

ANNEX E

COMMENTS AND RESPONSES TO THE  
DRAFT AND SUPPLEMENTAL DRAFT EIS

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**Comments and Responses to Draft and Supplemental Draft EIS**

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- 1) Table of Comments and Responses on the Supplemental EIS
- 2) Copy of Comments on Supplemental EIS
- 3) Table of Summary of Comments on the Draft EIS
- 4) Responses to Draft Comments
- 5) Copy of Comments on the Draft EIS

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**MATRIX OF COMMENTS ON THE SUPPLEMENTAL DRAFT EIS  
FOR HERBERT HOOVER DIKE MRR  
March 2005 - May 2005**

SOURCE OF LETTER	COMMENTS	RESPONSE
U.S. Environmental Protection Agency	“On the basis of our review and the satisfactory responses to our initial comments on this proposal, a rating of LO (Lack of objections) has been signed...EPA has no significant objections.”	Future NEPA documents will be coordinated with EPA.
U.S. Department of the Interior U.S. Fish and Wildlife Service	The revised alternative is a product of continued coordination and improvement on original design. It appears to avoid impacts to wetlands. No mitigation is required. However, modifications to this design potential could impact wetlands additional coordination under FWCA would be required. Proposed measures to avoid adverse effects to bald eagles and eastern indigo snake remain in effect.	Concur. The Corps will continue coordination with the FWS throughout designing and construction to ensure all impacts are minimized in accordance with the recommended plan, or to mitigate if the design changes outside of project footprint and would require wetland mitigation/remediation actions. Measures to avoid impacts to snakes and eagles will be implemented
National Oceanic and Atmospheric Administration National Marine Fisheries Service Protected Resources Division	On April 5, 2000, the NMFS designated critical habitat for Johnson’s seagrass adjacent to Hutchinson Island near the St. Lucie Estuary. The EIS does not contain sufficient information to complete ESA consultation.	A biological evaluation has been prepared for Johnson’s seagrass and is currently being coordinated. In addition, the Final EIS has been updated to include a description of effects to this species.
National Oceanic and Atmospheric Administration National Marine Fisheries Service Habitat Conservation Division	NMFS concurs with the Corps determination that EFH or other marine resources would not be affected by the proposed action.	No response needed.
Florida Department of Environmental Protection State Clearing House Officer	The state has determined that the proposed activity is consistent with the Florida Coastal Zone Management program. USACE is advised to coordinate with FDOT. Continued concurrence is based on adequate resolution to issues identified by state agencies.	The USACE will continue to coordinate with FDEP and FDOT on the recreational and infrastructural effects of rehabilitation of the dike, including trail closures and repairs.
Florida Department of Environmental Protection	Mitigation is not anticipated. Effects to the paved LOST may occur during construction, but would be coordinated with FDEP. An exemption to rehabilitate Reach 1A has already been issued.	The USACE will continue to coordinate with FDEP on trail closures and LOST impacts.
Florida Department of Transportation  FDOT-1	FDOT recommends that the recreational planning that is identified in the Environmental Commitments be expanded to include commitments during construction that minimize or avoid impacts to the trail such as closures	To the extent practicable, all impacts to the trail, including limiting staging areas, times of closures, and access point, will be minimized. The USACE will continue to coordinate with FDEP throughout construction on effects to the trail.

	or loss of access.	
FDOT-2	The document should include a section discussing potential impacts to surrounding transportation elements and specifically address impacts to the Trail. There should be a commitment in the document to coordinate with DEP on Trail closures. There should also be a commitment to replace in kind trail or associated structures impacted by rehabilitation.	The drafts and final EIS have all included discussions as to the impacts to transportation and infrastructure, as well as recreational elements, including LOST in sections 4.16 and 4.18. The Corps will continue to minimize and avoid all impacts to LOST and coordinate unavoidable impacts during construction.
FDOT-3	Should any project activities be performed in or adjacent to FDOT right of ways, it is required that coordination take place with FDOT district offices. This includes identifying haul routes around the lake for the delivery of equipment and materials, load restrictions, etc.	Noted.
FDOT-4	A review of FDOT District 4 5 year work program should be conducted by USACE prior to start of project to ensure HHD construction does not conflict with proposed FDOT roadways and bridge projects or CERP and Accelerate projects. ...Since one of the purposes of LOST was to provide ecotourism opportunities...the document should address impacts to surrounding communities.	The rehabilitation of the dike will not affect existing roadways or structures, with the exception of additional traffic and stops during construction. However, continual underseepage, piping and soil boils of the no action alternative could have significant impacts to existing roadways. The project is not anticipated to be in conflict with other projects, and in fact, is important to the storage component of CERP and Accelerate that relies on Lake Okeechobee. Effects to recreation and surrounding communities are included in the corresponding sections of the drafts and final documents.
Treasure Coast Regional Planning Council	The project is not in conflict or inconsistent with the SRPP.	No response needed.
Florida Department of State	The project could have an affect to the original design of HHD considered historically significant for its engineering design. However, the DOS concurs that the necessary changes will have no adverse affect on the characteristics qualifying property for listing in the National Register of Historic Places.	No response needed



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

MAY 16 2005

District Engineer, Jacksonville  
P.O. Box 4970  
Jacksonville, FL 32232

ATTN.: Ms. Rebecca Weiss  
Planning Division

Subject: **Draft Supplemental Environmental Impact Statement (DSEIS) for Herbert Hoover Dike (HHD) Rehabilitation, Reach #1, Lake Okeechobee, Palm Beach and Martin Counties, Florida (CEQ # 20050135 and ERP # COE-E 39050-FL) dated March 2005**

Dear Sir:

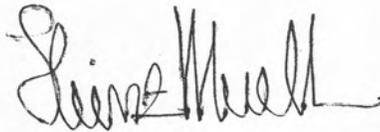
Pursuant to Section 309 of the Clean Air Act and Section 102 (2)(C) of the National Environmental Policy Act, EPA, Region 4 has reviewed the subject document, an evaluation of the consequences of restoring/upgrading the structural integrity of Reach #1 of the HHD ( a 22-mile segment from St. Lucie Canal to the Hillsboro Canal). Recent episodes of piping and sand boils along this southeastern segment have created concerns that a major breach was possible in the absence of some significant renovations. Stabilization of the HHD is essential since Lake Okeechobee is central to the region's water supply needs and is a fundamental element of the Central and South Florida Restudy (CSFR). As a planning objective, this and any remaining structural upgrades to the HHD should be consistent with the overall formulations associated with the CSFR. Similar structural problems exist elsewhere along the HHD system and will be the subject of subsequent NEPA documentation.

After further deliberation of the practicable alternatives it was determined by the Jacksonville District (District) that the most effective means to realize this upgrade would involve the use of a pervious hanging cut-off wall on the landward side of the dike together with a relief trench [including a inverted filter and relief berm] on the lakeward side [Alternative #4]. A road will be built on top of the relief trench for routine access and subsequent maintenance. This design lessens the project's footprint and reduces adverse impacts to existing wetlands, wildlife habitat, and groundwater.

From the information provided, it appears that the proposed design option will meet the primary project objective, viz., preventing a catastrophic dike failure within Reach #1. Moreover, with some minor modifications developed during the detailed design phase, the noted structural components can be installed with acceptable adverse environmental consequences and operational efficiencies. On the basis of our review and the satisfactory responses to our initial comments on this proposal, a rating of LO has been assigned. That is, the environmental ramifications of this action have been generally minimized from the original proposal to the extent that EPA has no significant objections to the subject rehabilitation measures.

Thank you for the opportunity to comment on this action. If we can be of further assistance, Dr. Gerald Miller (404-562-9626) will serve as initial point of contact.

Sincerely,

A handwritten signature in cursive script, appearing to read "Heinz Mueller".

Heinz J. Mueller, Chief  
NEPA Program Office



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Florida Ecological Services Office  
1339 20<sup>th</sup> Street  
Vero Beach, Florida 32960

April 18, 2005

Dennis W. Barnett, P.E.  
Acting Chief, Planning Division  
U.S. Army Corps of Engineers  
Post Office Box 4970  
Jacksonville, Florida 32232-0019

Dear Mr. Barnett:

The Fish and Wildlife Service (Service) has reviewed the additional information submitted by the U.S. Army Corps of Engineers (Corps), dated March 21, 2005, regarding the Supplemental Draft Environmental Impact Statement (EIS) for Reach One of the Herbert Hoover Dike (HHD) Major Rehabilitation Evaluation Report (MRR). This modification involves construction of approximately 22 miles of a pervious hanging cut-off wall, on the landward side of the dike, approximately 26-foot National Geodetic Vertical Datum and a relief trench with a French drain system, as a toe berm, all within the footprint of the HHD. This letter represents the Service's view of the effects of the proposed action in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 *et seq.*) and the provisions of the Fish and Wildlife Coordination Act of 1958, as amended (FWCA) (48 Stat. 401; 16 U.S.C. 661 *et seq.*).

## FISH AND WILDLIFE COORDINATION ACT

The proposed modifications, if implemented, will reduce environmental impacts previously addressed in our Final FWCA report dated December 20, 2001, and in our previous supplemental FWCA reports, dated March 4, 2003, and March 8, 2004. This alternative is a product of continual coordination and improvement on the design to address seepage issues while reducing environmental impacts. Because the revised design appears to avoid impacts to wetlands, no additional mitigation will be required. However, if modifications are made to the project design that potentially impact wetland habitat, further evaluation may be required under the FWCA.

## THREATENED AND ENDANGERED SPECIES

The Service concurred on June 9, 1999, with the Corps' determination that the project was "not likely to adversely affect" the threatened bald eagle (*Haliaeetus leucocephalus*) or the threatened eastern indigo snake (*Drymarchon corais couperi*). We must remind you the Corps' proposed measures to avoid adverse effects to the bald eagle and the eastern indigo snake remain in effect.

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IN AMERICA 

Our field inspections indicated the consistent presence of a bald eagle along the HHD between Canal Point and Pahokee at about Mile 10, measuring south from Port Mayaca. This was noted in our draft FWCA reports, dated February 11, 2000, and March 8, 2004. The Corps must search the area for bald eagle nests prior to construction to avoid construction activities that may disrupt nesting. In addition, prior to project construction, the contractor will instruct all personnel associated with the project that endangered species may be present in the area, and the need to avoid harming, harassing, or killing these species and the civil and criminal consequences. Construction activities must be kept under surveillance, management, and control to minimize any interference, disturbance, or impact to these resources.

On September 19, 2003, Service biologists conducted an inspection of reaches 1, 2, and 3 with project engineer Tracy Hendren. We discussed the subject modifications to the plan now included as the Preferred Alternative in the Supplemental Draft EIS to Reach One of the HHD MRR and visited Corps experimental design testing sites during the emergency repairs along the dike. We also inspected the ongoing project mitigation site near Moore Haven.

It appears the subject alternative will further reduce wildlife impacts of the project by avoiding changes to the toe ditch with the exception of temporary impacts associated with construction. We are delighted to see the effort the Corps' Project Engineer has made to minimize potential impacts on wildlife resources. In addition, we have noticed that sensitivity analysis has been performed for Section A to determine the length of cutoff and relief trench. We continue to encourage Corps' engineering staff to perform this analysis for each identified section to determine the adequate length required to maximize benefits. The Corps can further limit project cost and also environmental impacts as the project proceeds to detailed design.

Based on our review of the information in the Supplemental Draft EIS and the Corps' continued acceptance of measures to avoid adverse effects to the bald eagle and the eastern indigo snake, we find there is no need to reinitiate consultation at this time. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, if a new species is listed, or if designated critical habitat may be adversely affected by the project, reinitiation of consultation may be necessary.

We greatly appreciate your cooperation in this planning effort and thank you for your support in protecting significant fish and wildlife resources. If you have any questions regarding this project, please contact Agustin P. Valido at 772-562-3909, extension 298.

Sincerely yours,



James J. Slack  
Field Supervisor  
South Florida Ecological Services Office



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
263 13<sup>th</sup> Avenue South  
St. Petersburg, FL 33701  
(727) 824-5312, FAX 824-5309  
<http://sero.nmfs.noaa.gov>

**MAY - 5 2005**

F/SER31:SN

Ms. Rebecca Weiss  
Jacksonville District Corps of Engineers  
Department of the Army  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Dear Ms. Weiss:

NOAA's National Marine Fisheries Service (NMFS) received your March 31, 2005 letter, regarding your Supplemental Draft Environmental Impact Statement (EIS) for the Herbert Hoover Dike Major Rehabilitation Evaluation Report (MRR) for Reach 1, located in Palm Beach and Martin Counties, Florida. The proposed project described in the Supplemental Draft EIS involves the construction of a cutoff wall and relief trench on the landward side of the dike.

The NMFS provided comments on the Draft EIS for the MRR on July 29, 1999, pursuant to section 7 of the Endangered Species Act (ESA) and requested additional information on the project to evaluate potential adverse effects on Johnson's seagrass (*Halophila johnsonii*), located downstream from the proposed project. In a letter dated September 10, 1999, the Army Corp of Engineers (COE) stated "the implementation of the project would have minimal to moderate impacts on water quality within the immediate vicinity of the area of construction, and will be short-term, occurring during the construction activities only." The COE also indicated that adverse effects to water quality would be minimized based on a "rigorous environmental plan" that included the use of erosion control measures such as sediment barriers. The COE has also determined that they did not expect significant fluctuations in freshwater flows into the canal system by either construction activities or operation of the facility. Based on the above analysis the COE determined that the proposed project was not likely to adversely affect Johnson's seagrass. The NMFS concurred with the COE's determination in a letter dated September 16, 1999.

On April 5, 2000, the NMFS designated critical habitat for Johnson's seagrass. One of the critical habitat units is located adjacent to Hutchinson Island, in the Indian River Lagoon, near the St. Lucie Estuary.

