

**FINDING OF NO SIGNIFICANT IMPACT  
TEMPORARY EXCEPTIONAL DROUGHT OPERATIONS MODIFICATIONS TO  
THE INTERIM OPERATIONS PLAN  
FOR SUPPORT OF ENDANGERED AND THREATENED SPECIES  
AND TEMPORARY WAIVER FROM ACF WATER CONTROL PLAN  
JIM WOODRUFF DAM  
GADSDEN AND JACKSON COUNTIES, FLORIDA  
AND DECATUR COUNTY, GEORGIA**

**1. PROPOSED ACTION:**

The EDO is a temporary modification of the Jim Woodruff Dam Interim Operations Plan (IOP) as approved by the U.S. Fish and Wildlife Service (USFWS) on 15 November 2007. The IOP describes minimum releases and maximum fall rates for releases from the dam to the Apalachicola River in order to minimize or avoid adverse impacts or provide support to the threatened Gulf sturgeon (*Acipenser oxyrinchus desotoi*) and critical habitat for the Gulf sturgeon; the endangered fat threeridge mussel (*Amblema neislerii*); the threatened purple bankclimber mussel (*Elliptoideus sloatianus*); and the Chipola slabshell mussel (*Eliptio chipolaensis*). The intent of any modification to the IOP would be to minimize adverse impacts to listed species in the Apalachicola River while making allowances for increased storage opportunities and/or reductions in the demand of storage in order to provide continued support to project purposes, minimize impacts to other water users, and provide greater assurance of future sustained flows for species and other users during a severe multi-year drought, currently being experienced in the ACF basin.

The EDO is not a new water control plan for Jim Woodruff Dam. It is a temporary modification of the IOP, which is a definition of temporary discretionary operations within the limits and rule curves established by the existing water control plan. The EDO will require a temporary waiver from the existing water control plan to provide for minimum releases less than 5,000 cfs from Jim Woodruff Dam. The temporary waiver from the existing water control plan would also include provisions to allow temporary storage above the winter pool rule curve at the Walter F. George and West Point projects if the opportunity presents itself and/or begin spring refill operations at an earlier date in order to provide additional conservation storage for future needs.

The EDO specifies a minimum discharge applicable to daily releases from Jim Woodruff Dam. The minimum discharge is determined in relation to Composite Storage and not average basin inflow as under the IOP. Consistent with the IOP, the EDO uses Composite Storage to determine when the EDO is required and when various aspects of the EDO are implemented. The EDO is "triggered" whenever the Composite Storage falls below the bottom of Zone 3 into Zone 4. At that time the provisions of the IOP are suspended and management decisions are based on the provisions of the EDO. The provisions of the EDO remain in place until conditions improve such that the Composite Storage reaches a level above the top of Zone 3. At that time, the EDO provisions are suspended, and the provisions of the IOP are re-instated. Once the IOP is re-instated, the provisions of the EDO, including the "trigger" for implementation, are

eliminated and additional consultation will be required if future conditions result in the need to modify the IOP.

Operations under the EDO will be implemented and continued until such time as the Composite Storage enters into Zone 2; or until such time as additional formal consultation may again be initiated and completed.

## **2. ALTERNATIVES CONSIDERED:**

a. “No Action” Alternative. The CEQ regulations require analysis of the “no action” alternative. 40 C.F.R. § 1502.14. Based on the nature of the EDO, “no action” represents “no change” from the current management direction or level of management intensity. This alternative would represent the current water control operations at Jim Woodruff Dam. This alternative is not feasible given the intensity of the drought and the forecast for worsening conditions therefore additional alternatives were considered. Based on our modeling of the no action alternative under an extreme drought hydrology, the Composite Conservation Storage of the system would be depleted thus “breaking” the system in the event of a multi-year drought which has a reasonable chance of occurring given current meteorological forecasts. The Effects Analysis section includes a detailed description of this. Therefore, additional alternatives were considered.

b. Suspend Down Ramping Requirement Until 1 March 2008 – This alternative represents the IOP operations at Jim Woodruff Dam since 19 October 2007. At that time the Corps requested and the USFWS approved a temporary modification of the IOP consisting of an immediate suspension of the maximum fall rate schedule until 1 March 2008. Under this temporary modification, fall rates would be managed to match the fall rate of the basin inflow. Elimination of the down ramping provision would improve our ability to conserve storage to the maximum extent practicable. However, it was noted that additional temporary modifications to the IOP would likely be required in order to avoid depletion of the composite storage in the system. The suspension of the down-ramping requirements would address the situation when increased flows in the system begin to decline and ramp-down occurs. However, this alternative does not address the situation when adequate rainfall does not occur and there is not significant increase in flows to the point that water can be stored in the system. If this does not occur, there may not be many opportunities to take advantage of the suspension in down ramping. Based on the modeling results for the no action alternative, it is apparent that suspension of the down ramping provision alone fails to avoid depletion or near depletion of the composite storage in the system.

