

## MEMORANDUM FOR RECORD

**SUBJECT: Alabama Coosa-Tallapoosa (ACT) Drought Summit,  
25 June 2007, Columbus, Ga.**

**DRAFT**

1. Attendees: (See attached list)

2. Mobile District command comments and introduction of Mobile Team: General Schroedel opened the summit and briefly discussed the purpose of the meeting. The main purpose was to establish a process for sharing information. He indicated the need to work together and to have a common picture of the system. He also emphasized that this summit was not to evaluate Corps decisions or answer pending questions and that the Corps is neither a referee nor a mediator for other parties. The General's PowerPoint presentation, as well as Doug Otto's, is available at the following address:

<http://www.sam.usace.army.mil/pd/Pd1.htm>.

The General stated that our commitment is to serve the public, be transparent in communications, listen to concerns, and make sound decisions. Commander's intent is to succeed as a region, invest in people, build trust and leverage resources. The Corps role is not that of a referee. The convened group is to exchange information and share concerns, and is not for the purpose of decision making, as that would raise concerns regarding the Federal Advisory Committee Act.

He also spoke about south Florida's drought as an example of establishing a communication process to improve interagency coordination. The State of Florida asked for lowering water levels in Water Conservation Areas. Set up weekly conference calls with SAD, SAJ, the State of Florida, and the South Florida Water Management District. A key issue is the prevention of salt water intrusion into drinking water wells.

3. ACT System Status/Prognosis: Colonel Pete Taylor presented the objectives and agenda for the meeting, had participants introduce themselves, and introduced Doug Otto. Doug used a Powerpoint presentation to summarize the status of the drought; ACT System operation; and key constraints identified to date. Doug spoke about U.S. drought monitoring. Alabama and Georgia are currently in an exceptional drought period, particularly centered over the ACT Basin. Prognosis is not good for the short term. Long term drought is extreme case. Much lower than normal rainfall amounts are expected this year.

- Current releases of 300 to 350 cfs daily released from Carters Lake. Lake Allatoona is currently releasing about 500-600 cfs. Carters Lake has a small drainage basin and lake levels continue to drop. Inflows coming into both of these Corps reservoirs are at or below the historic low for this time of year.
- Information was presented for each of the Corps and Alabama Power Company reservoirs in the ACT basin with data such as project rule curve, lake level to date this year, projected reservoir levels over the next month, hydropower production capability, key water supply intake elevations, remaining storage, and elevation of the bottom on conservation pool.
- River levels are low in the ACT Basin, with unregulated tributaries such as the Cahaba River experiencing record low flows.
- Constraints/Issues for drought operations: On the Alabama River, endangered species, municipal water intake elevations, pulp and paper industry intake elevations and wastewater assimilative capacity (river flow more pertinent than elevation for discharging effluent), with flow cutbacks more than 20 percent at Montgomery creating adverse impacts on these industries. Discussed water intake elevations for several municipalities. Several have multiple level intakes and should be ok if lower level intakes are functional. Wedowee's intake at Lake Harris could be exposed by end of July or early August.
- Dissolved Oxygen (DO) may be limit for production at some mills. River depth is a limiting factor for

navigation on the Alabama River, as well as for the water intake at Alabama River Pulp (requiring 5.5 feet stage on the Claiborne gage).

4. Comments from attendees

- a. Carol Couch - Georgia Environmental Protection Division (EPD): Spoke of water storage for public drinking water use as being number one priority. Over 800,000 people in northwest Georgia almost exclusively depend on Allatoona and Carters Lakes for their water supply. We should be considering the possibilities that the current drought could be a multiyear event, and as such should be practicing very cautious preservation of the remaining storage in these lakes. Aggressive restrictions have been placed on water usage (Conservation) by the State of Georgia. Need to identify triggers that would indicate reducing the outflows at Allatoona and Carters to the minimum flows of 240 cfs at each lake.

Encouraged Corps to only release at-site minimums. Need to discuss factors that bear on minimum flows. Asked questions about flow requirements for T&E and if there are any benchmarks. She reiterated the consistency of the word "balance" as a thread used by all speakers. Recommend that in developing this balance, we need to set "priorities" for water use.