The EIS provided by the COE does not contain sufficient information for NMFS to complete ESA consultation. The NMFS requests that the COE provide sufficient information to evaluate the potential impacts to Johnson's seagrass critical habitat from the proposed project. The

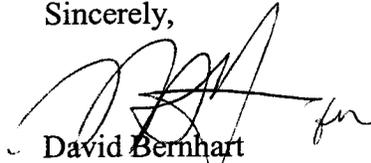
NMFS-1



NMFS also requests that the COE include an analysis of the project's potential effects on Johnson's seagrass and its designated critical habitat in their EIS.

Thank you for the opportunity to comment on this project. Please contact Shelley Norton, natural resource specialist, at (727) 551-5781 or at [Shelley.norton@noaa.gov](mailto:Shelley.norton@noaa.gov) with any questions about this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "David Bernhart", with a stylized flourish extending to the right.

David Bernhart  
Assistant Regional Administrator  
for Protected Resources

cc: F/SER4 - Miles Croom

Ref: I/SER/2005/00674

File: 1514.22. F.1. FL



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

April 18, 2005

**RECEIVED**

25 Apr 2005

Mr. Dennis W. Barnett  
Acting Chief, Planning Division  
Department of the Army  
Jacksonville District, Corps of Engineers  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Dear Mr. Barnett:

The National Marine Fisheries Service (NMFS) has reviewed the Supplemental Draft Environmental Impact Statement (EIS) for the Herbert Hoover Dike (HHD) Major Rehabilitation Evaluation Report for Reach One in Martin and Palm Beach counties, Florida. Your letter dated March 31, 2005, requests NMFS comments pursuant to the National Environmental Policy Act and the Magnuson-Stevens Fishery Conservation and Management Act. According to information provided to us, the Jacksonville District has determined that activities associated with construction of the proposed alternative will not adversely affect essential fish habitat (EFH) or other marine resources within the project area, adjacent canals, or Lake Okeechobee. Erosion control management will be implemented throughout construction and, therefore, no impacts are anticipated to downstream resources or water quality.

According to the information provided, the HHD, which surrounds Lake Okeechobee was originally constructed, as a series of embankments, in 1915, by local interests. The structure was intended to provide flood protection for surrounding communities and to facilitate irrigation for local agriculturists. In the 1930s and the 1940s, the U.S. Army Corps of Engineers (COE) improved the embankments by constructing the current levee system. Major culvert modifications were accomplished in the 1970s; however, since then, only as-needed repairs have been made. Recent high water events resulted in the need for major rehabilitation and the COE is preparing a series of HHD Major Rehabilitation Evaluation Reports (MRR) which document seepage and stability concerns and provide rehabilitation options.

The initial MRR and EIS focus on Reach One, the southeastern portion of the HHD, and propose five alternative actions for rehabilitation. The alternatives include:

- **No Action Alternative:** With this alternative, improvements to Reach One would not be constructed and no physical changes to the study area would result.

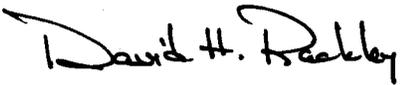


- Alternative 1: Construction of a stability berm at the landside toe of the levee and installing culverts with automatic/manual gates and pumps to control water level in the ditches.
- Alternative 2: Construction of an upstream impervious cutoff wall and a landside stability berm at the toe of the levee which would impede groundwater flow and control underseepage.
- Alternative 3: Construction of a Seepage Toe Berm with relief trench at the dike toe.
- Alternative 4 (Preferred Alternative): Construction of a pervious cutoff wall and relief trench on the landward slope of the dike within the existing footprint of the HHD.

The NMFS has reviewed the EIS and five alternatives. We note that the Preferred Alternative is also listed in the EIS as the Environmentally Preferred Alternative. Wetland impacts associated with this alternative are expected to be both minor and temporary and would result from the relocation of a low voltage transmission line. Therefore, NMFS concurs with the Jacksonville District's determination that EFH or other marine resources would not be affected by the proposed action. This concurrence is based on our review of the EIS, the nature of the work, associated mitigative measures, and the geographic location of the work. Accordingly, we have determined that the goals and requirements of the Magnuson-Stevens Fishery Conservation and Management Act and the regulations for implementing the EFH requirements of the Act have been met.

Thank you for providing the opportunity to comment on the EIS. If we can be of further assistance, please advise. Related comments, questions or correspondence should be directed to Ms. Jocelyn Karazsia in Miami, Florida, at (786) 263-0028.

Sincerely,

  
  
Miles M. Croom  
Assistant Regional Administrator  
Habitat Conservation Division

cc:  
EPA, WPB  
DEP, WPB  
FFWCC, Tallahassee  
FWS, Vero Beach  
F/SER4  
F/SER45-Karazsia



# Department of Environmental Protection

Jeb Bush  
Governor

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

Colleen M. Castille  
Secretary

May 16, 2005

Ms. Rebecca Weiss  
U.S. Army Corp of Engineers  
Jacksonville District, Planning Division  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

RE: Department of the Army, Jacksonville District Corps of Engineers – Supplemental Draft Environmental Impact Statement – Herbert Hoover Dike Major Rehabilitation Evaluation Report, Reach 1 – Martin and Palm Beach Counties, Florida.

SAI # FL200503240631C

Dear Ms. Weiss:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the above-referenced project.

The Florida Department of Environmental Protection (DEP) notes that the U.S. Army Corps of Engineers (USACE) and FDEP have been working on the rehabilitation of the Herbert Hoover Dike (HHD). The FDEP Southeast District Office has issued an exemption to perform the described rehabilitation on Reach 1A of the HHD. Alternative 4 will reduce the need to acquire or impact land outside of the dike footprint. Mitigation for impacts to water resources in the area is not anticipated unless impacts become a factor due to project design changes along certain areas of Reach 1. Some effects to the paved Lake Okeechobee Scenic Trail may occur during construction. However, the USACE plans to coordinate with the FDEP regarding any anticipated impacts. The USACE has also made several environmental commitments to further avoid, minimize or mitigate for any adverse effects of the rehabilitation. These include a pre-construction survey to determine location of bald eagle nests, protection measures for the indigo snake, survey of burrowing owl nests, coordination for effects to the Lake Okeechobee Scenic Trail, and informing construction crews of the potential for the presence of the endangered Okeechobee gourd, and compliance with all state and federal water quality criteria.

Florida Department of State (DOS) states that based on the information provided, their staff believes that the project could have an effect on the original design of the Herbert Hoover Dike (HHD), Site # 8PB2028, considered historically significant for its engineering design.

However, DOS concurs that the proposed necessary modifications will have no adverse effect on the characteristics qualifying this property for listing in the *National Register of Historic Places*.

Florida Department of Transportation (FDOT) comments that FDOT and FDEP have worked on the Lake Okeechobee Scenic Trail for the past several years. The HHD document should include a section discussing potential impacts to the surrounding transportation elements (i.e. roadway, bridges, rail, etc.) to ensure there will be no adverse impacts to these elements. This section should specifically discuss impacts to the Trail. If the Trail will be closed during the dike repairs, there should be a commitment in the document that coordination with FDEP, Trails Associations etc., will occur. If the trail or any of the associated structures are going to be impacted, there should be a commitment in the document stating that these items will be replaced in kind. The Trail and structures were funded using FHWA enhancement monies. Every effort should be made to minimize impacts to the trail and this should also be discussed in the document.

Should any project activities be performed in or adjacent to FDOT right-of-way, it is required that coordination take place with appropriate FDOT District offices. This would include identifying haul routes around the lake for the delivery of equipment and materials. There may be load restrictions on some of the FDOT bridges and this would have to be addressed through coordination with FDOT District 4. Issuance of permits from FDOT may be required for project activities located within FDOT right-of-way. A review of the FDOT District 4 5-year work program should be conducted by the USACE prior to the start of the project to ensure that HHD construction does not conflict with proposed FDOT roadway & bridge projects as well as USACE/SFWMD CERP & ACCELER8 projects that are anticipated for this area. Too much construction in one area has the potential for community impacts. Since one of the purposes of the Lake Okeechobee Scenic Trail was to provide ecotourism opportunities for the communities and bring tourism to the area, the HHD document should address impacts to surrounding communities.

The Treasure Coast Regional Planning Council indicates that the proposed project is not in conflict or inconsistent with the Strategic Regional Policy Plan. Every effort should be made to minimize impacts to private property owners, the Lake Okeechobee Scenic Trail, wetlands, listed species, and navigation of the lake in the vicinity of the project.

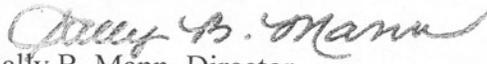
Based on the information contained in your submittal and the enclosed comments provided by our reviewing agencies, the state has determined that at this stage, the proposed activity is consistent with the Florida Coastal Management Program. The USACE is advised to coordinate with the FDOT on the above concerns. The state's continued concurrence with the

Ms. Rebecca Weiss  
May 16, 2005  
Page 3

project will be based, in part, on the adequate resolutions of issues identified by these state agencies.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Sylvia Cohen at (850) 245-2182.

Sincerely,

  
Sally B. Mann, Director  
Office of Intergovernmental Programs

SBM/sjc  
Enclosures

Cc: Tim Gray, FDEP, Southeast District  
John Outland, FDEP  
Scott Edwards, DOS  
Charlotte Hand, FDOT

**TO:** Florida State Clearinghouse

**THROUGH:** Ernie Barnett, Ecosystem Projects

**FROM:** John Outland, Ecosystem Projects

**DATE:** April 19, 2005

**SUBJECT:** Supplemental Draft Environmental Impact Statement – Herbert Hoover Dike (HHD) Major Rehabilitation Evaluation Report, Reach 1 – Martin and Palm Beach Counties, Florida.  
SAI # FL200503240631C

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Please note that the U.S. Army Corps of Engineers (USACE) and the Department have already been working on the rehabilitation of the Herbert Hoover Dike. The Department's Southeast District Office has already issued an exemption to perform the described rehabilitation on Reach 1A of the Dike (DEP File No: 0234604-001).

### **Background**

Recent high water events have caused several boils and pipings around the Herbert Hoover Dike, indicating the need for major rehabilitation. The USACE prepared a series of HHD Major Rehabilitation Evaluation Reports to document seepage and dike stability and evaluate rehabilitation options. The preferred alternative includes a pervious cutoff wall and a relief trench on the landward slope of the dike and within the dike's existing footprint along the 22 mile portion of Reach 1. The USACE believes that with even lowered lake levels associated with the WSE lake regulation schedule and CERP projects, unacceptable lake risk of dike failure remains and the rehabilitation is warranted.

### **Comments**

The preferred option, Alternative 4 consisting of a hanging seepage cutoff wall on the landward side of the dike slope and a relief trench with an inverted filter and relief berm at the toe of the landward slope of the dike, stopping at the dike's toe ditch, is expected to have minimal effects to wetland habitat due to its location. Alternative 4 will also reduce the need to acquire or impact land outside of the dike footprint. Mitigation for impacts to water resources in the area is not anticipated unless impacts become a factor due to project design changes along certain areas of Reach 1.

Some effects to the paved Lake Okeechobee Scenic Trail may occur during construction. However, the USACE plans to coordinate with the Department regarding any anticipated impacts.

The USACE has also made several environmental commitments to further avoid, minimize or mitigate for any adverse effects of the rehabilitation. These include a pre-construction survey to determine location of bald eagle nests, protection measures for the indigo snake, survey of burrowing owl nests, coordination for effects to the Lake Okeechobee Scenic Trail, and informing construction crews of the potential for the presence of the endangered Okeechobee gourd, and compliance with all state and federal water quality criteria.

It is recommended that the USACE and the Department continue to communicate and work cooperatively for this much needed rehabilitation.



# Florida Department of Transportation

JEB BUSH  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

JOSÉ ABREU  
SECRETARY

April 15, 2005

Mr. Bradd R. Schwichtenberg, PE  
Acting Chief, Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
PO Box 4970  
Jacksonville, FL 32232-0019

Dear Mr. Schwichtenberg:

Subject: **Supplemental Environmental Impact Statement (EIS)  
Herbert Hoover Dike Major Rehabilitation Evaluation Report Reach One**

The Florida Department of Transportation (FDOT) received a copy of the subject document for review and comment. As noted in the FDOT letter dated August 23, 1999 on the Draft EIS, the project could have impacts to the proposed development and construction of the Lake Okeechobee Scenic Trail (LOST) to be located on top of the Herbert Hoover Dike.

Since the completion of the Draft EIS, several components of the LOST have been constructed, including portions of the trail, trail heads, and access points. The acknowledgment of some effects on the LOST is included in section 4.17, Environmental Consequences to Recreational Resources (note this section is left out of the table of contents). FDOT recommends that the recreational planning that is identified in the Environmental Commitments be expand to include commitments during construction that minimize or avoid impacts to the trail such as closures or loss of access. FDOT-1

If you have any questions on this request, please call me at (850) 414-5269.

Sincerely,

Robert W. Crim, PE  
State Environmental Programs Engineer

cc: G. Schmidt, Dist. 4



# Florida

Department of Environmental Protection

"More Protection, Less Process"



Categories

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## Project Information

<b>Project:</b>	FL200503240631C
<b>Comments Due:</b>	04/23/2005
<b>Letter Due:</b>	05/16/2005
<b>Description:</b>	DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS - SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT - HERBERT HOOVER DIKE MAJOR REHABILITATION EVALUATION REPORT, REACH 1 - MARTIN AND PALM BEACH COUNTIES, FLORIDA.
<b>Keywords:</b>	ACOE - SDEIS FOR HERBERT HOOVER DIKE REHABILITATION - MARTIN AND PALM BEACH CO.
<b>CFDA #:</b>	12.106

## Agency Comments:

### TREASURE COAST RPC - TREASURE COAST REGIONAL PLANNING COUNCIL

The proposed project is not in conflict or inconsistent with the SRPP. Every effort should be made to minimize impacts to private property owners, the Lake Okeechobee Scenic Trail, wetlands, listed species, and navigation of the lake in the vicinity of the project.