c. Maintain 5,000 cfs Minimum Release at Jim Woodruff Dam and Eliminate All Other Provisions of IOP Until Composite Storage Enters Zone 2. The period of June through December is the most critical period during a dry year. This generally represents the period where significant amounts of storage are required to augment the basin inflow to meet the 5,000 cfs minimum flow. An opportunity to reduce flow below the 5,000 cfs minimum during this time is necessary. This alternative did not provide sufficient opportunity to conserve storage until basin inflows increase to a level where storage recovery can begin. Furthermore, extended

periods with Composite Storage in Zone 4 and especially those with Composite Storage levels significantly lower than the top of Zone 4 greatly limit ability to respond to drought conditions as severe as and more severe than are currently occurring. This alternative was deemed not a fair balance between providing more opportunities to conserve storage for future augmentation flows and continued flow support to threatened and endangered species and the multiple project purposes in the basin.

d. Maintain 5,000 cfs Minimum Release at Jim Woodruff Dam and Eliminate All Other Provisions of IOP Until Composite Storage Enters Zone 2: On 1 June 2008 See if Trigger to 4,150 cfs Flow is Met. Although this alternative is very similar to the two previous alternatives, the minimum flow reduction decision is delayed until next summer. Immediate consideration to lowering the minimum flow must be taken due to the continued need to use storage to augment the basin inflow to meet the 5,000 cfs minimum flow over the next few months and to optimize storage conservation and the likelihood of reservoir refill. Reservoir refill to Composite Storage levels above Zone 4 is critical to our ability to manage the system during an extended drought period and delaying the decision until 1 June 2008 would also miss the opportunity for supplementing storage during the normally wetter periods that occur prior to June. This alternative was deemed not a fair balance between providing more opportunities to conserve storage for future augmentation flows and continued flow support to threatened and endangered species and the multiple project purposes in the basin. Under this operation, more preference was given to immediate support threatened and endangered species than reservoir refill.

e. Maintain 4,150 cfs Minimum Release at Jim Woodruff Dam and Eliminate All Other Provisions of IOP Until Composite Storage Enters Zone 2. This alternative provided great benefit to storage conservation and reservoir refill. However, model results indicate prolonged periods of flows equal to 4,150 cfs would occur under this operation. This alternative was deemed not a fair balance between providing more opportunities to conserve storage for future augmentation flows and continued flow support to threatened and endangered species and the multiple project purposes in the basin. More preference was given to storage conservation and reservoir refill than to support to threatened and endangered species.

f. Georgia Environmental Protection Division (GAEPD) Recommendation – By letter dated 12 October 2007, the GAEPD requested a temporary modification of the IOP. The GAEPD recommends that these modifications remain in place until 1 March 2008 at which time additional modifications would likely be required. The GAEPD recommended plan consisted of temporary modifications of the IOP that include changes to two parameters applicable to the daily releases from Jim Woodruff Dam: a minimum discharge in relation to average basin inflows and a maximum fall rate. The recommended changes include:

- Immediate suspension of 5,000 cfs minimum release requirement at Jim Woodruff Dam. Minimum releases from the dam would match basin inflow while basin inflow values are less 5,000 cfs.
- If basin inflow values are 5,000 cfs or higher, then the maximum release from Jim Woodruff Dam would be 5,000 cfs.

- Immediate suspension of maximum fall rate schedule.

GAEPD subsequently revised the proposed modifications in a Motion for Preliminary Injunction filed in the United States District Court for the Middle District of Florida on 19 October 2007. GAEPD states in the motion that these emergency changes to the IOP would remain in effect until the earlier of: 1) 1 March 2008; 2) a decision on the merits of the Georgia II case; or 3) further order of the court, with the understanding that motions for modification of this relief may be appropriate in the event that conditions improve and the threat of depletion of reservoir system conservation storage is materially reduced. The revised temporary modifications include:

- Immediate suspension of 5,000 cfs minimum release requirement at Jim Woodruff Dam. Minimum releases from the dam would match the adjusted basin inflow while the adjusted basin inflow values are less 5,000 cfs, as measured at the Chattahoochee gage.
- If the adjusted basin inflow values are 5,000 cfs or higher, then the maximum release from Jim Woodruff Dam would be that required to maintain a 5,000 cfs flow measured at the Chattahoochee gage.
- Immediate suspension of maximum fall rate schedule.

