

MEMORANDUM FOR RECORD

SUBJECT: Jim Woodruff Interim Operations Plan – Meeting with US Fish and Wildlife Service to Discuss Compliance with Terms and Conditions of the Biological Opinion

1. Representatives of the US Army Corps of Engineers, Mobile District (CESAM) held a teleconference with representatives of the US Fish and Wildlife Service (USFWS) on 25 September 2007, to discuss status of operations under the IOP and measures taken and planned to assure compliance with the terms and conditions of the Biological Opinion (BO), issued by USFWS on 5 September 2006. This meeting represented the third semi-annual meeting. The following representatives participated in the meeting discussions.

Gail Carmody, USFWS	850-769-0552, Ext. 225
Jerry Ziewitz, USFWS	850-769-0552, Ext. 223
Sandy Tucker, USFWS	706-613-9493, Ext. 230
Tom Mackenzie, USFWS	404-679-7291
Joanne Brandt, CESAM-PD-EI	251-690-3260
Brian Zettle, CESAM-PD-EI	251-690-2115
Doug Otto, CESAM-EN-H	251-690-2718
Cheryl Hrabovsky, CESAM-EN-HW	251-694-4018
James Hathorn, CESAM-EN-HW	251-690-2735
Andy Ashley, CESAM-EN-HW	251-690-3385
Bill Stubblefield, CESAM-EN-HH	251-690-3116

2. Brian Zettle provided a status update regarding Reasonable and Prudent Measures (RPM) and Terms and Conditions outlined in the BO. A copy of this presentation is attached to this MFR. A brief summary of the discussions relevant to each RPM is provided below:

A. RPM1 Adaptive Management:

(1) Semi-Annual Meetings. It is proposed that semi-annual meetings continue to be conducted in the early fall and early spring, with August and February suggested as the appropriate meeting dates. This is the third semi-annual meeting, and also serves as the planning meeting for future actions.

(2) Update Evaluation Tools. Mobile District is currently in process of converting the HEC-5 hydrologic model to HEC-ResSim. The ResSim model will be more flexible, and can be programmed to run model simulations with if/then/else statements. This conversion should be completed in the next few months for the existing operations conditions, with the current IOP integrated into the existing operations. There is no forecasting capability in the ResSim model. However, we are considering working

with the Georgia State climatologist regarding a forecasting technique. USFWS requested that we include Florida in the forecasting discussions. Perhaps develop a consortium that includes University personnel from Florida and Georgia.

Mobile District also plans to extend the unimpaired flow data set through 2004 (and possibly through 2005 if additional demands data can be obtained from the States) – this will capture the recovery from the 1998-2002 drought period. It is planned to use Georgia's current Flint River Agricultural demand numbers as part of the unimpaired flow dataset.

Mobile District had intended to update/calibrate turbine ratings at Jim Woodruff Dam earlier this year, but drought conditions prevented there being enough water to support this effort. When we are able to accomplish this, we could also use flow/velocity meters to measure velocities at particular sites and depths associated with Gulf sturgeon spawning habitat. USFWS agreed to assist in identifying sample points for this effort.

(3) Annual Report. First Annual Report submitted 31 January 2007. Next Annual Report due 31 January 2008.

B. RPM2 Adjust June to February Lower Threshold to 10,000: This RPM was implemented immediately upon issuance of the BO. Whenever the 7-day basin inflow is less than 10,000 cfs, at least basin inflow but not less than 5,000 cfs will be released. A copy of the revised IOP table was provided to USFWS by letter dated 7 September 2006 and has been posted on the Mobile District website: <http://www.sam.usace.army.mil/ACF.htm>.

C. RPM3 Drought Provision: By letter dated 30 January 2007, the Corps requested an extension of the deadline to 28 February 2007. By letter dated 02 February 2007, the USFWS granted the extension. The drought provision modifications were submitted to USFWS on 16 February 2007 and additional information regarding stakeholder comments was provided on 23 February 2007. The USFWS approved the drought provision modifications to the IOP on 28 February 2007. The Finding of No Significant Impact was signed on 8 March 2007 and the drought provision modifications were immediately implemented. A copy of the modified IOP table was provided to USFWS by letter dated 23 March 2007 and has been posted on the Mobile District website: <http://www.sam.usace.army.mil/ACF.htm>.

D. RPM4 Sediment Dynamics and Channel Morphology Evaluation: By letter dated 31 January 2007, the Corps requested an extension of the deadline to 30 August 2007. By letter dated 30 March 2007, the USFWS granted the extension and requested a status update and schedule for completion of the evaluation. By letter dated 11 May 2007, the Corps provided the status update and schedule. A reconnaissance field trip was conducted on 20-21 June 2007 with Corps, USFWS, and contract personnel (Geomorphologist, River Engineer, and Malacologist). The field trip included a boat tour of the entire river with specific focus on mussel habitat characteristics and apparent trends. The trip proved to be very educational and insightful for all participants based on

feedback. A workshop was held in Mobile on 14-15 August 2007 to discuss the findings of the subject matter experts and identify additional studies needed to further refine our understanding of the sediment dynamics and channel morphology of the Apalachicola River. Following the workshop, the Corps completed the evaluation based on the findings of the experts and submitted it to the USFWS on 30 August 2007.