### MARTIN - MARTIN COUNTY

### PALM BEACH -

### ENVIRONMENTAL POLICY UNIT - OFFICE OF POLICY AND BUDGET, ENVIRONMENTAL POLICY UNIT

No Comment

### OTTED - OFFICE OF TOURISM, TRADE AND ECONOMIC DEVELOPMENT

No Comment

### COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS

### FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

NO COMMENT BY JOE WALSH ON MAY 10, 2005

### STATE - FLORIDA DEPARTMENT OF STATE

Based on the information provided, DOS staff believes that the project could have an effect on the original design of the Herbert Hoover Dike, Site # 8PB2028, considered historically significant for its engineering design. However, DOS concurs that the proposed necessary modifications will have no adverse effect on the characteristics qualifying this property for listing in the National Register of Historic Places.

### TRANSPORTATION - FLORIDA DEPARTMENT OF TRANSPORTATION

FDOT and FDEP have worked on the Lake Okeechobee Scenic Trail for the past several years. The HHD document should include a section where they discuss potential impacts to the surrounding transportation elements (i.e. roadway, bridges, rail, etc.) to ensure there will be no adverse impacts to these elements. This section should specifically discuss impacts to the Trail. If the Trail will be closed during the dike repairs, there should be a commitment in the document that coordination

with FDEP, Trails Associations etc., will occur. If the trail or any of the associated structures are going to be impacted, there should be a commitment in the document stating that these items will be replaced in kind. The Trail and structures were funded using FHWA enhancement monies. Every effort should be made to minimize impacts to the trail and this should also be discussed in the document. Should any project activities be performed in or adjacent to FDOT right-of-way, it is required that coordination take place with appropriate FDOT District offices. This would include identifying haul routes around the lake for the delivery of equipment and materials. There may be load restrictions on some of the FDOT bridges and this would have to be addressed through coordination with FDOT District 4. Issuance of permits from FDOT may be required for project activities located within FDOT right-of-way. A review of the FDOT District 4 5-year work program should be conducted by ACOE prior to the start of the project to ensure that HHD construction does not conflict with proposed FDOT roadway & bridge projects as well as ACOE/SFWMD CERP & ACCELER8 projects that are anticipated for this area. Too much construction in one area has the potential for community impacts. One of the purposes of the Lake Okeechobee Scenic Trail was to provide ecotourism opportunities for the communities and bring tourism to the area, the HHD document should address impacts to surrounding communities

**ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Please note that the U.S. Army Corps of Engineers (USACE) and the DEP have been working on the rehabilitation of the Herbert Hoover Dike (HHD). The DEP Southeast District Office has issued an exemption to perform the described rehabilitation on Reach 1A of the HHD. Alternative 4 will reduce the need to acquire or impact land outside of the dike footprint. Mitigation for impacts to water resources in the area is not anticipated unless impacts become a factor due to project design changes along certain areas of Reach 1. Some effects to the paved Lake Okeechobee Scenic Trail may occur during construction. However, the USACE plans to coordinate with the DEP regarding any anticipated impacts. The USACE has also made several environmental commitments to further avoid, minimize or mitigate for any adverse effects of the rehabilitation. These include a pre-construction survey to determine location of bald eagle nests, protection measures for the indigo snake, survey of burrowing owl nests, coordination for effects to the Lake Okeechobee Scenic Trail, and informing construction crews of the potential for the presence of the endangered Okeechobee gourd, and compliance with all state and federal water quality criteria.

**SOUTH FLORIDA WMD - SOUTH FLORIDA WATER MANAGEMENT DISTRICT**

The SFWMD is a partner with the USACOE in this project. Consequently, a consistency determination is not necessary.

For more information please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD MS-47  
TALLAHASSEE, FLORIDA 32399-3000  
TELEPHONE: (850) 245-2161  
FAX: (850) 245-2190

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FLORIDA DEPARTMENT OF STATE  
**Glenda E. Hood**  
Secretary of State  
DIVISION OF HISTORICAL RESOURCES

Mr. Bradd R. Schwichtenberg, PE  
Planning Division, Environmental Branch  
Jacksonville District Corps of Engineers  
Post Office Box 4970  
Jacksonville, Florida 32232-0019

April 7, 2005

Re DHR Project File Number: 2005-3027 / Received by DHR: March 29, 2005  
Supplemental Draft Environmental Impact Statement  
Herbert Hoover Dike Major Rehabilitation Evaluation Report for Reach 1  
Martin and Palm Beach Counties

Dear Mr. Schwichtenberg:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended in 1992; and the National Environmental Policy Act of 1969, as amended. The State Historic Preservation Officer is to advise and assist federal agencies when identifying historic properties (listed or eligible for listing, in the National Register of Historic Places), assessing effects upon them, and considering alternatives to avoid or reduce the project's effect on them.

Based on a review of the information provided, it is the opinion of this office that this project could have an effect on the original design of the Herbert Hoover Dike, 8PB2028, considered historically significant for its engineering design. However, this office concurs that the proposed necessary modifications will have no adverse effect the characteristics qualifying this property for listing in the *National Register of Historic Places*.

If there are any questions concerning our comments, please contact Laura Kammerer, Deputy Historic Preservation Officer for Review and Compliance, by telephone at 850-245-6333. Thank you for your interest in protecting Florida's historic properties.

Sincerely,

*for*   
Frederick P. Gaske, Director, and  
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

Director's Office  
(850) 245-6300 • FAX: 245-6436

Archaeological Research  
(850) 245-6444 • FAX: 245-6436

Historic Preservation  
(850) 245-6333 • FAX: 245-6437

Historical Museums  
(850) 245-6400 • FAX: 245-6433

Southeast Regional Office  
(954) 467-4990 • FAX: 467-4991

Northeast Regional Office  
(904) 825-5045 • FAX: 825-5044

Central Florida Regional Office  
(813) 272-3843 • FAX: 272-2340

COUNTY: ALL

DATE: 3/24/2005

COMMENTS DUE DATE: 4/23/2005

CLEARANCE DUE DATE: 5/16/2005

SAI#: FL200503240631C

REFER TO: FL199501030002CR

MESSAGE:

<b>STATE AGENCIES</b>	<b>WATER MNGMNT. DISTRICTS</b>	<b>OPB POLICY UNIT</b>	<b>RPCS &amp; LOC GOVS</b>
COMMUNITY AFFAIRS	SOUTH FLORIDA WMD	ENVIRONMENTAL POLICY UNIT	
ENVIRONMENTAL PROTECTION			
FISH and WILDLIFE COMMISSION			
X OTTED			
STATE			
TRANSPORTATION			

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APR 04 2005

OIP / OLGA

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS - SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT - HERBERT HOOVER DIKE MAJOR REHABILITATION EVALUATION REPORT, REACH 1 - MARTIN AND PALM BEACH COUNTIES, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)  
 3900 COMMONWEALTH BOULEVARD MS-47  
 TALLAHASSEE, FLORIDA 32399-3000  
 TELEPHONE: (850) 245-2161  
 FAX: (850) 245-2190

EO. 12372/NEPA Federal Consistency

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> No Comment | <input checked="" type="checkbox"/> No Comment/ <del>Consistent</del> |
| <input type="checkbox"/> Comment Attached      | <input type="checkbox"/> Consistent/Comments Attached                 |
| <input type="checkbox"/> Not Applicable        | <input type="checkbox"/> Inconsistent/Comments Attached               |
|  | <input type="checkbox"/> Not Applicable                               |

From:

Division/Bureau: OTTED

Reviewer: M. Blakely

Date: 3/29/05

**SUMMARY OF COMMENTS ON THE DRAFT EIS  
FOR HERBERT HOOVER DIKE MRR  
July 1999 - March 2003**

<b>SOURCE OF LETTER</b>	<b>SIGNIFICANT ISSUES</b>	<b>NOTE</b>
City of Pahokee	Potential City water plant impacts concerns and adjacent toe ditch obstacles	Concerns are addressed in the HHD MRR VE Study, July 2002, recommended plan
Southwest Regional Planning Council	The HHD MRR Reach One found Regionally Significant & Consistent with SWRPC goals, objectives and policies	No further action required
National Marine Fisheries Service Protected Resources Division	Downstream water quality concerns that may affect endangered Johnson's seagrass in St. Lucie Estuary	Proposed project would take place in area not within NMFS purview.
Environmental Protection Agency	Environmental ramifications minimized, further plan refinement needed to improve project further	Additional courtesy coordination will be done as detailed design information becomes available
South Florida Regional Planning Council	The HHD MRR Reach One found consistent with SFRPC goals, objectives and policies	No further action required
National Marine Fisheries Service Protected Resources Division	None – Best Management Practices for water quality will suffice	No further coordination with NMFS needed unless plans change.
Department of the Interior	Exotics in collector canals, WRAP assessment needed for toe ditches, toe ditch impact compensation, wetland value consistency thru out EIS	DOI issues will be worked out with USFWS
South Florida Water Mgmt District	A combination of 3 alternatives should be considered. 2 pgs of staff specific comments were provided	A combination of alternatives would be implemented based on the HHD MRR and the July 2002 VE study. The DEIS will be edited per staff cmts.
Department of Community Affairs Florida Coastal Management Program	The Florida State Clearing House has coordinated a review of the referenced project.	No adverse effects are anticipated with the implementation of Alternative 3.
Florida Department of Transportation	FDOT noted the project may impact the Lake Okeechobee Segment of the Florida National Scenic Trail,	FDOT requests access to the HHD via proposed trailheads not be restricted.
Florida Department of State Division of Historical Resources	FDOS noted HHD is eligible for listing the National Register of Historic Places	The HHD would need to be documented as per HAB standards prior to construction.
Florida Department of Environmental Protection	FDEP noted that Alt. 3 is the environmentally preferred alternative	A FDEP WQC will be required
U.S. Department of Interior U.S. Fish & Wildlife Service	Based on review of HHD MRR RCH 1 Value Engineering Study, July 02, and further consultation for mitigation, further consultation is not required at this time. BMPs, protection measures for nesting Bald Eagles and the Eastern Indigo Snake, and wetland mitigation are required.	Protection measures have been coordinated with Engineering Division and the Corps' contractor for the nesting bald eagle and eastern indigo snake. Clearing and planting of mitigation site has been initiated. No further action required at this time.

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United States Department of the Interior Office of Environmental Policy and Compliance	09-16-1999	13

**City of Pahokee  
171 North Lake Avenue  
Pahokee, Florida 33476**

Comment: We reviewed the rehabilitation report for the dike as it affects Pahokee. Our concerns are limited to some specific sites that may be impacted by the project. One in particular is the City's water plant. The tanks may be within the 50 feet that is proposed for the rehab. However, I believe there is sufficient room to do what is proposed with minor modifications.

Response: The Corps has modified the plan with the current recommended alternative. Impacts to the water treatment plant will be avoided.

**Southwest Florida Regional Planning Council  
4980 Bayline Drive North  
Fort Myers, Florida 333917-3909**

Comment: The Council reviewed the DEIS and found it to be "Regionally Significant and Consistent" with adopted goals, objectives and policies of the Strategic Regional Policy Plan.

Response: No response needed.

**South Florida Regional Planning Council  
3440 Hollywood Boulevard, Suite 140  
Hollywood, Florida 33201**

Comment: The review of the DEIS as proposed, is generally consistent with the goals and policies of the Strategic Regional Planning Policy Plan for South Florida.

Response: No response needed.

**South Florida Water Management District  
3301 Gun Club Road  
West Palm Beach, Florida 33406**

**General Comments**

Comment No. 1: Why was the Herbert Hoover Dike segmented into reaches and what criteria was used?

Response: The Herbert Hoover Dike (HHD) was divided into reaches based on hydrology and hydraulics, geology, population and perceived conditions at the time. For example, the limits of Reach One were based on the limits of inundated cells, similar geology (3 cells in Reach One), largest population in inundated cells, and at the time, it was thought that Reach One had the worst existing dike conditions.

Comment No. 2: How was Reach One selected as the first priority?

Response: The Herbert Hoover Dike (HHD) was divided into reaches based on hydrology and hydraulics, geology, population and perceived conditions at the time. For example, the limits of Reach One were based on the limits of inundated cells, similar geology (3 cells in Reach One), largest population in inundated cells, and at the time, it was thought that Reach One had the worst existing dike conditions.

Comment No. 3: What is the risk associated with rehabilitation of Reach One verses the remaining reaches?

Response: If Reach One is rehabilitated, the risk of failure for another reach does not increase. Systems reliability can be addressed as either series or parallel systems. HHD is a series system in which the performance of each component (reach) is independent of the others. An analogy is a chain. The links (reaches) all see the same load (lake level). Fixing a weak link does not cause another link to lose capacity. In fact, the overall capacity (reliability of the system) is increased.

Comment No. 4: If Reach One is rehabilitated, what is the risk of failure of another portion of the dike?

Response: If Reach One is rehabilitated, the risk of failure for another reach does not increase. Systems reliability can be addressed as either series or parallel systems. HHD is a series system in which the performance of each component (reach) is independent of the others. An analogy is a chain. The links (reaches) all see the same load (lake level). Fixing a weak link does not cause another link to lose capacity. In fact, the overall capacity (reliability of the system) is increased.

Comment No. 5: As a result, the impacts of the No Action Alternative are not equally compared with other alternatives. It is assumed that a failure will occur in Reach One

in the No Action Plan. However there is a risk that failure may occur in another Reach with No Action Alternative or other alternatives.

Response: Any engineered structure has a risk of failure. Defining the level of acceptable risk determines whether or not a structure is considered safe or unsafe. Probability of “failure”, in this case catastrophic failure, is the product of the probability of a given lake elevation combined with the probability of unsatisfactory performance for a given reach. At higher lake levels, we (USACE) consider this risk to be unacceptable. We consider the “No Action alternative” unacceptable due to the proximity of populated areas and the potential for loss of life.