As defined in the motion, "Adjusted Basin Inflow" is "the amount of water that would flow by Jim Woodruff Dam during a given time period if all of the Corps' reservoirs maintained a constant water surface elevation during that period, plus Georgia's municipal and industrial consumptive demands from the Chattahoochee River and Lake Lanier". Due to the similarity of the proposed modifications, we address the most recent recommendation in this alternative discussion.

We have incorporated aspects of the Georgia proposal into the EDO, such as the suspension of maximum fall rate schedule; the storage of all basin inflows above 5,000 cfs; and the reduction of the 5,000 cfs flow if certain triggers are reached. The immediate suspension of the 5,000 cfs flow to match the adjusted basin inflows was not incorporated because it may not provide the benefits to Lake Lanier that are key to maintaining storage in the system. It could be beneficial to the lower project but could present a problem with holding the additional storage in the lower projects if they exceed the top of conservation or even a designated level within the flood zone. The provision to match minimum releases to basin inflows when flows are below 5,000 cfs would be more detrimental to the species than the reduction designated in the EDO. The EDO provides a reduction in flow if certain triggers are reached but does not reduce the flows to a level that could occur under this proposal.

g. ARC Recommendation— Atlanta Regional Commission (ARC) provided a three-phase Reservoir Recovery Plan that included an Emergency Operations Plan as phase 1. The other two phases include actions that would require additional consultation apart from the intent of the current consultation and therefore are not included in this alternative description. The ARC recommends that the Emergency Operations Plan remain in place until 1) composite storage within the system is recovered; 2) a new IOP and/or updated Water Control Plan are completed;

or 3) composite storage within the system is in Zone 4 on 1 February 2008. The Emergency Operations Plan consists of temporary modifications of the IOP that include changes to two parameters applicable to the daily releases from Jim Woodruff Dam: a minimum discharge in relation to average basin inflows and a maximum fall rate. In addition, the Emergency Operations Plan includes a temporary waiver of the seasonal drawdown at the West Point and Walter F. George projects. The recommended minimum discharge changes include:

During the non-spawning season (June-February):

- When Basin Inflow is greater than 5,000 cfs, all flows in excess of those required to meet the 2,000 cfs minimum flow target at Farley Nuclear Plant should be stored in the Chattahoochee reservoirs to the extent possible.
- When Basin Inflow is less than 5,000 cfs, (or whatever alternative minimum flow FWS determines to be appropriate) storage should be released from the Chattahoochee reservoirs to meet the minimum flow.

During the spawning season (March-May):

- When Basin Inflow is greater than 11,000 cfs, all flows in excess of those required to meet the 2,000 cfs minimum flow target at Farley Nuclear Plant should be stored in the Chattahoochee reservoirs to the extent possible.
- When Basin Inflow is between 5,000 cfs and 11,000 cfs, Woodruff Outflow should equal Basin Inflow.
- When Basin Inflow is less than 5,000 cfs, (or whatever alternative minimum flow FWS determines to be appropriate) storage should be released from the Chattahoochee reservoirs to meet the minimum flow.

The ARC Emergency Operation Plan includes a modification of the IOP maximum fall rate schedule that determines maximum fall rate based on (1) the Basin Inflow fall rate; or (2) the IOP maximum fall rate schedule. The recommendation is that the maximum fall rate schedule should follow the higher of these two fall rates.

We have incorporated aspects of the ARC proposal such as storing basin inflow; maintaining the 5,000 cfs minimum flow if certain triggers do not call for a reduction in the minimum flow; storing basin inflow while meeting the minimum target flow for Farley Nuclear Plant and adjustments to the maximum fall rate. The condition in the ARC proposal to provide releases equal to basin inflow when Basin Inflow is between 5,000 cfs and 11,000 cfs was not incorporated into the EDO because it does not provide enough opportunities to store water during the periods that fall into that range. This may occur more frequently during a dry winter and spring and would represent opportunities missed to supplement storage.

**3. FACTORS CONSIDERED IN DETERMINING THAT NO ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED:** As described in the attached EA, the EDO will not significantly impact resources in the project area. Resource areas considered in the impacts analysis include physical habitat, land use changes, historic and archaeological resources, fishery and wildlife resources, essential fish habitat, threatened and endangered species, recreation, hydrology, water quality and supply, flood control, navigation, hydropower, floodplain and wetland resources, and aesthetics. The EDO provides maintenance of minimum flows without significantly impacting Gulf sturgeon or mussels, and host fish spawning activities during the spring months. The EDO was also determined to not significantly contribute to cumulative impacts affecting these resources. The EDO constitutes a short-term use of man's environment and does not prohibit the maintenance and enhancement of long-term productivity in the project area.

**4. CONCLUSIONS:** An evaluation of the Environmental Assessment describing the EDO shows that the EDO would have no significant environmental or human impacts. Therefore, an environmental impact statement is not required.

DATE: 16 NOV '07

  
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