DEPARTMENT OF THE ARMY
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS
ROOM 9M15, 60 FORSYTH ST., S.W.
ATLANTA, GEORGIA 30303-8801

REPLY TO
ATTENTION OF

RECORD OF DECISION

CENTRAL AND SOUTH FLORIDA PROJECT
HERBERT HOOVER DIKE
MAJOR REHABILITATION AND EVALUATION REPORT - REACH ONE

DECISION

We have reviewed the Final Environmental Impact Statement (EIS) for the Central and South Florida Project, Herbert Hoover Dike (HHD) Major Rehabilitation and Evaluation Report (MRER), Reach One, in Palm Beach and Martin Counties, Florida. We have also reviewed all correspondence, including comments on the Draft, Supplemental Draft, and Final EIS, and all pertinent documents for this project. Based upon this review and after review of the views of other agencies, Native American Tribes, non-governmental organizations, and the general public, I concur with the District Engineer's recommendations to implement the plan identified in the Supplemental MRER and Final EIS as Alternative 4. This alternative includes the construction of a cutoff wall and inverted drainage system at the toe of the dike for the rehabilitation of the Herbert Hoover Dike.

The recommended plan consists of the construction of approximately 22 miles of an impervious hanging cut-off wall on the landward side of the dike, at approximately 26-ft NVGD, and a relief trench with inverted filter and relief berm at the dike's toe, adjacent to the existing toe ditch in Reach One of the HHD. An access road would be built on top of the relief trench. At the end of construction, all rehabilitation project features will be buried beneath ground. This alternative minimizes the project's footprint to the existing HHD footprint and reduces overall impacts to the natural system and the human environment when compared to the other alternatives.

Two minor variations of the plan for Reach 1 may be needed where special considerations require a design change to fit HHD geometry and real estate requirements. Just south of culvert C-12, a rock quarry lies adjacent to the landside toe of the embankment with insufficient space between the embankment toe and quarry bank to allow construction of the proposed drainage berm. The second variation may be required at a water filtration plant in Pahokee located just north of the HHD access road and directly adjacent to the HHD landward side. These modifications to the alignments and depths of both the cutoff wall and relief trench may be necessary to achieve a stable design.

A Draft EIS for the subject project was circulated for public and agency review on 6 August 1999 when a Notice of Availability of the document was published in the Federal Register. Subsequent to the coordination of the Draft EIS, the proposed project plan was revised as a result of a value engineering study and additional engineering information gathered during subsequent "high water" events on Lake Okeechobee. The resulting recommended plan, as described above, and

alternatives were addressed and coordinated in a Supplemental Draft EIS, for which a Notice of Availability was published in the Federal Register on 1 April 2005. Public and agency review of the Final EIS was initiated by publication of a Notice of Availability in the Federal Register on 8 July 2005.

ALTERNATIVES AND CONSIDERATIONS BALANCED IN MAKING THE DECISION

In addition to the no-action alternative, four other alternatives with various multiple components were carried through the final alternative evaluation and selection process. The No Action Alternative would involve making no improvements to the embankment at Reach One. Alternative 1 would involve construction of a stability berm, improvements to existing drainage ditches, and regulation of the water level in the ditch system. Alternative 2 proposes construction of an impervious cutoff wall and landside stability berm. Alternative 3 would involve installation of a seepage berm with relief trench along the landward toe of the embankment. The alternative plans were evaluated based on the ability to maintain the stability of the dike while minimizing or avoiding impacts to the natural system and human environment. The Recommended Plan would stabilize the dike while minimizing impacts. By siting the construction features within the footprint of the dike and on the upland slope and adjacent to the toe ditch, wetland and wildlife impacts would be minimized and additional real-estate requirements would be eliminated. In addition, impacts to adjacent communities and agricultural practices would also be minimized.

MEANS TO AVOID OR MINIMIZE ADVERSE EFFECTS

All practicable means to avoid or minimize adverse environmental effects have been incorporated into the recommended plan. Siting all structures and construction on existing dike footprint and upland of the toe ditch would minimize disturbance or loss of ecologically valuable habitat. Utilizing a hanging cut-off wall would minimize any impacts to ground water levels and surface waters outside of the project footprint, preserving water resources that are currently used for local irrigation. Maintaining construction within the existing dike footprint would also minimize disturbance to adjacent landowners and eliminate the need to acquire additional real estate for the project. Burying all rehabilitation features beneath ground would eliminate potential aesthetic impacts.