Comment No. 6: alternatives 1 through 3 do not eliminate the possibility of dike failure; it only reduces the risk of failure. It is this reduction in risk for Alternatives 1 through 3 that should be compared with the risk of failure associated with the No Action Alternative.

Response: “Eliminating” the possibility of failure is not possible in any structure. Reducing the risk to an acceptable level in the most economically and environmentally acceptable manner is our objective. Again, due to the life safety issues, the No Action Alternative is not acceptable.

Comment No. 7: Other than the No Action alternative, there are no non-structural alternatives considered. Operational alternatives should be addressed in the evaluation.

Response: Unfortunately, even if we were to substantially lower the Lake during a 100-year flood event, the water comes into the Lake much faster than we could remove it. The Lake level could still rise to an elevation that could result in a dike failure. Besides maintaining unusually low Lake levels or draining the Lake entirely would have significant socioeconomic and environmental consequences. Therefore, Lake levels must be maintained within reasonable levels.

Comment No. 8: Implementing one of the three alternatives alone may not optimize benefits. Each alternative is applicable in different areas. Therefore, a combination of three alternatives should be considered.

Response: Each Alternative was evaluated based on the particular problem in a particular area. All three alternatives were considered.

## **Specific Comments**

Comment No. 1: DEIS page 3, Para. 1: Is there “continued degradation of the HHD’s stability...? If so, there should be a discussion of what is happening and its potential implications.

Response: Degradation of stability is addressed in the technical portion of the MRR. Piping causes degradation of the structure and is discussed in detail in appendix H.

Comment No. 2: DEIS page 5, Para 3: While the sentence immediately before this paragraph states that the repairs and modifications are authorized by the Flood Control Act of 1948, will the requirements of local cooperation be based on the same authorization?

Response: The MRR, dated Nov 2000, page 77, Section 18. Cost Sharing, states: “...recent guidance from CECW-OM, dated 8 August 2000, states that the acquisition of required real estate interest be borne by the non-Federal sponsor and all additional costs be 100 percent Federal.”

Comment No. 3: DEIS page 12, Para. 2: Recommend replacing the Fernald and Patton citation with a more recent one, which would reflect the most recent Lake regulation schedule. You could cite the 1997 SWIM Plan Update or perhaps, the WSE DEIS, if you feel comfortable with that.

Response: Replace the Fernald and Patton citation with “(Lake Okeechobee Regulation Schedule Study, Final Environmental Impact Statement, November 1999)”.

Comment No. 4: DEIS page 14, Para. 3: It is not clear how flooding of perimeter wetlands amounts to a primary source of nutrients; advection of high nutrient water from open water to the littoral zone is a redistribution of existing nutrients, not a new source. Instead include atmospheric inputs via precipitation as additional source. Unfortunately, we still do not have good data quantifying the relative magnitude of this source. Also there is a typographic problem in the apparent bridge between this paragraph and the next one.

Response: The comment has been discussed and will be clarified in the water quality section of the final EIS.

Comment No. 5: DEIS page 14, Para 5: Disagree that the water in Lake Okeechobee is essentially uniform in chemical composition. There are considerable differences in

chemistry even within different regions of the open water, and certainly between waters in the open water and littoral zones.

Response: Agree with your opinion.

Comment No. 6: DEIS, page 15, Para 2: This paragraph suggests that water levels can be controlled between 17.5 and 15.5 ft HCVD. However, this is not true. Suggest a broader discussion of actual water level ranges that can be expected with the current and WSE regulation schedules.

Response: Rewrite this paragraph to read: “The Lake is regulated for multiple-use purposes such as flood control, water supply, regional groundwater control, enhancement of fish and wildlife, navigation and recreation. The guidelines for the management of Lake water levels are a regulation schedule that was developed by the South Florida Water Management District (SFWMD) and USACE. The schedule was developed to provide seasonal Lake fluctuations that attempt to lower the Lake stage prior to the wet season to provide both storage capacity and flood protection for the surrounding areas during the wet season. After the peak of the hurricane season, Lake levels are allowed to increase to store water for the upcoming dry season. The Caloosahatchee River and the St. Lucie Canal are the primary outlets for release of flood water when the Lake is above regulation stages. The Corps of Engineers is ultimately responsible for prescribing regulations and key operating criteria for all project works. Any operational activity must be consistent with the Corp’s water management plan. (See Appendix I, Hydrology and Hydraulics analysis, Herbert Hoover Dike Major Rehabilitation Evaluation Report, December 1998, for information on the frequency of Lake levels and how they were determined.)”

Comment No. 7: DEIS page 16, Para 4: The term “duration” is used where the term “return frequency” should be used and vice versa.

Response: Concur, it will be corrected.

Comment No. 8: DEIS, page 19, Para 2: Change “Vallioneria” to Vallisneria”. Also, suggest steering clear of the term “diverse” to describe these marshes, unless you want to get into a discussion of what diverse means. The marshes in Lake Okeechobee actually were not very diverse, at least prior to human impact. Whatever diversity they have obtained recently is a perversion due to invasive species; it is doubtful that this is how we want to increase diversity.

Response: Concur.

Comment No. 9: DEIS, page 21, Para 4: The Latin species name for the Florida apple snail is unfamiliar, and not consistent with the one used by SFWMD (*Pomacea paludosa*).

Response: Concur, change to (*Pomacea paludosa*).

Comment No. 10: DEIS, Page 24: Given that there is now an alligator hunting season (permits given by lottery only), parts of this section seem incongruous. Perhaps this should be rewritten.

Response: Add this sentence to 3<sup>rd</sup> paragraph on page 24: Alligator hunting permits are issued by lottery only during Alligator hunting season.

Comment No. 11: DEIS, page 26, Para 2: The basis for the statement that wood storks are an excellent indicators of wetland health when the habitat is not clear. They are frequently found in South Florida on golf courses.

Response: The author is saying that the wood stork is an indicator species associated with wetlands. The author also stated that wood storks feed in shallow ponds, tidal pools etc that area also found in many golf courses.

Comment No. 12: DEIS, page 50, Para 2: It is not clear what type of water quality issues might be perceived.

Response: Since the modified recommended alternative avoids impacts to isolated wetlands, there are no water quality issues with the present plan. Some temporary construction impacts (disturbed sediments) will occur during the dike rehabilitation. These temporary impacts would end with the completion of the construction.

Comment No 13. DEIS, page 52, Para 1: If a breach were to occur, and massive discharges ensued, it is likely that the fluid mud sediments near the center of the Lake would laterally transported to the near shore region close to the breach. This would result in elevated Total Suspended Solids as well as elevated Total Phosphorus concentrations, near this region as well.

Response: Agree, a levee breach would likely result in significant sediment transport with resulting in elevated levels of sediment components in the water column.

Comment No. 14: DEIS, page 52, Para 1: It is true that a breach of the dike is likely to be preceded by significant freshwater discharges to the estuaries with the No Action Alternative. However, this is equally true for the other alternatives. Discharges to the estuaries are determined by the regulation schedule, which is common to all alternatives.

Response: Concur.

Comment No 15. DEIS, page 73, Para 6: Although the impacts of the failures might be contained in separated watersheds, the risk of failure changes as each reach is rehabilitated. For example, rehabilitation of Reach One may actually increase the risk of a failure in another reach.

Response: Again, performances of Reaches (links) are independent of each other. Repairing Reach One lowers its risk of failure and INCREASES overall system reliability. The other reaches still have the SAME probability of failure, only now Reach One is much LESS likely to fail.

Comment No. 16: DEIS, page 73, Para 6: The impacts of the proposed regulation schedule WSE should be assessed. Also the impacts of implementation of Restudy Comprehensive Plan components that will attenuate inflows to the Lake must also be considered in the cumulative effects section.

Response: WSE, the new regulation schedule, should have limited impact on the Herbert Hoover Dike System. For example, for the former schedule, Run 25, the peak 100-year flood elevation on Lake Okeechobee was 21.3 feet. For Run 22D, a schedule similar to WSE, the 100-year flood elevation would be 20.5 feet. This is a beneficial change that reduces the lake stage and corresponding likelihood of failure associated with a 100-foot Year flood on the Lake. But the extent of reduction in stages and failure likelihood is not adequate. An unacceptable risk of dike failure would still exist at the lowered stage of 20.5 feet. A regulation schedule that resulted in extremely low lake levels, or draining the Lake entirely, would have catastrophic socio-economic and environmental consequences. (See Herbert Hoover Dike Major Rehabilitation Evaluation Report, (HDDMRER) December 1998).

The intent of the HHD MRR is to ensure that a reliable levee system is provided along the perimeter of Lake Okeechobee. The Restudy Comprehensive Plan components should benefit the Lake in many more ways, some of which follow.

The storage reservoirs will detain water during wet periods for later use during dry periods and reduce nutrient loads flowing to the lower Kissimmee River and Lake Okeechobee. This increased storage capacity should reduce the duration and frequency of both high and low water levels in the Lake. These facilities could be designated to achieve significant water quality improvements, depending on location. The watershed water quality treatment facilities will be designed to attenuate peak flows and retain phosphorus before it enters the Lake. The aquifer storage and recovery wells should provide additional regional storage, and increase the Lake's water storage capability to better meet regional water supply demands for agriculture, Lower East Coast urban areas, and the Everglades. They should also reduce harmful regulatory discharges to the St. Lucie Canal and Caloosahatchee Estuaries and maintain and enhance the existing level of flood protection.

**State of Florida Clearinghouse  
Department of Community Affairs  
2555 Shumard Oak Boulevard  
Tallahassee, Florida 32399-2100**

Comment: The letter provides consolidated State review comments on the DEIS.

Response: No response needed.

**(1) Division of Forestry  
Forest Resources planning Council & Support Services Bureau  
3125 Conner Blvd., MS C23  
Tallahassee, Florida 32399-1650**

Comment: No comment

Response: No response needed

**(2) Office of Environmental Services  
Florida Fish and Wildlife Conservation Commission  
620 South Meridian Street  
Tallahassee, Florida 32399-1600**

Comment: No comment

Response: No response needed.

**(3) Department of Environmental Protection  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000**

Comment: The project will require a water quality certification under Chapter 373, F.S. and Section 402 of the Clean Water Act.

Response: Agree the Corps will coordinate with the Department's Federal Liaison concerning application requirements.

**(4) Florida Department of State  
Division of Historic Resources  
500 South Bronough Street  
Tallahassee, Florida 32399**

Comment: The department noted the HHD is eligible for listing the National Register of Historic Places. However, it has concurred with the determination that the proposed plan will have no adverse effect to the eligible resource.

Response: The USACE had noted the Herbert Hoover Dike is eligible for listing in the National Register of Historic Places. However, both the USACE and SHPO are in concurrence the proposed project will have no adverse effect on the historic character of the Herbert Hoover Dike.

**(5) Florida Department of Transportation  
Transportation Planning Office – District 4  
3400 West Commercial Blvd., 3<sup>rd</sup> Floor  
Ft. Lauderdale, Florida 33309-3421**

Comment: The Department recommends that the U.S. Army Corps of Engineers coordinate with FDOT and the Florida Department of Environmental Protection on the implementation of the Lake Okeechobee Scenic Trail Master Plan.

Response: The U.S. Army Corps of Engineers is coordinating all work with your suggested point of contact.

**(6) Treasure Coast Regional Planning Council  
301 East Ocean Boulevard, Suite 300  
Stuart, Florida 34994**

Comment: No comment.

Response: No response needed.

**(7) Southwest Florida Regional Planning Council  
4980 Bayline Drive North  
Fort Myers, Florida 333917  
Glades County**

Comment: No comment

Response: No response needed.

**United States Environmental Protection Agency  
Region 4  
Atlanta Federal Center  
612 Forsyth Street  
Atlanta, Georgia 30303-8960**

General comment: From the information provided, it appears that the proposed design option will meet the primary objective, viz, preventing a catastrophic dike failure within Reach #1. On the basis of our review a rating of EC-2 has been assigned.

Response: No response needed.

Detailed Comment (1): There should be some consideration given to compensate for the infrastructure losses experienced by the local public in the immediate project area.

Response: We concur that this issue along with many others are important and will be addressed during the detailed design process when total real estate needs are known.

Detailed Comment (2): The fate of the peat which will be excavated during the construction of the seepage berm should be noted.

Response: Peat will be stockpiled for use on areas of the dike where sterile soils exist.

Detailed Comment (3): We observe that fill will have to be transported to the abandoned rock quarry (vicinity C-12) in order to support the drainage berm. It would be helpful if the final document provided more details on the specifics of this design element. In this instance it appears that comprehensive sediment control is fundamental to the long-term maintenance of dike integrity and by extension the expected degree of flood damage prevention.

Response: The repair in the MRR is a concept design. We concur that sediment control (and many other items) will need to be addressed during the design process. Once final design is approved and funded these items can then be addressed.

Detailed Comment (4): It has been our experience that the protective grates over the drop openings are very prone to clogging, especially after mowing operations. Some information as to their maintenance should also be provided in the final document. For example, what criteria/standards will be used by the District or its agents in providing controls?

Response: The recommended alternative has been modified to not include the drop structures in question. However, the U.S. Army Corps of Engineers Guide Specification number 01570, Erosion Control and Pest Control, addresses these types of concerns. The project quality assurance plan will include these specifications.

Detailed Comment (5): It was noted that during periods of concentrated rain and/or backpumping from adjacent agricultural fields the usual situation reverses and flows in the canal move toward the Lake in some portions (vicinity of C-12 and C-13) of Reach #1 rather than vice versa. When this occurs the seepage channel will not function as designed because of this differential head. Any loss of efficiency is important as this would seem to be exactly the times when the seepage canal would be most needed. We understand that this situation can be rectified via some rerouting of the culvert system. The final document should provide details on exactly how this will be accomplished.

Response: The revised recommended alternative takes into account the differential encountered in the above comment as the worst case scenario for head differential and highest seepage rates. The new design does not increase total flow at higher head differentials.