E. RPM5 Monitoring: By letter dated 31 January 2007, the Corps requested an extension of the deadline to 30 August 2007. By letter dated 30 March 2007, the USFWS granted the extension and requested a status update and schedule for completion of the long term monitoring plan. By letter dated 11 May 2007, the Corps provided the status update and schedule. A reconnaissance field trip was conducted on 20-21 June 2007 with Corps, USFWS, and contract personnel (Geomorphologist, River Engineer, and Malacologist). The field trip included a boat tour of the entire river with specific focus on mussel habitat characteristics and apparent trends. The trip proved to be very educational and insightful for all participants based on feedback. A workshop was held in Mobile on 14-15 August 2007 to discuss the findings of the subject matter experts and discuss the long term monitoring studies that are needed to 1) periodically estimate total abundance of listed mussels in the action area; and 2) determine the fraction of the population that is located in habitats that are vulnerable to low-flow impacts. Following the workshop, the Corps submitted the monitoring plan to the USFWS on 30 August 2007. The Corps anticipates finalizing the long-term monitoring study details this winter/spring and beginning the studies in Summer 2008. The USFWS indicated that they are still reviewing the mussel monitoring plan and are coordinating the plan with other scientist. The Corps will continue to work closely with them regarding the final design and execution of the monitoring study.

3. Volumetric Balancing. At the October 2006 Semi-annual meeting the Corps and USFWS began discussing lessons learned and potential improvements to the volumetric balancing accounting system. By letter to USFWS dated 16 May 2007, the Corps documented mutual agreements regarding the updating of the volumetric balancing accounting system (implemented 1 May 2007). The current balance is approximately 12,000 dsf which exceeds the “soft” cap of 10,000 dsf described in the updated accounting system. Additional discussion is needed on the timing and volume of balancing activities. However, all agreed that balancing activities are mostly limited by lack of rainfall and subsequent basin inflows less than 5,000 cfs. By letter dated 2 August 2007, the FDEP notified USFWS of their objections to the updated volumetric balancing accounting system and claimed that under-releases have occurred in violation of the Endangered Species Act. Andy Ashley (EN-HW) provided a summary of the FDEP letter and explained misinterpretations and false assumptions made by FDEP. The Corps agreed to provide additional information regarding the FDEP claims to USFWS so that they can respond to the letter.

4. Update on Current Operations and Drought Conditions. James Hathorn provided an update on the current status of the Federal reservoirs and system operations. He discussed the impacts of the current extended drought on storage and provided model simulations of reservoir levels if the current drought conditions continue. It is apparent

that temporary modifications to the IOP will be needed if current conditions continue as anticipated.

5. Potential Temporary Modifications to the IOP due to Current Drought and 2008 Operations Plan. Due to the continuing drought conditions we agreed to discuss temporary modifications to the IOP that would assist in recovering storage or reduce the demand on storage in order to ensure the continuation of augmentation flows when inflows are less than 5,000 cfs. Possible modifications discussed include temporary suspension of the downramping provision, storage of all basin inflow greater than 5,000 cfs, and reductions in the 5,000 cfs minimum flow. Early analysis suggests that some options may be able to be implemented quickly without the risk of adverse impacts to listed species. It was mutually agreed that additional analysis and modeling would be needed and that both agencies would continue to work together on potential modifications in the coming weeks.

**Jim Woodruff Dam
Interim Operations Plan
Semi-Annual Meeting**

25 September 2007

RPM1 Adaptive Management

- **Semi-annual Meetings**
 - 26 October 2006, 1 March 2007, 25 September 2007
- **Update Evaluation Tools**
 - Convert HEC-5 model for 1977 and 1995 conditions to HEC-ResSim
 - Incorporate IOP Rules
- **Annual Report**
 - 31 January 2007
 - Next Scheduled for 31 January 2008

RPM2 Adjust June to February Lower Threshold to 10,000

- Implemented 7 September 2006
- Incorporated into RPM3 Drought Provision

RPM3 Drought Provision

- Request for Extension 30 January 2007
- Extension Granted 2 February 2007
- Drought Provision Modifications Submitted
16 February 2007
- Additional Information Submitted
23 February 2007
- RPM3 Drought Provision Approved
28 February 2007
- RPM3 Drought Provision FONSI Signed
8 March 2007

RPM4 Sediment Dynamics and Channel Morphology Evaluation

- Request for Extension 31 January 2007
- Extension Granted 30 March 2007
- Recon Field Trip W/ Geomorphologist, River Engineer, and Malcologist
20-21 June 2007
- Workshop to Discuss Findings
14-15 August 2007
- RPM4 Submittal 30 August 2007

RPM5 Monitoring

- **Monitor Incidental Take Days**
 - Calendar Year 2007 = 6 Days (39 Days max)
- **Mussel Monitoring Plan**
 - Request for Extension 31 January 2007
 - Extension Granted 30 March 2007
 - Status Update 11 May 2007
 - Recon Field Trip Initial Sampling Effort 31 May 2007
 - Mussel Sampling 7-12 June 2007
 - Recon Field Trip W/ Geomorphologist, River Engineer, and Malcologist 20-21 June 2007
 - Workshop to Discuss Findings 14-15 August 2007
 - Mussel Sampling Report and Monitoring Plan Submittal 30 August 2007
- **Implement Mussel Monitoring Plan**
 - Finalize long-term monitoring study details this winter/spring
 - Begin studies next summer

Volumetric Balancing

- October 2006 Began Informal Discussions Regarding Lessons Learned and Improvements to Accounting System
- Documentation of Mutually Agreed Upon Updated Accounting System 16 May 2007
- Current Balance = 12,000 dsf Credit
 - “Soft” Cap (10,000 dsf) Exceeded
 - Informal Discussions on Timing and Volume for Balancing Activities Needed
- FDEP Letter to USFWS 2 August 2007