Consultation with the US Fish and Wildlife Service (USFWS) in regard to listed species under their jurisdiction has been completed for this stage of the project. Prior to construction, detailed surveys will be conducted to determine whether federally listed threatened or endangered species, specifically bald eagle, eastern indigo snake, and/or the Okeechobee gourd are present on the construction site. Concurrent with bald eagle nest surveys, surveys for burrowing owls, a state listed species, will also be conducted. If listed species are present, the US Army Corps of Engineers (Corps) and the USFWS will determine if additional consultation under the Endangered Species Act is necessary to establish site-specific measures to avoid impacts. During construction, standard precautions or management plans will be implemented for the bald eagle, eastern indigo snake, and burrowing owls to avoid any adverse effects on those listed species. Construction personnel will also be advised of the possible presence of the Okeechobee gourd, an endangered plant species. Wading bird rookeries will be protected by maintaining a construction set back distance or consulting with Florida Fish and Wildlife Conservation Commission (FFWCC). The National Marine Fisheries

Service (NMFS) identified potential impacts downstream of the project area to Johnson's seagrass. Conditions to stringently control turbidity and erosion during construction have been placed into the construction specifications to minimize any impacts to downstream resources, including Johnson's seagrass. Consultation with NMFS was completed after coordination of the Final EIS, as confirmed by letter from NMFS dated 20 September 2005.

All land has previously been acquired for the project. A cultural resources analysis has been conducted and concluded that due to past uses of each site, cultural resources are highly unlikely to be discovered at any of the sites. Although HHD is eligible for inclusion on the National Register of Historic Places for its historical significance, the State Historic Preservation Officer has concurred with our determination of no effect to cultural or historic resources in accordance with Section 106 of the National Historic Preservation Act (36CFR800).

Impacts to recreational features on the dike will be minimized by preventing staging on trails or park features. These requirements, along with language in the construction contract that requires damage to all work (including temporary construction), utilities, materials, equipment and plant to be repaired to the satisfaction of the Contracting Officer at the Contractor's expense, regardless of the cause of such damage, should reduce or remedy temporary impacts to existing recreational resources. The contractor will also be required to replace any facilities damaged during construction, and to maintain or restore as necessary the dike crest width, elevation, condition, and integrity.

PUBLIC /AGENCY COMMENTS IN THE FINAL EIS

No public comments were received on the Final EIS. Agency comments include concerns raised by the Florida Department of Transportation (FDOT) and the FFWCC regarding impacts to the Lake Okeechobee Scenic Trail (LOST). The FDOT requested that the Final EIS include a specific commitment stating that the Corps would replace any impacted LOST facilities in kind. The Corps will take actions within its authority to insure the trail is not damaged and, if necessary, repaired. As stated above, the Corps will direct the contractor to avoid and minimize damage to LOST facilities. In the event that the trail is damaged, the contractor will be required to maintain the asphalt trail as a haul road during the period of construction, as well as replace any facilities damaged.

The FFWCC commented on a number of concerns, including the potential for direct and indirect effects that would potentially benefit or adversely impact plant and animal species by direct loss, degradation, and fragmentation of wetland, transitional, and upland habitats in and around Lake Okeechobee from construction of ditches, berms, levee cutoff walls, or other project features. Anticipated impacts described were based on the assumption that the Corps would change the current water regulation schedule of Lake Okeechobee and raise lake levels above the current operational schedule after repairing the dike, thereby allowing ecologically detrimental water levels. Additional concerns were related to drawing water down during construction and a desire to coordinate the timing of any draw downs to be ecologically beneficial.

The construction and repair of the dike will not change the regulation schedule or require lowering lake levels. Other concerns listed by the FFWCC related to negative impacts from an alternative plan, other than the recommended alternative. Habitat impacts are limited by maintaining construction to lands within the HHD footprint that are used and maintained as a dike, consisting of

routinely mowed grasses on an upland slope, and thus, have very little value as uplands or transitional habitat. However, concerns regarding impact to burrowing owls in the project footprint have been addressed and commitments made to reduce impacts.

COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

The Recommended plan is in compliance with all applicable environmental laws and requirements including but not limited to the National Environmental Policy Act, Endangered Species Act, Fish and Wildlife Coordination Act, National Historic Preservation Act, Clean Water Act, Clean Air Act, Coastal Zone Management Act, and Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations." Recommendations from the USFWS under the Fish and Wildlife Coordination Act have been incorporated into the recommended plan. The Draft, Supplemental Draft, and Final EISs were distributed for public comment, and all comments were incorporated and considered. The Corps has determined, in consultation with the USFWS and NMFS, that the project is not likely to adversely affect listed species under the jurisdiction of these agencies.

SUMMARY

In view of the above, I find that any adverse affects of the recommended plan, as described in the Final Environmental Impact Statement, including management measures for endangered species throughout the construction period, would be avoided and/or minimized to the extent practicable and that the recommended plan best meets the overall Federal and State objectives. The recommended plan is consistent with applicable laws, regulations, national policy, and administrative directives. The overall public interest will be best served by implementing the recommended plan for Major Rehabilitation of Reach 1 of the HHD, as described in the Final EIS.

23 Sep 05
Date

MICHAEL J. WALSH
Brigadier General, US Army
Commanding