Detailed Comment (6): There is a quarry within Reach #1 which may pose some problems in achieving/maintaining project objectives. It will have to be partially filled because of insufficient space to construct the proposed drainage berm between its

margins and the existing embankment toe of the levee. This fill must be carefully chosen to ensure that it has the proper structural/textural characteristics. Namely, it would need acceptable shrink-swell characteristics to nominalize the potential for failure of the culvert line at its joints. We are also concerned about the gross integrity of the fill on which the drainage berm will be placed. Unless there is essentially a waterproof seal between the drain and the quarry, this fill would be subject to excessive wetting which could foster slumping. This could be true notwithstanding the rock-filled gabions placed on the margins of the project and the quarry and the premise the water levels in the quarry will remain lower than the elevations of the culvert system. Unless this seal is maintained over the life of the project and quarry drains remain open, the water in the quarry could approximate that in the drain and lessen its efficacy at exactly the time (rain fall periods) that it must have maximum utility in maintaining HHD integrity. In a related matter, if the quarry will only be partially filled, there would appear to be the opportunity to construct a shallow littoral zone to provide wildlife and water quality functions. We would strongly support adding this feature to the project.

Response: Concur. Structural fill will be specified so that the desired properties are achieved. This will take place during the final design.

Detailed Comment (7): Perennial vegetation must be scrupulously prevented from growing on the elevated berm to preclude root penetration/clogging of the perforated drainage (culvert) line. The current practice of regular mowing will accomplish this end, but care will have to be taken that the weight of the equipment does not adversely affect the efficacy of the drainage system by compaction and /to tearing the geotextile fabric which surrounds the culvert.

Response: Due diligence will be utilized to ensure the maintenance of the dike slopes will not adversely affect drainage structures critical to the performance of the dike

Detailed Comment (8): While the analysis of upgrading HHD is on-going, this would be an excellent opportunity to compare the overall water quality ramifications of agricultural waterward of the dike verses the economic benefits of this land.

Response: There is no known agriculture waterward of the HHD. However, if it does exist waterward of the levee it would be useful to evaluate the resultant nutrient loading/water quality impacts of that agriculture. Unfortunately there is no mechanism authorized to undertake a study of that nature under the auspices of the Herbert Hoover Dike Major Rehabilitation Report Reach One study.

**United State Department Of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702**

Comment: The DEIS does not sufficiently explain the effects the seepage berm will have on downstream water quality; therefore, NMFS can not make a determination on this project's effects on Johnson's seagrass.

Response: This issue was answered with a letter dated September 16, 1999 from NMFS.

**United State Department Of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702**

Comment: The information in your letter stated that to minimize temporary water quality due to construction, all Corps of Engineers contractors will follow a rigorous environmental protection plan. This plan will require the use of various erosion control measures. Based on this information, NMFS concurs with your conclusion that this project is not likely to affect species protected by the National Species Act under NMFS purview.

Response: No response needed.

**United States Department of the Interior  
Office Of The Secretary  
Office of Environmental Policy And Compliance  
Richard B. Russell Federal Building  
75 Spring Street, S.W.  
Atlanta, Georgia 30303**

Comment (1): The Draft EIS is inconsistent in its evaluation of the impact of the project on wetlands along the existing toe ditch on the landward side of Herbert Hoover Dike

(HHD) (Section 4.09, pg DEIS-19, Section 5.09, pg DEIS-55, pg DEIS-55, Contrast: Section 5.10, pg DEIS-56, Section 5.21, pg DEIS-75).

Response: In February 2000, the U.S. Fish & Wildlife Service performed a Wetland Rapid Assessment Procedure (WRAP) on reach One (22-mile long section) and outlined a compensatory wetland mitigation plan for this section of the Herbert Hoover Dike. A mitigation plan for identified wetlands that would be affected by the project was developed and agreements documented in the final Fish and Wildlife Coordination Act Report dated December 20, 2001. The recommended plan was further refined and detailed in 30% design document. The refined plan eliminated work in the toe ditches and landward of the ditched that would have impacted wetland habitat. As a result, only temporary impacts to wetland habitat are anticipated. Mitigation work will not be required. This information is included in the Annex A of the Final EIS.

Comment (2): If the US Fish and Wildlife Service's (USFWS) wetland compensation recommendations for proposed littoral shelves in the existing quarry cannot be completed by the Corps, an alternative wetland compensation plan should be developed.

Response: See response to Comment No. 1.

Comment (3): The Service recommends use of the Wetland Rapid Assessment Procedure (WRAP) to perform an evaluation prior to detailed design of the project.

Response: See response to Comment No. 1.

Comment (4): The proposed WRAP assessment would provide a more suitable estimate of both the quantity and quality of the wetlands to be affected.

Response: See response to Comment No. 1.

# **CITY OF PAHOKEE**

**171 North Lake Avenue  
Pahokee, Florida 33476  
(561)-924-5534**

Alvis Davis  
Mayor

August 11, 1999

Roy Singletary  
Vice Mayor

Keith W. Babb, Jr.  
Commissioner

W. Pete Moore  
Commissioner

Henry Crawford, Jr.  
Commissioner

Mr. James C. Duck  
Chief Planning Division  
Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Re: Herbert Hoover Dike Rehabilitation

Dear Mr. Duck:

We reviewed the rehabilitation report for the dike as it affects Pahokee. Our concerns are limited to some specific sites that may be impacted by the project. One in particular is the City's water plant. The tanks may be within the 50 feet that is proposed for the rehab. However, I believe there is sufficient room to do what is proposed with minor modifications. I'm not sure of all the obstacles that may be adjacent to the toe ditch but they can be addressed on an individual basis during the design.

I appreciate the opportunity to review the report and in general concur with the selected alternative. If we can be of any assistance with this project please let me know.

Sincerely,



Kenneth N. Schenck  
City Manager

KNS/dp

C: Greg Vaday, TCRPC

**"Sunshine's Winter Harbor"**



## Southwest Florida Regional Planning Council

4980 Bayline Drive, 4th Floor, N. Ft. Myers, FL 33917-3909 (941) 656-7720

P.O. Box 3455, N. Ft. Myers, FL 33918-3455 SUNCOM 749-7720

FAX 941-656-7724

August 20, 1999

Mr. Mark Ziminske  
USACOE - Jacksonville District  
P.O. Box 4970  
JACKSONVILLE, FL 32232-0019

RE: IC&R Project #99-337  
State Clearinghouse #FL9501030002CR

USACOE - Jacksonville District - Draft EIS - The Herbert Hoover Dike -  
Major rehabilitation evaluation report - Lake Okeechobee, Florida.

Dear Mr. Ziminske:

The staff of the Southwest Florida Regional Planning Council reviews various proposals, Notifications of Intent, Preapplications, permit applications, and Environmental Impact Statements for compliance with regional goals, objectives, and policies, as determined by the Strategic Regional Policy Plan. The staff reviews such items in accordance with the Florida Intergovernmental Coordination and Review Process (Chapter 29I-5, F.A.C.), and adopted regional clearinghouse procedures.

These designations determine Council staff procedure in regards to the reviewed project. The four designations are:

Less Than Regionally Significant and Consistent no further review of the project can be expected from Council.

Less Than Regionally Significant and Inconsistent Council does not find the project of regional importance, but will note certain concerns as part of its continued monitoring for cumulative impact within the noted goal area.

Regionally Significant and Consistent project is of regional importance, and appears to be consistent with Regional goals, objectives, and policies.

Regionally Significant and Inconsistent project is of regional importance and does not appear to be consistent with Regional goals, objectives, and policies. Council will oppose the project as submitted, but is willing to participate in any efforts to modify the project to mitigate the concerns.

To: Mr. Mark Ziminske  
Date: August 20, 1999  
Re: SWFRPC #99-337  
Page: 2

The above referenced document has been reviewed by this office, based on the information contained in the document, and on local knowledge, has been found **Regionally Significant and Consistent** with adopted goals, objectives, and policies of the Strategic Regional Policy Plan. Also, Regional staff supports the implementation of the Alternative 3 improvements to Reach 1.

Should you or any other party request this finding to be reconsidered, please contact Nichole L. Gwinnett, IC&R Coordinator, with this request, or any questions concerning staff review of this item. This recommendation will be discussed at the next scheduled Council meeting. Should Council action differ from the staff recommendation, you will be notified.

Sincerely,

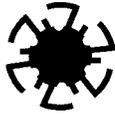
SOUTHWEST FLORIDA REGIONAL PLANNING COUNCIL



 Wayne E. Daltry  
Executive Director

WED/NLG

cc: Cherie Trainor, Florida State Clearinghouse



September 3, 1999

Mr. James C. Duck  
Chief, Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

RE: SFRPC #99-0813, Request for comments on the Draft Environmental Impact Statement for the Herbert Hoover Dike Major Rehabilitation Evaluation Report.

Dear Mr. Duck:

We have reviewed the above-referenced draft report and have the following comments:

- The Herbert Hoover Dike Major Rehabilitation, as proposed, is generally consistent with the goals and policies of the *Strategic Regional Policy Plan for South Florida*, particularly the following:

#### Strategic Regional Goal

- 3.8 Enhance and preserve natural system values of South Florida's shorelines, estuaries, benthic communities, fisheries, and associated habitats, including but not limited to, Florida Bay, Biscayne Bay and the coral reef tract.

#### Regional Policies

- 3.8.3 As a result of proposed project reviews, include conditions that result in a project that enhances and preserves marine and estuarine water quality by:

- a) improving the timing and quality of freshwater inflows;
- b) reducing turbidity, nutrient loading and bacterial loading from wastewater facilities, vessels;
- c) the number of improperly maintained stormwater systems; and
- d) requiring port facilities and marinas to implement hazardous materials spill plans.

- 3.8.4 Enhance and preserve commercial and sports fisheries through monitoring, research, best management practices for fish harvesting and protection of nursery habitat and include the resulting information in educational programs throughout the region. Identified nursery habitat shall be protected through the inclusion of suitable habitat protective features including, but not limited to:

- a) avoidance of project impacts within habitat area;
- b) replacement of habitat area impacted by proposed project; or
- c) improvement of remaining habitat area within remainder of proposed project area.

- 3.8.5 Enhance and preserve habitat for endangered and threatened marine species by the preservation of identified endangered species habitat and populations. For threatened species or species of critical concern, on-site preservation will be required unless it is demonstrated that off-site mitigation will not adversely impact the viability or number of individuals of the species.

**Strategic Regional Goal**

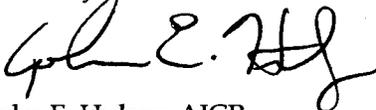
- 3.9 Restore and protect the ecological values and functions of the Everglades System

**Regional Policies**

- 3.9.4 Restore natural volume, timing, quality and distribution of water to the Everglades, Florida Bay, Biscayne Bay, other eastern estuaries, and the Atlantic Ocean by:
- a) supporting structural and operational modifications to the Central and Southern Flood Control Project and recommended by the US Army Corps of Engineers C&SF Feasibility Study;
  - b) supporting implementation of East Coast Buffer Plan; and
  - c) supporting a water supply plan that meets the needs of the natural system.
- 3.9.5 Conserve water entering the Everglades system and increase the self sufficiency of urban and agricultural water supplies by:
- a) creating water storage areas near or within urban areas;
  - b) promoting increased efficiency of water use in agriculture, business uses and residential use; and
  - c) promoting the development of alternative water supply sources.
- 3.9.6 Restore water quality throughout the system by:
- a) requiring stormwater treatment and storage areas for existing and newly developed areas and agricultural lands; and
  - b) protecting existing wetlands, native uplands and identified aquifer recharge areas.
- 3.9.7 Include the Everglades system in the ecological studies so that the successes of restoration may be expanded and included in adaptive management of the system.

Thank you for the opportunity to comment. If you require further information, please contact me.

Sincerely,



John E. Hulsey, AICP  
Senior Planner

JEH/cp



## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

---

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574  
Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

PRO SWIM-LO RF 99699R

October 6, 1999

Mr. James C. Duck  
Chief, Planning Division  
Jacksonville District  
U.S. Army Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Dear Mr. Duck:

Please find enclosed the consolidated comments of staff at the South Florida Water Management District regarding the Draft Environmental Impact Statement for the Herbert Hoover Dike Major Rehabilitation Evaluation Report.

Thank you for the opportunity to comment. Please call me if I can be of further assistance.

Sincerely,

A handwritten signature in cursive script that reads "Lewis Hornung".

Lewis Hornung  
Lake Okeechobee Restoration Program Manager

LH:dju  
Enclosure

---

### GOVERNING BOARD

Michael Collins, *Chairman*  
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Patrick J. Gleason

Nicolas J. Gutierrez, Jr.  
Harkley R. Thornton  
Trudi K. Williams

### EXECUTIVE OFFICE

Frank R. Finch, P.E., *Executive Director*  
James E. Blount, *Chief of Staff*

# **Herbert Hoover Dike Major Rehabilitation Evaluation Report Draft Environmental Impact Statement**

## **South Florida Water Management Districts Comments**

### **General Comments**

#### Evaluation of Alternatives

The Draft Environmental Impact Statement does not address the following:

- Why the Herbert Hoover Dike was segmented into reaches and what criteria were used;
- How was reach 1 selected as the first priority;
- What is the risk associated with rehabilitation of reach 1 vs the remaining reaches; and
- If reach 1 is rehabilitated, what is the risk of failure of another portion of the dike?

As a result, the impacts of the No Action Alternative are not equally compared with the other alternatives. It is assumed that a failure will occur in reach 1 in the No Action Plan. However, there is a risk that failure may occur in another reach with the No Action Alternative or the other alternatives.

Alternatives 1 through 3 do not eliminate the possibility of dike failure; it only reduces the risk of failure. It is this reduction in risk for Alternatives 1 through 3 that should be compared with the risk of failure associated with the No Action Alternative.

#### Selection of Alternatives

Other than the No Action Alternative, there are no non-structural alternatives considered. Operational alternatives should be addressed in the evaluation.

