forward to attending the big meeting in June!

Julie

Julie V. Mayfield  
Vice President and General Counsel  
Georgia Conservancy”

The meeting adjourned at 12:30 pm. The next SAC meeting dates are April 20 in Bainbridge from 7:30am to noon, May 26 from 7:30am to noon (location to be announced) and June 27 (time and location to be announced).

Meetings will continue to rotate at sites along/near the Flint River, and all meeting dates, times and locations will also be posted on the Flint River Basin Plan website, [www.gadnr.org/frbp](http://www.gadnr.org/frbp).

The website and e-mail for the project are as follows:

WEBSITE: [www.gadnr.org/frbp](http://www.gadnr.org/frbp)

E-MAIL: [frbplan@drn.state.ga.us](mailto:frbplan@drn.state.ga.us)

**\*\*Any questions about or corrections to these meeting notes should be directed to Courtney Tobin (706) 542-7149 ([tobin@cviog.uga.edu](mailto:tobin@cviog.uga.edu)) or Dennis Epps (706) 542-6244 ([epps@cviog.uga.edu](mailto:epps@cviog.uga.edu)), meeting facilitators, Carl Vinson Institute of Government, University of Georgia.**