

Notes From 1/8/08 SEG meeting (9:15 a.m. to 10:15 a.m). This is not a verbatim transcript. Compiled from notes taken by SEG attendees.

Ben Dysart opened the meeting. The attendees introduced themselves.

The agenda for this meeting was accepted.

The November 2007 transcript was accepted by the SEG.

Bill Bailey explained he would be making three presentations today:

- Mitigation planning status is posted [here](#).
- Jasper terminal status is posted [here](#).
- Plan formulation status is posted [here](#)

The first presentation was on mitigation planning. A number of different resources are being evaluated in looking at impacts. The goal is to come up with one comprehensive plan.

Judy Jennings - How is an impact defined?

Bill Bailey - An impact to freshwater wetlands occurs when salinity in the water goes from less than 0.5 ppt to greater than 0.5 ppt – from fresh to brackish.

Freshwater marsh impacts were evaluated using the EFDC (hydrodynamic) model that was developed by EPA and then enhanced by this project. This model was approved by the resource agencies. Approximately 600-1200 acres (depending on the depth of the channel) of fresh water marsh would be impacted without mitigation. Bill discussed various mitigation scenarios intended to avoid impacts to the freshwater wetlands. He explained that the Corps looked at these scenarios individually and in combination to determine the best plan. The Corps also looked at the scenarios incrementally, building onto the mitigation plans. Bill reviewed the mitigation flow scenarios as listed in the table in the Powerpoint presentation.

Table – best plans are those in red. Negative 322 acres (go from brackish to fresh), +32, +201 and +337 acres go from freshwater to brackish.

Question: What do the dashed lines mean?

Bill Bailey- We didn't do calculations for those plans. There is a cost assigned to each plan but it isn't linear across the table.

Plan 7 was rerouting the river through Steamboat River (where the river used to go). It is pretty much silted in – there is very little flow during low tide. Plan 7 would block off the main river and reroute it through its old channel, which is a pretty big deal and a difficult engineering challenge. It is expensive, but not impossible.

In looking at the different plans for the 48-foot alternative, the Corps of Engineers looks at the most cost effective of the different options. The plans are running around \$50,000 per acre except Plan 7 which is about \$200,000 per acre. The Corps of Engineers' assessment of Plan 7 is that it is not worth that much money.

Bill explained they did not run Plan 7 for the 44-foot depth because the flow rerouting features would be sufficient by themselves to eliminate the adverse salinity impacts to the marshes. Also the 45-foot impacts were much smaller. They did run Plan 7 on the 46-foot and 48-foot depths. The 48-foot depth showed improvement, but not by much.

Will Berson - Did the depths included overdredge and advance maintenance?

Bill Bailey - Yes.

Dave Kyler - Do different (marsh) locations have different values?

Bill Bailey - No, all acres are the same type of marsh are assumed to have equal value.

Steve Willis - Are negative impacts to salt water marshes between Savannah and Tybee being looked at?

Bill Bailey - Some work would be included. The Kings Island Turning Basin would be evaluated because some marsh there would be dug up when the turning basin is expanded. There would be no adverse impact to any other marshes.

Bill Farmer - Why was there such a dramatic change (in impact) between one depth and another?

Bill Bailey - This estuary is not linear and therefore the results are not linear either.

Joel Fleming - Are open water acres were included?

Bill Bailey – No, just those outside the riverbanks.

Joel Fleming - Are there additional benefits for freshwater wetland acreage in Plan 7?

Bill Bailey - Yes, there would be some additional freshwater wetland acreage.

Will Berson - Are the dollar amounts reflected on the table in today's dollars, not over the life of the plan?

Bill Bailey – Correct.

Bill Bailey reviewed Plan 6b which is the 44-foot depth alternative. Included in this plan is a diversion structure. Its purpose is to try to pull more water into the system.

Will Berson - It seems these flow alterations will have impact after mitigation. How will you evaluate these changes?

Bill Bailey – We will rerun the model to identify the effects. We will then redesign the DO system for that new flow pattern.

Judy Jennings - What does redesigning the DO system mean?

Bill Bailey – We're not changing the system, but changing how much oxygen might be needed and at what location we would need to put these systems.

Judy Jennings - The media lately has been saying the depth will be 48 feet. Thought other depths were being considered.