Implementing one of the three alternatives alone may not optimize benefits. Each alternative is applicable in different areas. Therefore, a combination of three alternatives should be considered.

#### Alternative 3

The main disadvantage of implementing Alternative 3 will be in its high cost of maintenance. The relief drain must be kept clear and open at all times since this will be the main relief conduit for the water seeping through the levee. Selection of a geotextile that will allow the free flow of water into the relief pipe is critical to this alternative. Since the lithology varies significantly along the reach, clogging of the geotextile or the perforated culvert is anticipated which may lead to a saturation of soils around the trench leading to piping or excessive seepage. This alternative may be implemented in areas

with a uniform lithology and along areas where the local drainage district and farms depend heavily on seepages for their watering needs.

### Alternative 2

Alternative 2 with modifications may be implemented for the bulk of the reach in areas where the other alternatives are not suitable. No significant alteration of the groundwater regime in the adjacent areas is anticipated under this scenario. Groundwater seepages under the cutoff wall and the rim canals will keep the water table in the adjacent landward areas sufficiently saturated for irrigation. During high water levels in the lake, the cutoff trench will intercept the groundwater table and retain the floodwaters within the confines of the diked area. The cutoff wall need not be 60 feet deep and may be terminated 5 feet below the most permeable horizon (depth around 40 feet). The depth of the cutoff wall may vary locally which can be determined after a detailed geotechnical investigation. The 3-foot thick cutoff trench may be filled with an admixture of locally available muck and bentonite. The existing seepage ditch may be relocated further landward of the stability berm. The seepage ditch will trap any surface runoff. The material excavated from the cutoff trench may be used for the construction of stability berm. This alternative will provide protection with a low construction and maintenance cost.

### Alternative 1

Alternative 1, which involves the improvement of the existing drainage ditches and construction of stability berm, may be implemented where ROW is limited. Application of this alternative will be limited.

### **Specific Comments:**

1. P 3, para 1: Is there "...continued degradation of the HHD's stability..."? If so, there should be a discussion of what is happening and its potential implications.
2. P5, para 3.00: While the sentence immediately before this paragraph states that the repairs and modifications are authorized by the Flood Control Act of 1948, will the requirements of local cooperation be based on the same authorization?
3. p. 12, para 2: Recommend replacing the Fernald and Patton citation with a more recent one, which would reflect the most recent lake regulation schedule. You could cite the 1997 SWIM Plan Update or perhaps, the WSE DEIS, if you feel comfortable with that.
4. p.14, para 3: It is not clear how flooding of perimeter wetlands amounts to a primary source of nutrients; advection of high nutrient water from the open water to the littoral zone is a redistribution of existing nutrients, not a new source. Instead, include atmospheric inputs via precipitation as an additional source. Unfortunately, we still do not have good data quantifying the relative magnitude of this source. Also, there is a typographic problem in the apparent bridge between this paragraph and the next one.

5. p. 14, para 5: Disagree that the water in LO is essentially uniform in chemical composition. There are considerable differences in chemistry even within different regions of the open water, and certainly between waters in the open water and littoral zones. For an overview, recommend looking at the following paper:

Steinman, A.D., K.E., Havens, N.G. Aumen, R.T. James, K.-R. Jin, J. Zhang, and B. Rosen. 1999. Phosphorus in Lake Okeechobee: sources, sinks, and strategies. Pages 527-544 in: K.R. Reddy, G.A. O'Connor, and C.L. Schelske (editors). Phosphorus Biogeochemistry of Subtropical Ecosystems: Florida as a case example. CRC/Lewis Publ., New York.

6. p. 15, para 2: This paragraph suggests that water levels can be controlled between 17.5 and 15.5 ft, NGVD. However, this is not true. Suggest a broader discussion of actual water level ranges that can be expected with the current and WSE regulation schedules.
7. P. 16, para 4: the term "duration" is used where the term "return frequency" should be used and vice versa
8. p. 19, para 2: change "Vallioneria" to "Vallisneria". Also, suggest steering clear of the term "diverse" to describe these marshes, unless you want to get into a discussion of what diverse means. The marshes in LO actually were not very diverse, at least prior to human impact. Whatever diversity they have obtained recently is a perversion due to invasive species; it is doubtful that this is how we want to increase diversity.
9. p. 21, para 4: The latin species name for the Florida apple snail is unfamiliar, and not consistent with the one used by SFWMD (*Pomacea paludosa*).
10. p. 24: Given that there is now an alligator hunting season (permits given by lottery only), parts of this section seem incongruous. Perhaps this should be rewritten?
11. p. 26, para 2: The basis for the statement that wood storks are excellent indicators of wetland health when the habitat is not clear. They are frequently found in south Florida on golf courses.
12. P. 50, para 2: It is not clear what types of water quality issues might be perceived.
13. p. 52, para 1: If a breach were to occur, and massive discharges ensued, it is likely that the fluid mud sediments near the center of the lake would be laterally transported to the near shore region close to the breach. This would result in elevated TSS, as well as elevated TP concentrations, near this region, as well.
14. P. 52, para 1: It is true that a breach of the dike is likely to be preceded by significant freshwater discharges to the estuaries with the No Action Alternative. However, this is equally true for the other alternatives. Discharges to the estuaries are determined by the regulation schedule, which is common to all alternatives.
15. P. 73, para 6: Although the impacts of failures might be contained in separate watersheds, the risk of failure changes as each reach is rehabilitated. For example, rehabilitation of reach 1 may actually increase the risk of a failure in another reach.
16. P. 73, para 6: The impacts of the proposed regulation schedule WSE should be assessed. Also, the impacts of implementation of Restudy Comprehensive Plan components that will attenuate inflows to the lake must also be considered in the cumulative effects section



STATE OF FLORIDA

## DEPARTMENT OF COMMUNITY AFFAIRS

*"Helping Floridians create safe, vibrant, sustainable communities"*

JEB BUSH  
Governor

STEVEN M. SEIBERT  
Secretary

October 8, 1999

Mr. Mark Ziminske  
Department of the Army  
Jacksonville District Corps of Engineers  
Post Office Box 4970  
Jacksonville, Florida 32232-0019

RE: Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida  
SAI: FL9501030002CR

Dear Mr. Ziminske:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the above-referenced project.

The Department of Environmental Protection (DEP) notes that Alternative 3, the Corps' preferred alternative, is also the environmentally preferred alternative. Avoidance of impacts to mitigation will reduce anticipated impacts to wetlands, listed wildlife species or water quality. The project will require a water quality certification under Chapter 373, Florida Statutes, and Section 401 of the Clean Water Act. The Corps should coordinate with the DEP's Federal Liaison regarding permitting requirements. Please refer to the enclosed DEP comments.

The Department of Transportation (DOT) notes that the project may impact the development of the Lake Okeechobee Segment of the Florida National Scenic Trail. The DOT is participating with other agencies in the joint development of the Trail. The DOT recommends that the Corps coordinate with the DOT and the DEP

2555 SHUMARD OAK BOULEVARD • TALLAHASSEE, FLORIDA 32399-2100  
Phone: (850) 488-8466/Suncom 278-8466 FAX: (850) 921-0781/Suncom 291-0781  
Internet address: <http://www.state.fl.us/comaff/>

FLORIDA KEYS  
Area of Critical State Concern Field Office  
2796 Overseas Highway, Suite 212  
Marathon, Florida 33050-2227

GREEN SWAMP  
Area of Critical State Concern Field Office  
205 East Main Street, Suite 104  
Bartow, Florida 33830-4641

Mr. Mark Ziminske  
October 8, 1999  
Page Two

on the implementation of the Lake Okeechobee Scenic Trail Master Plan. In addition, efforts should be taken to avoid restricting access to the Dike from proposed trailheads. Please refer to the enclosed DOT comments.

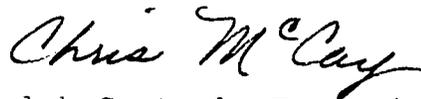
The Department of State (DOS) notes that the Herbert Hoover Dike (8PB2028) is eligible for listing in the National Register of Historic Places. The DOS notes that Alternative No. 3 has been selected as the preferred alternative. It is the opinion of the DOS that the proposed project activities associated with Alternative No. 3 will have no adverse impact on the historic character of the Herbert Hoover dike. Please refer to the enclosed DOS comments.

Based on the information contained in the draft environmental impact statement and the enclosed comments provided by our reviewing agencies, the state has determined that the above-referenced project is consistent with the Florida Coastal Management Program.

In addition, the Treasure Coast and Southwest Florida Regional Planning Councils have identified the policies and goals of their Strategic Regional Policy Plans which may apply to the proposed activity. The comments provided by the regional planning councils are enclosed for your review and consideration.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Cherie Trainor, Clearinghouse Coordinator, at (850) 922-5438.

Sincerely,



Ralph Cantral, Executive Director  
Florida Coastal Management Program

RC/cc

Enclosures

cc: Robert Hall, Department of Environmental Protection  
George Percy, Department of State  
Gustavo Schmidt, Department of Transportation  
Wayne Daltry, Southwest Florida Regional Planning Council  
Liz Gulick, Treasure Coast Regional Planning Council

COUNTY: State

DATE: 07/28/1999

COMMENTS DUE-2 WKS: 08/12/1999

CLEARANCE DUE DATE: 09/24/1999

SAI#: FL9501030002CR

Message:

STATE AGENCIES

WATER MANAGEMENT DISTRICT:

OPB POLICY UNITS

- X Agriculture
- Community Affairs
- Environmental Protection
- Fish & Wildlife Conserv. Comm
- State
- Transportation

South Florida WMD

Environmental Policy/C & ED

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

Department of the Army - Jacksonville District  
 Corps of Engineers - Draft Environmental Impact  
 Statement - The Herbert Hoover Dike - Major  
 Rehabilitation Evaluation Report - Lake  
 Okeechobee, Florida. Also available on the web  
 at:  
<http://www/saj.usace.army.mil/pd/env.doc.htm>

To: Florida State Clearinghouse  
 Department of Community Affairs  
 2555 Shumard Oak Boulevard  
 Tallahassee, FL 32399-2100  
 (850) 922-5438 (SC 292-5438)  
 (850) 414-0479 (FAX)

EO. 12372/NEPA

Federal Consistency

- No Comment
- Comments Attached
- Not Applicable

- No Comment/Consistent
- Consistent/Comments Attached
- Inconsistent/Comments Attached
- Not Applicable

REFERRED TO JAMES B. RATH, MANAGER,

Division of Forestry  
 Forest Resource Planning  
 & Support Services Bureau  
 3125 Conner Blvd., Mail Stop C23  
 Tallahassee, FL 32399-1650

OOKEECHOBEE DISTRICT (16) FOR  
 HIS COMMENTS.  
 (941) 462-5160

From:

Division/Bureau:

Reviewer:

Date:

*James B. Rath*  
 8-12-99



Jeb Bush  
Governor

# Department of Environmental Protection

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

David B. Struhs  
Secretary

September 24, 1999

RECEIVED  
SEP 28 1999

State of Florida Clearinghouse

Ms. Cherie Trainor  
Florida State Clearinghouse  
Department of Community Affairs  
2555 Shumard Oak Boulevard  
Tallahassee, Florida 32399-2100

Re: Department of the Army, Jacksonville District Corps of Engineers, Draft Environmental Impact Statement, The Herbert Hoover Dike, Major Rehabilitation Evaluation Report, Lake Okeechobee, Florida

SAI: FL9501030002CR

Dear Ms. Trainor:

This Department has reviewed the above-described project proposal and we offer the following comments.

The Corps preferred alternative, alternative 3, consists of the installation of a seepage berm with relief trench along the landward toe of the embankment along Reach One of the Herbert Hoover Dike. Reach one is approximately 22.4 miles long and located along the southeast area of the Lake from the St. Lucie Canal at Port Mayaca, south to the Hillsboro Canal at Belle Glade. The purpose of the seepage berm and trench is to eliminate the ongoing degradation and instability of the dike from seeping and piping flows.

Alternative 3 is also the environmentally preferred alternative as its environmental consequences are expected to be minimal. Avoidance of impacts or mitigation will reduce anticipated impacts to wetlands, listed wildlife species or water quality.

The project will require a water quality certification under Chapter 373, F.S. and Section 401 of the Clean Water Act. The Corps should coordinate with the Department's Federal Liaison, Mr. Eric Bush concerning permit application requirements. Mr. Bush can be reached in Jacksonville at 904/232-3410.

Thank you for the opportunity of commenting on this proposal. If you have any questions regarding this letter please give me a call at 904/487-2231.