- b. Willard Bowers - Alabama Power Company (APC): Mentioned that we are in 2<sup>nd</sup> year of drought. Brought up that Alabama Power previously asked for variance in Feb 2007. The variance was granted to fill lakes early, but the permission was withdrawn 4 hrs later. If drought continues, need relief from navigation flow requirements. Indicated that decision making needs to be addressed and how to get timely decisions. He noted that during the droughts in 1986 and 1988, no NEPA or public notices were required for the APC and Corps variances. Expressed concern that NEPA documentation was interfering with sound and timely decision making process.

Operators need to come to logical answer on flows required. Steam plants have temperature restrictions for discharge waters, e.g., Barry Steam

Plant on the Mobile River. The drought has caused flows to get so low at that facility that negative flows have been observed, which could affect the plant's ability to operate within its NPDES permit temperature limits. Availability of hydropower production helps stabilize the overall power system within Alabama, so the hydropower function is not just about production of kilowatts. Recommend consideration of ways to provide relief in northern and central part of Alabama if downstream areas gets rain. Suggested that Corps reservoirs on the Alabama River be refilled to help protect the paper and pulp mills on the river.

- c. Joel Seymour - South Eastern Power Administration (SEPA): Long term power contracts, 20 years, for federal dams. They are responsible for marketing of power produced at 10 projects in Alabama and Georgia. Noted that as reservoir elevations decline, also the hydropower efficiency declines, e.g., 25% decline at Lake Allatoona when the lake gets into the 828-830 foot elevation range. Under ideal conditions they like to operate the hydropeaking plants between 6-9am and 4-8 pm.

SEPA markets power for 22 Federal projects in 11 states. Contracts have been made based on system operations and requirements Concerns when unanticipated drastic changes are made in water usage. They buy energy during drought periods. Participated in weekly "Drought Buster" telephone calls about hydro production. Must recover operating costs when have to purchase at high rates, such as during a hot, dry summer. Concerned about water studies and basin plans. Importance of integrated operations. Commented about refill times for reservoirs and integration of systems.

- d. Daphne Smart - Alabama Department of Environmental Management (ADEM): Concerned about public water supply systems. Potentially 8 intakes on the Coosa could be affected, e.g., Gadsden, Childersburg, Talladega, Clanton, Elmore County (she will provide a list with information on elevation of intakes). Look for alternative water sources. Extend water intake lines to lower elevations. Water quality concerns. Seeing fish kills earlier than normal for

this time of year. Concerned about NPDES discharge limitations for pulp and paper industries regarding their ability to comply with the DO permit limits.

Concerned that just by meeting/complying with emissions limits, we may not be protecting water quality and the aquatic resources since many areas are going below the 7Q10 flows for which the discharge limits were established. System needs to be managed as a whole and provide flows for longest time possible. Carol Couch asked about water conservation regulations and restrictions in Alabama. Daphne mentioned that although the state does not have water conservation laws, a number of cities and counties are enacting daily watering restrictions. ADEM has also sent letters to major industries regarding the drought conditions and the compliance with their permits. Carol Couch asked questions about flow requirements for T&E species and any benchmarks.

- e. Sandy Tucker - USFWS (Georgia Office): Advocates for aquatic systems. Recommends early and often involvement with USFWS regarding endangered species consultation. They are concerned about impacts to minimum flows during drought conditions. Mentioned the need for identification of trigger to know when the drought is over and "normal" operations/releases could resume.

Water quality is also an issue. The three endangered species in Alabama River (Alabama sturgeon, heavy pigtoe, and tualatoma snail) are in a perilous state due to the drought, and this historic condition could be enough to drive these species to extinction. Want cooperative partnership.

- f. Rick Oates - Alabama Pulp and Paper Council: Violation of permits by the paper and pulp industries is not an option - these mills would shut down rather than violate their NPDES permits. Need for balance in use of system especially in regards to flows. Economic impacts of thirteen mills are great for Alabama (landowners, loggers, truckers, etc.). One of the mills is on the Coosa and four on the Alabama River. The mill in Wilcox County also

withdraws water for several communities' water supply. Communications are important.