Hope Moorer - All along the goal of the Georgia Ports Authority has been to reach 48 feet. The study has to do the analysis to look at alternatives between 42 and 48 feet.

Bill Bailey - The Corps will choose the NED plan, but the sponsor can pay for additional depth if the NED plan is below 48 feet.

Judy Jennings - GPA has the ability to do anything they want regardless of what the Corps recommends.

Bill Bailey reviewed the wetland restoration. In mitigation, you try to avoid, then minimize, then restore or preserve. He explained they are considering flow-altering components as a means of avoidance for mitigation. The Corps tried to identify restoration or enhancement sites, but were unable to find any suitable lands. No agency or the SEG could identify suitable lands. For wetland mitigation the Corps intends to use the Regulatory SOP (Standard Operating Procedures) to quantify remaining wetland mitigation needs. The SOP is being reviewed by the Corps' Center of Expertise for Ecosystem Restoration.

Steve Willis - Is the Corps was still getting abnormalities in the model?

Bill Bailey - No, Bill stated they were not still finding them. He said he was not sure which model Steve was talking about. They did experience some problems with Plan 7 and they had worked through those and got the plan to work.

Steve Willis – Do you have any documentation of what the abnormalities were and how they were resolved?

Bill Bailey - Did not think they had this information.

Will Berson – What did they use as a replacement ratio?

Bill Bailey - The SOP does not use ratios. They use more of a calculated functional value approach.

Will Berson - You may have to make the case ...the Corps should live by the rules that everyone lives by. I think you will have problems.

Bill Bailey –The SOP establishes the rules that everyone in Georgia uses to obtain approval for wetland impacts in their projects.

Gail Bowers – Is the SOP online?

Bill Bailey – Yes.

Judy Jennings – Is location of wetlands considered?

Kelie Moore – Yes, location is a factor. The agencies have been using this SOP for 8 years or so. The SOP uses a credit system. There are few acres of high quality. That is why it is not acre for acre because you could replace better acreage with lesser acreage. The further away the preservation takes place, the more credits are needed. Everyone in Georgia uses this for Corps of Engineers' permits.

Bill Bailey – U.S. Fish and Wildlife Service wants mitigation to occur within the Savannah River Basin. The Corps is using regulatory SOP to work with those two components. Still looking at mitigating impacts on chlorides.

Will Berson – When talking about chlorides, how will they be mitigated?

Bill Bailey – We are looking at the possibility of building a storage pond. In the past, we had thought about moving the intake point upstream.

John Sawyer – Looking at the potential for a reservoir. His understanding is if we start building it today, it would be many years before it could be completed – 10 to 15 years. Everyone keeps assuming the only impacts will be to the industries. 12 parts is the old standard set in 1947. It does not mean a thing. The duration, frequency and magnitude of spikes in the chlorides are what are important. No one can tell what it will be and that model run does not. He also heard that 250 parts of chloride is the limit for drinking water. The Federal EPA MCL is the limit and he cannot exceed it, not the limit to which it can go. USFWS has said the Corps cannot put the pipeline through the Refuge, so moving the intake is a huge dollar amount and not going to be done overnight. Also, building a reservoir is not going to be done overnight. It does not seem that we are coming to a resolution and he does not see anything that is workable. In ten to fifteen

years the aquifer wells may start salting up. We may need to depend on the river for drinking water and it is going to salt up.

Judy Jennings – Did the City (of Savannah) bless the model? I get comments about the model all the time.

John Sawyer – No. We have not accepted it. The Corps has the letter from the City.

Judy Jennings – I have not heard anything about this. What is the reservoir?

John Sawyer – It's one of the ideas the Corps is looking at for mitigation.

Bill Bailey – We're considering a storage pond. Only looking at 100-150 acres of land GPA currently owns. It is not a reservoir, it is a pond surrounded by a dike that would hold a week's worth of supply ... more than is used by the industries.

Will Berson – What John said reminded him about impacts on air – as long as you don't move into non-attainment on air, you don't impact it. He is concerned about the impact on air from shipping. This project needs to discuss both air and water. Where are we in terms of analysis on this?

Bill Bailey – We are still working on it.

Steve Willis – When driving here this morning there was a smelly layer of smoke. These conditions are right now.