Sincerely,

Robert W. Hall  
Office of Intergovernmental  
Programs

Cc: Eric Bush  
John Outland

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

CO

State

RECEIVED AUG 06 1999

DATE: 07/28/1999  
COMMENTS DUE-2 WKS: 08/12/1999  
CLEARANCE DUE DATE: 09/24/1999  
SAI#: FL9501030002CR

Mess

9/9/99

STATE AGENCIES

WATER MANAGEMENT DISTRICTS

OPB POLICY UNITS

- Agriculture
- Community Affairs
- Environmental Protection
- X Fish & Wildlife Conserv. Comm
- State
- Transportation

South Florida WMD

RECEIVED

AUG 13 1999

State of Florida Clearinghouse

Environmental Policy/C & ED

RECEIVED BY GFC

AUG 11 1999

OFFICE OF ENVIRONMENTAL SERVICES

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- X Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

Department of the Army - Jacksonville District  
Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida. Also available on the web at:  
<http://www/saj.usace.army.mil/pd/env-doc.htm>

To: Florida State Clearinghouse  
Department of Community Affairs  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399-2100  
(850) 922-5438 (SC 292-5438)  
(850) 414-0479 (FAX)

EO. 12372/NEPA

No Comment  
 Comments Attached  
 Not Applicable

Federal Consistency

No Comment/Consistent  
 Consistent/Comments Attached  
 Inconsistent/Comments Attached  
 Not Applicable

From: Division/Bureau: Office of Environmental Services  
Reviewer: Mary Ann Poole  
Date: Aug. 6, 1999

Office of the Secretary  
 Office of International Relations  
 Division of Elections  
 Division of Corporations  
 Division of Cultural Affairs  
 Division of Historical Resources  
 Division of Library and Information Services  
 Division of Licensing  
 Division of Administrative Services



State Board of Education  
 Trustees of the Internal Improvement Trust Fund  
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 Florida Land and Water Adjudicatory Commission  
 Siting Board  
 Division of Bond Finance  
 Department of Revenue  
 Department of Law Enforcement  
 Department of Highway Safety and Motor Vehicles  
 Department of Veterans' Affairs

FLORIDA DEPARTMENT OF STATE  
**Katherine Harris**  
 Secretary of State  
 DIVISION OF HISTORICAL RESOURCES

Ms. Cherie Trainor  
 State Clearinghouse  
 Department of Community Affairs  
 2555 Shumard Oak Boulevard  
 Tallahassee, Florida 32399-2100

August 20, 1999  
 AUG 25 1999  
 State of Florida Clearinghouse

RE: DHR Project File No. 995631  
 Cultural Resource Assessment Request  
 SAI# FL9501030002CR  
 Draft Environmental Impact Statement for the Herbert Hoover Dike  
 Major Rehabilitation Evaluation Report

Dear Ms. Trainor:

In accordance with the provisions of Florida's Coastal Zone Management Act and Chapter 267, *Florida Statutes*, as well as the procedures contained in 36 C.F.R., Part 800 ("Protection of Historic Properties"), we have reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*, or otherwise of historical or architectural value.

We have reviewed the referenced draft environmental impact statement and note that the Herbert Hoover Dike (8PB2028) is eligible for listing in the National Register. We specifically reviewed sections 4.18 and 5.18, both dealing with Cultural Resources. We note that Alternative No. 3, which involves the installation of a seepage berm with relief trench along the leeward toe of the embankment, was selected as the preferred alternative. Therefore, it is the opinion of this office that the proposed project activities associated with Alternative No. 3 will have no adverse effect on the historic character of the Herbert Hoover Dike. The project is also consistent with the historic preservation laws of Florida's Coastal Management Program.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservation Planner, at 850-487-2333 or 800-847-7278. Your interest in protecting Florida's historic properties is appreciated.

Sincerely,

*Laura A. Kammerer*

*for*

George W. Percy, Director  
 Division of Historical Resources and  
 State Historic Preservation Officer

GWP/Ese

xc: Jasmin Raffington, FCMP-DCA

R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399-0250 • <http://www.flheritage.com>

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> Director's Office<br>(850) 488-1480 • FAX: 488-3355                     | <input type="checkbox"/> Archaeological Research<br>(850) 487-2299 • FAX: 414-2207    | <input checked="" type="checkbox"/> Historic Preservation<br>(850) 487-2333 • FAX: 922-0496 | <input type="checkbox"/> Historical Museums<br>(850) 488-1484 • FAX: 921-2503    |
| <input type="checkbox"/> Historic Pensacola Preservation Board<br>(850) 595-5985 • FAX: 595-5989 | <input type="checkbox"/> Palm Beach Regional Office<br>(561) 279-1475 • FAX: 279-1476 | <input type="checkbox"/> St. Augustine Regional Office<br>(904) 825-5045 • FAX: 825-5044    | <input type="checkbox"/> Tampa Regional Office<br>(813) 272-3843 • FAX: 272-2340 |



# Florida Department of Transportation

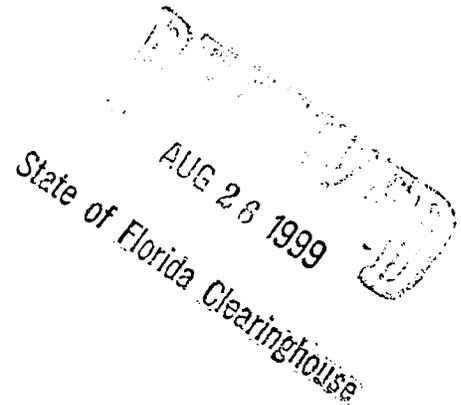
JEB BUSH  
GOVERNOR

TRANSPORTATION PLANNING OFFICE - DISTRICT 4  
3400 West Commercial Blvd., 3rd Floor, Ft. Lauderdale, FL 33309-3421  
Telephone: (954) 777-4601; Fax: (954) 777-4671

THOMAS F. BARRY, JR.  
SECRETARY

August 23, 1999

Ms. Cherie Trainor, Coordinator  
Florida State Clearinghouse  
Department of Community Affairs  
2555 Shumard Oak Boulevard  
Tallahassee, FL. 32399-2100



Dear Ms. Trainor:

**SUBJECT: SAI# FL 9501030002CR  
Herbert Hoover Dike Major Rehabilitation Evaluation Report**

In response to the Intergovernmental Coordination and Review request for comments or objections, the Department has the following comments concerning the Herbert Hoover Dike Major Rehabilitation Evaluation Report Draft Environmental Impact Statement.

A review of the Study indicates that the project possibly could have some impacts on the development of the Lake Okeechobee Segment of the Florida National Scenic Trail. The Florida Department of Transportation is participating with other agencies in the joint development of the Trail. The Department's project number is 2313401. The Department recommends that the U.S. Army Corps of Engineers coordinate with us and the Florida Department of Environmental Protection on the implementation of the Lake Okeechobee Scenic Trail Master Plan. Additionally, efforts should be taken to avoid restricting access to the Dike from proposed trailheads.

The applicant should contact either Mr. Kent Rice or Mr. Scott Seeburger at (954) 777-4601 to coordinate with the Department regarding matters pertaining to the Lake Okeechobee Scenic Trail.

Ms. Cherie Trainor  
August 23, 1999  
Page 2

If you have any other questions, please contact this office.

Sincerely,



Gustavo Schmidt, P.E.  
District Planning Manager

GS:lh

Attachment

cc: Sandra Whitmire  
James Scully  
Scott Seeburger  
Kent Rice  
Anna Gannon

File:: 4280.05

FLORIDA STATE CLEARINGHOUSE  
RPC INTERGOVERNMENTAL COORDINATION  
AND RESPONSE SHEET

07/1/1999

CB-02

SAI #: FL9501030002CR

DATE: 07/28/1999

COMMENTS DUE TO CLEARINGHOUSE: 08/27/1999

AREA OF PROPOSED ACTIVITY: COUNTY: State

FEDERAL ASSISTANCE  DIRECT FEDERAL ACTIVITY  FEDERAL LICENSE OR PERMIT  OCS

**PROJECT DESCRIPTION**

Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida. Also available on the web at:  
<http://www/saj.usace.army.mil/pd/env-doc.htm>

**ROUTING:**

RPC

- X Treasure Coast RPC
- SW Florida RPC
- Central FL RPC

**RECEIVED**

AUG 12 1999

TREASURE COAST  
REGIONAL PLANNING COUNCIL

**PLEASE CHECK ALL THE LOCAL GOVERNMENTS BELOW FROM WHICH COMMENTS HAVE BEEN RECEIVED; ALL COMMENTS RECEIVED SHOULD BE INCLUDED IN THE RPC'S CLEARINGHOUSE RESPONSE PACKAGE. IF NO COMMENTS WERE RECEIVED, PLEASE CHECK "NO COMMENT" BOX AND RETURN TO CLEARINGHOUSE.**

COMMENTS DUE TO RPC: 08/18/1999

NO COMMENTS: **X**

(IF THE RPC DOES NOT RECEIVE COMMENTS BY THE DEADLINE DATE, THE RPC SHOULD CONTACT THE LOCAL GOVERNMENT TO DETERMINE THE STATUS OF THE PROJECT REVIEW PRIOR TO FORWARDING THE RESPONSE PACKAGE TO THE CLEARINGHOUSE.)

NOTES:

**ALL CONCERNS OR COMMENTS REGARDING THE ATTACHED PROJECT (INCLUDING ANY RPC COMMENTS) SHOULD BE SENT IN WRITING BY THE DUE DATE TO THE CLEARINGHOUSE. PLEASE ATTACH THIS RESPONSE FORM AND REFER TO THE SAI # IN ALL CORRESPONDENCE.**

IF YOU HAVE ANY QUESTIONS REGARDING THE ATTACHED PROJECT, PLEASE CONTACT THE STATE CLEARINGHOUSE AT (904) 922-5438 OR SUNCOM 272-5438.

99-337

**FLORENDA STATE CLEARINGHOUSE  
RPC INTERGOVERNMENTAL COORDINATION  
AND RESPONSE SHEET**

SAI #: FL9501030002CR

DATE: 07/28/1999

COMMENTS DUE TO CLEARINGHOUSE: 08/27/1999

AREA OF PROPOSED ACTIVITY: COUNTY: State

FEDERAL ASSISTANCE     DIRECT FEDERAL ACTIVITY     FEDERAL LICENSE OR PERMIT     OCS

**PROJECT DESCRIPTION**

Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida. Also available on the web at:  
<http://www/saj.usace.army.mil/pd/env-doc.htm>

**ROUTING:**

RPC

Treasure Coast RPC  
X SW Florida RPC  
Central FL RPC

**RECEIVED**

AUG 02 1999

TREASURE COAST  
REGIONAL PLANNING COUNCIL

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AUG 24 1999

State of Florida Clearinghouse

PLEASE CHECK ALL THE LOCAL GOVERNMENTS BELOW FROM WHICH COMMENTS HAVE BEEN RECEIVED; ALL COMMENTS RECEIVED SHOULD BE INCLUDED IN THE RPC'S CLEARINGHOUSE RESPONSE PACKAGE. IF NO COMMENTS WERE RECEIVED, PLEASE CHECK "NO COMMENT" BOX AND RETURN TO CLEARINGHOUSE.

COMMENTS DUE TO RPC: 08/18/1999

Glades County

**RECEIVED**

AUG 5 1999

S.W. FLORIDA REGIONAL  
PLANNING COUNCIL

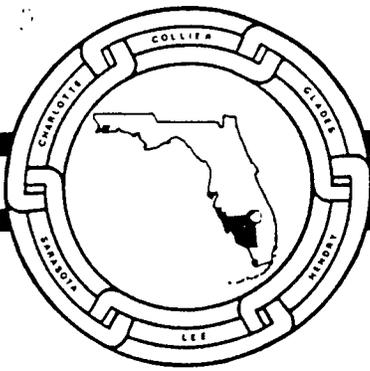
NO COMMENTS:

(IF THE RPC DOES NOT RECEIVE COMMENTS BY THE DEADLINE DATE, THE RPC SHOULD CONTACT THE LOCAL GOVERNMENT TO DETERMINE THE STATUS OF THE PROJECT REVIEW PRIOR TO FORWARDING THE RESPONSE PACKAGE TO THE CLEARINGHOUSE.)

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IF YOU HAVE ANY QUESTIONS REGARDING THE ATTACHED PROJECT, PLEASE CONTACT THE STATE CLEARINGHOUSE AT (904) 922-5438 OR SUNCOM 272-5438.



## Southwest Florida Regional Planning Council

4980 Bayline Drive, 4th Floor, N. Ft. Myers, FL 33917-3909 (941) 656-7720

P.O. Box 3455, N. Ft. Myers, FL 33918-3455 SUNCOM 749-7720

FAX 941-656-7724

August 20, 1999

Mr. Mark Ziminske  
USACOE - Jacksonville District  
P.O. Box 4970  
JACKSONVILLE, FL 32232-0019

RE: IC&R Project #99-337  
State Clearinghouse #FL9501030002CR

USACOE - Jacksonville District - Draft EIS - The Herbert Hoover Dike -  
Major rehabilitation evaluation report - Lake Okeechobee, Florida.

Dear Mr. Ziminske:

The staff of the Southwest Florida Regional Planning Council reviews various proposals, Notifications of Intent, Preapplications, permit applications, and Environmental Impact Statements for compliance with regional goals, objectives, and policies, as determined by the Strategic Regional Policy Plan. The staff reviews such items in accordance with the Florida Intergovernmental Coordination and Review Process (Chapter 29I-5, F.A.C.), and adopted regional clearinghouse procedures.

These designations determine Council staff procedure in regards to the reviewed project. The four designations are:

Less Than Regionally Significant and Consistent no further review of the project can be expected from Council.

Less Than Regionally Significant and Inconsistent Council does not find the project of regional importance, but will note certain concerns as part of its continued monitoring for cumulative impact within the noted goal area.

Regionally Significant and Consistent project is of regional importance, and appears to be consistent with Regional goals, objectives, and policies.

Regionally Significant and Inconsistent project is of regional importance and does not appear to be consistent with Regional goals, objectives, and policies. Council will oppose the project as submitted, but is willing to participate in any efforts to modify the project to mitigate the concerns.

To: Mr. Mark Zimins...  
Date: August 20, 1999  
Re: SWFRPC #99-337  
Page: 2

The above referenced document has been reviewed by this office, based on the information contained in the document, and on local knowledge, has been found **Regionally Significant and Consistent** with adopted goals, objectives, and policies of the Strategic Regional Policy Plan. Also, Regional staff supports the implementation of the Alternative 3 improvements to Reach 1.

Should you or any other party request this finding to be reconsidered, please contact Nichole L. Gwinnett, IC&R Coordinator, with this request, or any questions concerning staff review of this item. This recommendation will be discussed at the next scheduled Council meeting. Should Council action differ from the staff recommendation, you will be notified.

