CESAM-PD-EI
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FINDING OF NO SIGNIFICANT IMPACT
FOR
RELEASE OF TRIPLOID GRASS CARP FOR HYDRILLA MANAGEMENT
WALTER F. GEORGE LAKE
APALACHICOLA-CHATTAHOOCHEE-FLINT RIVERS PROJECT
ALABAMA AND GEORGIA

1. PROPOSED ACTION: The proposed action is to reduce the infestation of submersed invasive aquatic plants predominantly hydrilla (*Hydrilla verticillata*) within Walter F. George Lake. The proposed action will be accomplished by satisfying the following objectives:

- Maintain area of the lake covered by hydrilla to no more than 2,400 acres.
- Reduce density of submersed aquatic plants occurring within infested areas to less than 30%.
- Enhance development of mixed native aquatic plant communities
- Reduce infestations at Corps operated public use areas to a level of no impact
- Achieve desired level of aquatic plant reductions at an annual cost of less than $280,000.

The recommended plan to achieve the proposed action consists of the integration of the following three components:

1. Release triploid grass carp. An initial stocking rate of 12 fish per hydrilla vegetated acre would be released (i.e. 13,440 fish). To assure that an effective population of grass carp remain in the lake, it is assumed that up to 3 fish per hydrilla vegetated acre would be stocked every 5 to 7 years for maintenance control (i.e. 3,360 fish).
2. Continue chemical treatment (endothall, diquat, flouridone, and copper) at minimal levels, with diminishing applications as the effectiveness of grass carp in controlling hydrilla begins to be demonstrated.
3. Encourage establishment of native aquatic plants through plantings.

This alternative would treat the entire 2,800 acres of the lake presently infested with hydrilla at a total average annual cost of $68,048.

2. ALTERNATIVES CONSIDERED: Alternatives to the proposed action which were considered in detail include:

- No Action Alternative. This alternative would treat a total of 230 hydrilla infested acres with herbicides on an annual basis. The average annual cost of this alternative is $100,000. This level of chemical treatment can be reliably accomplished within the

estimated annual budget amounts received by the Walter F. George Project. It is important to note that this represents a reduced level of treatment compared to that conducted during the three-year period from 2004 to 2006 when hydrilla continued to expand its coverage on the lake.

- Maximum Chemical Treatment. This alternative would use herbicides to treat the entire 2,800 acres of hydrilla infested submersed aquatic plants that are projected to cover Walter F. George Lake in 2007. At a projected annual cost of $1,404,000, this alternative does not recognize the budget constraints that presently influence the aquatic plant management program.

- Flow Assisted Delivery System. This alternative would take advantage of the natural flow of water through Walter F. George Lake to deliver a contact herbicide to control hydrilla. This method would apply endothall at a concentration of 1.5 ppm over a continuous period of 48 hours. It is estimated that 2,280 acres of hydrilla would be treated by this alternative, at a total annual cost of $1,202,000.

- Release of Triploid Grass Carp Only. This alternative would release 12-inch triploid grass carp at a stocking rate of 20 to 22 fish per hydrilla vegetated acre into Walter F. George Lake (i.e., 24,640 fish). Control of hydrilla would be gained through the feeding behavior of grass carp. To assure that an effective population of grass carp remain in the lake, it is assumed that up to 5 fish per hydrilla vegetated acre would be stocked every 5 to 7 years for maintenance control (i.e. 5,600). This alternative would treat the entire 2,800 acres of the lake presently infested with hydrilla at an average annual cost of $12,000.

3. FACTORS CONSIDERED IN DETERMINING THAT NO ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED: First and foremost, the recommend plan would result in no significant adverse environmental impacts to the environment. To the contrary, by controlling the expansion of hydrilla on Walter F. George Lake, potential adverse impacts on water quality, fishery habitat and population structure, recreation, aesthetics, and property values would be avoided. Since the recommended plan would be implemented through the application of adaptive management principles, adjustments can be made at regular intervals in the amount and locations at which chemical herbicides will be applied and in the stocking rates of triploid grass carp to obtain the most effective control of hydrilla while minimizing risks to the loss of native submersed aquatic vegetation. The recommended plan should assure that the habitat value of a residual acreage of 2,400 acres of hydrilla is maintained until an equivalent acreage of native plants can be established. It also anticipated that waterfowl habitat within the lake will not be significantly affected. An important consideration is that should any adverse effects occur, those effects would not be permanent and could be reversed with time since triploid grass carp have a finite life span of 10 – 20 years and are incapable of reproduction. A consideration of the risks

associated with the escape of grass carp from Walter F. George Lake indicates that an insignificant number of fish could potentially move past the three downstream locks and dams to enter the Apalachicola River and Apalachicola Bay which is over 100 miles downstream of the last lock and dam in the basin. Lastly, the recommended plan represents the most cost-effective approach to gaining control of the developing hydrilla problem at Walter F. George Lake without unduly compromising the Operation and Maintenance budget of the Project.

4. CONCLUSIONS: An evaluation of the attached Environmental Assessment describing the recommended plan to control hydrilla at Walter F. George Lake by combining the release of triploid grass carp with the application of chemical herbicides along with efforts to promote the establishment of native aquatic plants shows that the proposed action would have no significant impact on the human environment and that an Environmental Impact Statement is not required.

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