

**Coastal Saltwater Intrusion Stakeholder Meeting
Held at Beaufort Jasper Water and Sewer Authority
August 6, 2010**

The following were in attendance at this meeting:

SCDHEC, GAEPD, Hilton Head PSD, FSI Hunter, DPW Fort Stewart/Hunter AAF, South Island PSD, Daufuskie Conservancy, City of Savannah, Skidway Island Utilities Inc., Water Utility Management, City of Hinesville, Daufuskie Fire Council, Georgia Power, Georgia Pacific, CDM, BJWSA, Tybee Island, Beaufort County Planning, International Paper, Dr. Richard Spruill.

Dr. Jim Kennedy, Ga EPD, presented an overview of the Coastal Sound Science Initiative

The Coastal Sound Science Initiative is a joint venture between Georgia and South Carolina to model the effects of groundwater withdrawals from the Upper Floridan Aquifer.

Questions/Comments

Participants would like a copy of this presentation.

What is the difference between the upper and lower aquifer?

Water quality in the lower units may require treatment.

Can mitigating strategies be modeled?

Yes. Must decide what strategies to evaluate.

The saltwater plume on Hilton Head Island is being shown as a wall, where in reality there are plumes on the sides as well.

A general depiction is modeled, and does not match exactly everywhere. There are hot spots not on the model, as modeling was concentrated on the north end of Hilton Head.

There is a plume that was discovered during the harbor deepening that is not depicted on the model.

This model focused on the salt water plume at the northern end of Hilton Head Island, Pinckney Island, and at the Colleton River. The plume beneath the Savannah was simulated using a different model that focused on the river.

Must be proactive on the North part of Hilton Head Island. Have already lost 5 out of 11 wells due to saltwater intrusion. Once salted the well is not recoverable.

Can't assume that today's prediction (based on 2 points) will work in 30 years. Will have to conduct periodic checks.

David Baize, SCDHEC, presented "Setting Goals and Management Options for the Upper Floridan Aquifer"

The original goals – to stop saltwater intrusion before the aquifer is affected, and to stabilize or reverse intrusion – have not been met.

Open Discussion

SC is in a position to move off the aquifer. Georgia will not find it so easy to transfer off of groundwater. It will take a multiple-year to decades-long effort with a huge capital investment.

Will see additional movement of plume and more wells lost on Hilton Head Island even with the best efforts.

Most of the impacts are being felt in South Carolina at present.

Much investment has been made already in SC towards alternatives.

It is in SC best interest that Georgia moves quickly to address this issue.

Georgia would like to see more saltwater sources included in the model.

More information that truly simulates all the saltwater impacts involved.

The problem is worse in the Savannah River than the model shows.

Modeling of salt water at the Savannah River was done using a model different than that used to model Hilton Head Island

Getting Georgia to spend money to help solve a problem in SC is difficult, but getting Georgia to spend money to solve a problem that affects Georgia will be easier. Need a better model that shows all aspects of this problem.

More information and better information will make selling the solutions much easier.

Vertical model shows more is going on than just the northern end of Hilton Head Island.

Intensive monitoring program now – Upper and Middle Floridan. Aquifer storage, work in conjunction with BJ during peak, use Upper, Middle, and Lower aquifer and change as demands are changing.

How much benefit would be derived from moving wells from the Upper to the Middle Floridan?

Limited: water quality is less, will need higher level of treatment. There are interconnections with the Upper Floridan. This may be a temporary solution for some, but not the solution to regional capacity. Yields are less.

What about long term for the Middle Floridan?

Not thick (about 50 feet). Need to guard against interconnection from one aquifer to the other.

We are mismanaging the Upper Floridan Aquifer. Wouldn't be allowed to withdraw so much water from a river that it would change the dynamics of the river system, but have the mentality that it is O.K. to withdraw from an aquifer while degrading that aquifer (out of sight/out of mind).