Sincerely,

SOUTHWEST FLORIDA REGIONAL PLANNING COUNCIL



*for* Wayne E. Daltry  
Executive Director

WED/NLG

cc: Cherie Trainor, Florida State Clearinghouse



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

AUG 30 1999

District Engineer, Jacksonville  
P.O. Box 4970  
Jacksonville, FL 32232

ATTN.: Mr. Mark Ziminske  
Planning Division

Subject: Draft Environmental Impact Statement (EIS) for Herbert Hoover Dike  
(HHD) Rehabilitation, Lake Okeechobee, Florida (CEQ # 99-02-71)

Dear Sir:

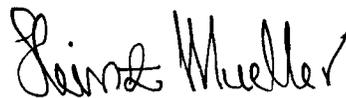
Pursuant to Section 309 of the Clean Air Act and Section 102 (2)(C) of the National Environmental Policy Act, EPA, Region 4 has reviewed the subject document, an evaluation of the consequences of restoring/upgrading the structural integrity of Reach #1 of the HHD ( a 22-mile segment from St. Lucie Canal to the Hillsboro Canal). Recent episodes of piping and sand boils along this southeastern segment have created concerns that a major crevasse was possible in the absence of some significant renovations. While not specifically mentioned, we assume that similar problems exist elsewhere along the HHD system and will be the subject of subsequent NEPA documentation.

After deliberation of the practicable alternatives it was determined by the Jacksonville District (District) that the most environmentally sensitive means to effect this upgrade would involve the use of a seepage berm with relief trench coupled with a French drain along the landward toe of the embankment. Stabilization of the HHD is essential since Lake Okeechobee is central to the region's water supply needs and is a fundamental element of the Central and South Florida Restudy (CSFR). While it was not noted as a planning objective in the EIS, this and any remaining structural upgrades to the HHD should be consistent with the overall formulations associated with the CSFR.

From the information provided, it appears that the proposed design option will meet the primary project objective, viz., preventing a catastrophic dike failure within Reach #1. Moreover, with some minor modifications developed during the detailed design phase, the noted structural components can be installed with acceptable adverse environmental consequences and operational efficiencies. Our specific comments in this regard are attached. On the basis of our review a rating of EC-2 has been assigned. That is, while the environmental ramifications of this action have been generally minimized, certain design changes will be necessary as planning continues to improve the project further.

Thank you for the opportunity to comment on this action. If we can be of further assistance, Dr. Gerald Miller (404-562-9626) will serve as initial point of contact.

Sincerely,

A handwritten signature in black ink that reads "Heinz J. Mueller". The signature is written in a cursive style with a large initial 'H'.

Heinz J. Mueller, Chief  
Office of Environmental Assessment  
Environmental Accountability Division

Attachment

## Detailed Comments

According to the text, unavoidable construction impacts (direct/indirect) will adversely affect some important recreational and infrastructure features in the project area. While the final design will make all practicable efforts to minimize these perturbations, there should be some consideration given to compensation for the infrastructure losses experienced by the local public in the immediate project area. For example, there could be some cost sharing on those roads requiring accelerated maintenance as a result of the dramatic increase in heavy truck traffic, replacement fishing access could be provided for those areas lost to construction rights-of-way, and vegetation destroyed within public parks during the initial work could be replanted with a mix of the species lost.

It was noted that flexible fencing and/or hay "may" be used to control erosion during initial construction, especially peat removal activities. Controlling erosion along the seepage berm and associated structures will not be as easy/definitively accomplished as implied in the text. Notwithstanding specific contract stipulations, it has been our experience that installation and especially maintenance of the "best management practices" (BMP) to control erosion on these type projects often prove illusive to achieve. The reason(s) why this occurs are important, but not as operative as the fact that additional remediation and attendant environmental perturbation are engendered when initial installation and subsequent maintenance are not performed. Constructing the upgrades during the driest part of the year has an obvious appeal, but should not be in lieu of more active measures to control surface water movement. The fate of the peat which will be excavated during the construction of the seepage berm should be noted.

We observe that fill will have to be transported to the abandoned rock quarry (vicinity of C-12) in order to support the drainage berm.. It would be helpful if the final document provided more details on the specifics of this design element. In this instance it appears that comprehensive sediment control is fundamental to long-term maintenance of dike integrity and by extension the expected degree of flood damage prevention.

By design seepage will move from the filter stone into the perforated culvert system and then empty via controlled outlets into the various canals which drain the Lake. While our staffs have discussed this matter, some additional

information in the final EIS about this water movement would be helpful to other reviewers in determining its effects. There will some control of seepage flows as water exits the culvert system (at the noted 8 points), but there were no specifics about these weirs/stop-log risers would be managed. Similarly, drop inlets will be used to preclude ponding on the landward side of the upgraded levee. It has been our experience that the protective grates over the drop openings are very prone to clogging, especially after mowing operations. Some information as to their maintenance should also be provided in the final document. For example, what criteria/standards will be used by the District or its agents in providing this control?

It was noted that during periods of concentrated rain and/or backpumping from adjacent agricultural fields the usual situation reverses and flows in the canal move toward the Lake in some portions (vicinity of C-12 and C-13) of Reach #1 rather than vice versa. When this occurs the seepage channel will not function as designed because of this differential head. Any loss of efficiency is important as this would seem to be exactly the times when the seepage canal would be most needed. We understand that this situation can be rectified via some rerouting of the culvert system. The final document should provide details on exactly how this will be accomplished.

There is a quarry (3000'x 10-20'x ?) within Reach #1 which may pose some problems in achieving/maintaining project objectives. It will have to be partially filled because there is insufficient space to construct the proposed drainage berm between its margins and the existing embankment toe of the levee . This fill must be carefully chosen to ensure that it has the proper structural/textural characteristics. Namely, it would need acceptable shrink-swell characteristics to nominalize the potential for failure of the culvert line at its joints. We are also concerned about the gross integrity of the fill on which the drainage berm will be placed. Unless there is essentially a water proof seal between the drain and the quarry, this fill would be subject to excessive wetting which could foster slumping. This could be true notwithstanding the rock-filled gabions placed on the margins of the project and the quarry and the premise that water levels in the quarry will always remain lower than the elevation of the culvert system. Unless this seal is maintained over the life of the project and quarry drains remain open, the water level in the quarry could approximate that in the drain and lessen its efficacy at exactly the time (rain fall periods) that it must have maximum utility in maintaining HH dike integrity. In a related matter, if the quarry will

only be partially filled, there would appear to be the opportunity to construct a shallow littoral zone to provide wildlife and water quality functions. We would strongly support adding this feature to the project.

Perennial vegetation must be scrupulously prevented from growing on the elevated berm to preclude root penetration/clogging of the perforated drainage (culvert) line. The current practice of regular mowing will accomplish this end, but care will have to be taken that the weight of the equipment does not adversely affect the efficacy of the drainage system by compaction and/or tearing the geotextile fabric which surrounds the culvert.

While the analysis of upgrading HHD is on-going, this would be an excellent opportunity to compare the overall water quality ramifications of agriculture waterward of the dike versus the economic benefits of this land use. This determination would not be of just academic interest given the need to reduce nutrient outputs from the water exiting the Lake to the south to meet regulatory requirements.



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, FL 33702  
(727) 570-5312; FAX 570-5517

JUL 29 1999

F/SER3:BH

Mr. James C. Duck  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Dear Mr. Duck:

This is in response to your request for comments on the draft environmental impact statement (DEIS) on the Herbert Hoover Dike Major Rehabilitation Evaluation Report received in our office on July 26, 1999. This project will make repairs to the first of eight segments or "reaches" of the Herbert Hoover Dike (HHD) on Lake Okeechobee in southern Florida. The HHD was constructed in 1915 to provide flood protection and irrigation. Improvements were made in the 1930's, 1940's and 1970's. The U. S. Army Corps of Engineers (COE) evaluated four alternatives for the repair of reach one. The preferred alternative will include the installation of a seepage berm with a relief trench along the lower portion of the landward toe of the embankment.

All of the proposed construction activities will take place in habitat that does not contain species protected by the Endangered Species Act (ESA) under National Marine Fisheries Service (NMFS) purview; therefore, the proposed construction activities are not likely to adversely affect NMFS protected species. However, the use of this system may affect downstream water quality. Johnson's seagrass (*Halophila johnsonii*), a threatened species under the ESA, can be found downstream from the St. Lucie Canal in the St. Lucie Estuary. Therefore, any fluctuations in the freshwater flow into the canal caused by this project may have an effect on the water quality of the estuary which may affect Johnson's seagrass. The DEIS does not sufficiently explain the effects the seepage berms will have on downstream water quality; therefore, NMFS can not make a determination on this project's effects on Johnson's seagrass. NMFS suggests that the final EIS better analyze the effects on downstream water quality.

If you have any questions, please call Bob Hoffman, Fishery Biologist.

Sincerely yours,

Charles A. Oravetz  
Assistant Regional Administrator  
Protected Resources Division





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, FL 33702  
(727) 570-5312; FAX 570-5517

SEP 16 1999

F/SER3:BH

Mr. James C. Duck  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Dear Mr. Duck:

This responds to your September 10, 1999 letter relaying additional information requested by the National Marine Fisheries Service (NMFS) in a letter dated July 29, 1999 on the Herbert Hoover Dike Major Rehabilitation Evaluation Study. The NMFS July 29, 1999 letter requested additional information regarding the construction of the seepage berm and relief trench along the lower portion of the landward toe of the Herbert Hoover Dike embankment on Lake Okeechobee in southern Florida. This information was requested so NMFS could evaluate this project's potential for adverse impacts to Johnson's seagrass located down stream in the St. Lucie Estuary.

The information in your letter states that to minimize temporary water quality impacts due to construction, all Corps of Engineers contractors will follow a rigorous environmental protection plan. This plan will require the use of various erosion control measures. Based on this information, NMFS concurs with your conclusion that this project is not likely to affect species protected by the Endangered Species Act under NMFS purview.

This concludes Jacksonville District's consultation responsibilities under section 7 of the ESA for the construction of the Herbert Hoover Dike Major Rehabilitation Evaluation Study for species under NMFS purview. Consultation should be reinitiated if new information reveals impacts of the identified activity that may affect listed species or their critical habitat, a new species is listed, the identified activity is subsequently modified or critical habitat determined that may be affected by the proposed activity.

Sincerely yours,

William T. Hogarth, Ph.D.  
Regional Administrator





# United States Department of the Interior

## OFFICE OF THE SECRETARY

### OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE

Richard B. Russell Federal Building

75 Spring Street, S.W.

Atlanta, Georgia 30303

September 16, 1999

ER-99/651

Mr. Mark Ziminske  
U. S. Army Corps of Engineers  
Jacksonville District, Planning Division  
P. O. Box 4970 - PD-ES  
Jacksonville, FL 32232-0019

Dear Mr. Ziminske:

The Department of the Interior has reviewed the draft EIS for the Herbert Hoover Dike Major Rehabilitation Evaluation Study, FL, as requested.

The Draft EIS is inconsistent in its evaluation of the impact of the project on wetlands along the existing toe ditch on the landward side of the Herbert Hoover Dike (HHD). In some portions of the document, the Corps states they provide habitat for small fishes and invertebrates and the toe ditches are used by foraging wading birds (Section 4.09, Page DEIS-19; Section 5.09, Page DEIS-55). Not only does the Corps acknowledge this habitat value, but states on Page DEIS-55 that "impacts would be relatively significant." In contrast, other portions of the document, state that for these same wetlands, "impacts to fish and wildlife would be minimal" (Section 5.10, Page DEIS-56); or that impacts are "not significant in extent" (Section 5.21, Page DEIS-75).

The Fish and Wildlife Service's (Service) draft Fish and Wildlife Coordination Act (FWCA) report found that the cumulative habitat value of this linear wetland, particularly when considering the 22.4-mile length of Reach 1 of the HHD, was significant. The FWCA report found that compensatory wetland mitigation should be included in the project design and recommended that a littoral shelf be provided along existing quarries as the preferred form of mitigation. On Page DEIS-78, the Corps states that gabions will be installed in that area instead of the Service's proposed littoral shelf. If the Corps is unable to follow the Service's specific recommendation as to the design of the compensatory wetland mitigation, the Service continues to recommend that an alternate mitigation proposal should be included in the project plans.

The Service is unable to agree with the Corps' finding on Page DEIS-78 that the proposed collector canal will compensate fully for loss of the wetlands functions and values of the existing toe ditch. The draft EIS does not provide an adequate accounting of the extent of wetland impact, a functional assessment of the existing wetlands, nor an assessment of the functions and values anticipated with

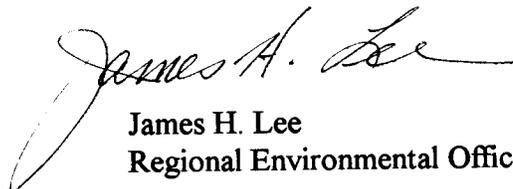
the proposed collector canal. The Service recommends use of the Wetland Rapid Assessment Procedure (WRAP) to perform such an evaluation prior to detailed design of the project. The Service offers its assistance in establishing the WRAP assessment team and participating in the field inspections. An element in the WRAP's functional assessment of the future with project condition should include a commitment by the Corps to maintain the proposed collector canal free of exotic vegetation. The Service continues to recommend this as an element in any proposed compensatory mitigation, despite the Corps' statement on Page DEIS-78 that such a recommendation "is not applicable."

### **Specific Comment**

The only estimate of the impact of the project on wetlands appears on Page 3 of Draft Annex C, the Section 404 (b)(1) evaluation. That document estimates that 7 acres of "low quality remnant wetlands" and 10-15 acres of toe ditches will be filled. The body of the EIS should provide an accounting of the area and a functional assessment of the wetlands to be affected to support this statement. The proposed WRAP assessment would provide a more supportable estimate of both the quantity and quality of the wetlands to be affected.

Thank you for the opportunity to provide comments on this draft EIS. If you have questions regarding the fish and wildlife comments, please contact Bruce Bell at 404/679-7089.

Sincerely,

A handwritten signature in cursive script that reads "James H. Lee". The signature is written in black ink and is positioned above the printed name and title.

James H. Lee  
Regional Environmental Officer

CC: FWS-ES, BBell, Atlanta  
OEPC, WASHINGTON, DC