- g. Brian Atkins - Alabama Department of Economic and Community Affairs, Office of Water Resources (ADECA-OWR)): Ninety percent of Alabama is classified in extreme drought condition. Asked for more water releases from Corps projects in Georgia. Need more coordination and communication, earlier. Disconcerting to look at reservoir levels, especially Allatoona, which has been rising, and what was to be done as far as releases. Expressed desire to have increased releases from Carters and Allatoona. Confused as to what can be done to balance interests in regards to flow releases.

Need to know what Corps' desires and expectations are and unclear on how the Corps is operating these upstream reservoirs. Stated that the Corps and stakeholders worked out drought operations during the 2000 drought without doing any NEPA documentation, which seems to be holding up the decision process during the current drought. Alabama has no state law or regulation requiring water conservation during droughts.

- h. Jim Parsons - Cobb-County Marietta Water Authority, Atlanta Regional Commission (ARC)): They see the main issue of the drought is one of water supply. Groundwater not an option for the highly populated area in north Georgia. Atlanta area economy is driven by water.
- i. Tonya Blaylock -Georgia Power Company (GPC)): Primary concern is steam plant (Plant Hammond and Plant Bowen) production and temperature permit limits on Coosa and Etowah Rivers. Run minimum loads as much as possible. Already they have had a temperature violation a couple of weeks ago at Plant Hammond (exceeded 90 degrees), a once-through cooling water process on the upper end of Weiss Lake in Georgia. Window of flexibility is very narrow. SER's in load reductions. Collaboration is important.
- j. Barnett Lawley - Alabama Department of Conservation and National Resources (ADCNR)): Oyster industry is adversely affected by salinity intrusion induced by

the drought causing increased oyster predator populations. Priorities need to be established. Communication is important.

- k. Kirk Cooper - Federal Energy Regulatory Commission (FERC): Reported that APC has had two minimum flow variances for Jordan Dam approved by FERC this Spring, and a third requests was submitted by APC last Friday - proposing to reduce the minimum flow from 2,000 cfs to 1,000 cfs, in 250 cfs increments associated with monitoring.
- l. Dee Stewart - Environmental Protection Agency (EPA): Involved with water quantity in relation to water quality. Most of USEPA's regulatory responsibilities have been passed along to appropriate State agencies such as GEPD and ADEM. Concerned that public gets safe drinking water. Interested in working out issues with people.

## 5. Discussion of Process

- a. DDE Butler provided a summary of the meeting. Reiterated listening to all concerns and the process of translating these concerns. Raised several rhetorical questions: How do we meet everyone's goals. How do we manage risks? Evaluate alternatives, e.g., extending water intakes into deeper water, use of gas turbines as alternative to hydro. What are the critical/trigger levels? What are the break points? Stressed better communication, quick decisions and fully coordinated responses.
- b. General Schroedel suggested that more coordination from higher levels be initiated after technical experts have met. Decisions should be anticipated 3-4 wks in advance. Initiate teleconference to make assumptions and share them with users. Rationale for making decisions should also be discussed.

Need to be consistent with our decisions and approaches across the region. Need to think/get outside of the box. Set priorities with human water usage being the most important. Establish a southern coalition to let Congress know that water supply is a great issue and should be a national

one. Envisions a need to doubling of water storage in the southeastern US over the next 20 years to address water supply issues.

#### 6. Conclusions:

- Comment- In trying to address technical issues, technical people have constraints on what can be shared. (Willard Bowers)
- Comment - Be clear about what we are trying to do and how that information will be used. (Sandy Tucker)
- Comment/Question - Is there one place that shows constraints on system and requirements available? Need to capture these constraints in useable location. (Phil Mancusi-Ungaro (USEPA))
- Comment- No idea when drought will end. What are future needs and how do we get there. Future is just as important as the present. (Joel Seymour)
- Suggestions - Not enough communication is ongoing. Reiterated General's goals of meeting. Needs to reassess if the teleconference is not working. How to solve a particular need with concerns from other entities (unfavorable)? Need to quantify needs of system (personnel). (Carol Couch)

#### 7. Tasker/Action Items:

- Task- Set up a conference call in about two weeks to further discuss the drought situation and share data.
- Missing from meeting: United States Geological Survey (USGS), navigation interests, and recreation interests.

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