Need to bring the coastal aquifer system into balance. What is the recharge rate? Need to know how much freshwater is moving into the aquifer system in order to figure out how much we can safely withdraw.

Need a phased approach to reduction and reliance on this system. Take out a reasonable amount relative to what is going on. Can come up with a reasonable plan to reduce 75%. Will need a phased plan for reduction.

Reduced reliance on the aquifer system. Can't run to another aquifer and make the same mistakes.

Will become an "unfunded mandate". Force people to deal with issues in step-wise fashion. Can't happen overnight.

Can we agree right now that no more wells should be drilled into the aquifer?

There is a cap in Georgia's red zone. Hilton Head Island has been capped. Look at other areas that need to be capped.

Are there any areas in SC that are not capped that need to be?

Have not figured a sustainable yield for this aquifer yet.

If we stop using it now, how long to clean up the aquifer?

300-400 years? But at least won't contaminate new parts of it.

Governor's Committee: Savannah River Basin Advisory

Cooperatively develop a compact between the states OR through litigation. Want to work this out cooperatively. Have spent 7 years trying to get this model done.

Decide what the goal is first, and then make it work.

Next step is education of political leaders in towns to include in their budgets.

Effingham County needs to be included.

Determine where money is going to come from.

Do we have enough of an understanding to move forward, or should we delay decisions in order to wait for more science (modeling)?

Do we move forward and monitor results as we go along?

Georgia's draw on the aquifer is more than SC, but has not continued to withdraw at-will. City of Savannah just took an 8 mgd reduction. Have established rules to manage the aquifer. Georgia

wants to save the aquifer as much as SC. Has been mismanaged in the past, but are using new tools now.

There is a lot of economy on Hilton Head and in Savannah – will going off the aquifer by 80% in 5 years kill the economy?

A deadline of some time is going to be necessary in order to make it happen. Will take help from the business community to figure out what kinds of reductions and by when.

Don't arbitrarily set a number of years. Figure out how much needs to be reduced and how long that will take.

Hilton Head reduced from 17 mgd to 9 mgd. The leadership of the utilities took charge and started looking at different options. The more options and resources you have, the better off you are. Using the Middle Floridan with Reverse Osmosis. Didn't cause rates to go up too much. Georgia has a much broader area to spread these options.

All golf courses on Hilton Head Island use reclaimed water; South end uses it for irrigation.

Water treatment plants proposed on rivers in Georgia using ASR (private enterprises). Georgia passed a law outlawing ASR in the Floridan aquifer in Atlantic coastal plain counties. People have the view that Georgia has been fighting options and solutions.

Where do we go from here?

Steering Committee: DHEC and GAEPD appoint a steering committee, including both large and small municipal water suppliers and industries to meet with agencies and put together a proposal for review by all affected parties.

Capture minutes and presentations.

Meet together regularly.

Use the Georgia/South Carolina shared website as conduit for accessing info (www.Savannahriverbasin.org).

Constant updates to web.

Want to hear from the group where to go next with the model. Request through the steering committee for modeling scenarios. Identify a specific question, they will figure out how to model it.

Need to present a more comprehensive picture. Plume at Ft. Pulaski is probably bigger than being shown in the model. Modeling left out certain aspects on purpose. If include more aspects may find out that Georgia has more of a problem than is being shown right now.

30 years is a short time for the capital improvements that will need to be made to address this issue.

Savannah River model needs to be changed. Looking at salt water that is coming in through the channel area only.

Summary

Group agreed to manage the Upper Floridan Aquifer to whatever the sustainable yield is determined to be.

SCDHEC and GAEPD will get together a list of people to serve on the steering committee.

Post minutes, coastal permitting plan, and presentations on the web site
www.savannahriverbasin.org

Set a time frame for some of the steps being described.

The committee will come together by the first of September, and develop a schedule for future meetings and activities.

Georgia Council and SC Advisory Council will be briefed.

The steering committee will report back to this larger stakeholder group present at the August 6, 2010 meeting.