



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT
GOVERNOR
HERSCHEL T. VINYARD JR.
SECRETARY

ENVIRONMENTAL RESOURCE PERMIT CONSTRUCTION AUTHORIZATION

PERMITTEE:

U.S. Army Corps of Engineers, Jacksonville District
701 San Marco Boulevard
Jacksonville, FL 32207

ATTENTION:

Mr. Eric Summa
Chief, Environmental Branch
Planning Division

Permit Number: 0234604-018
Project: Herbert Hoover Dike Rehabilitation and Repair
Phase: Culverts 5A and 5 Replacement
County: Glades

Date of Issue: June 14, 2013
Expiration Date: June 14, 2018

This permit is issued under the authority of Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.). The activity is not exempt from the requirement to obtain an Environmental Resource Permit. Pursuant to Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity.

Issuance of this permit constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act. This permit also constitutes certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. § 1341.

PROJECT DESCRIPTION:

The project is part of the U.S. Army Corps of Engineers' Herbert Hoover Dike (HHD) Rehabilitation and Repair Project which is expected to enhance the stability of the dike's approximately 143 miles of levees. The replacement of Culverts 5A and 5 is expected to reduce the risk of failure at these structures located within the HHD. The new structures will be renamed S-281 (formerly C-5A) and S-282 (formerly C-5).

The Florida Department of Environmental Protection (Department) authorizes the U.S. Army Corps of Engineers (Permittee/Corps) to remove and replace Culverts 5A and 5 as follows:

- The existing C-5A is a three-barrel, ten-foot diameter, 160 foot long corrugated metal pipe structure. The existing C-5 is a three-barrel, ten-foot diameter, 160 foot long corrugated metal pipe structure. C-5 is equipped with 3 slide gates, while C-5A has 1 slide gate and 2 flap gates. The flap gates are located on the lakeside and open automatically based on landside stage levels. An earthen cofferdam will be installed in Lake Okeechobee and a steel sheetpile cofferdam will be installed on the landside of each culvert for dewatering. Both of these structures will be demolished in place.
- The S-281 and S-282 structures will include cast-in-place reinforced concrete foundations, culvert barrels, and headwalls. Combination flap/slide gates will be installed at the lakeside headwalls of each structure. S-281 will consist of three (3) ten-foot diameter culverts, and the S-282 will consist of three (3) ten-foot diameter culverts, each approximately 176 feet long.
- A cutoff wall will be installed in the centerline of the embankment at both structures, and the embankment reconstructed to match the existing crest elevation of the dike.

- Riprap will be installed along the lakeside of the embankment face, and a control building will be installed at the landside work platform at each structure.

Operation of the culvert structures will remain unchanged. The flap gates will open automatically to discharge into Lake Okeechobee from the landside for flood control, and the slide gates will open to discharge from the Lake for water supply.

Temporary construction activities for the culvert replacement will include construction of a cofferdam, both earthen and structural, on both sides of the culvert and dewatering activities. Temporary bypass pumps will be installed for continuation of drainage and/or irrigation supply to and from Lake Okeechobee during construction.

The project described above may be conducted only in accordance with the terms, conditions and attachments contained in this permit. The issuance of this permit does not infer, nor guarantee, nor imply that future permits or modifications will be granted by the Department.

PROJECT LOCATION:

The activities authorized by this permit and State-owned submerged lands authorization are located within Lake Okeechobee, Class I Waters, and the landward toe ditch of the Herbert Hoover Dike, Class III Waters. Culvert 5A is located at the junction of L-41 Canal and Lake Okeechobee through Levee D-3 at station 286+56, adjacent to SR 78 approximately 3.8 miles north of the city of Moore Haven and S-77 lock/gate in Glades County. Culvert 5 is located in Levee D-3 at station 411+06 in upper Nicodemus Slough approximately 2.3 miles north of Culvert 5A and 6.1 miles north of the city of Moore Haven in Glades County. Both culverts are located within Reach 4, levee designation 3 (LD-3). The specific section/township/range of each culvert is as follows:

- Culvert 5A: Sections 22, 27, Township 41 South, Range 32 East; and
- Culvert 5: Section 10, Township 41 South, Range 32 East.

State-owned Submerged Lands Authorization

The Department acts as staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) and issues certain authorizations for the use of sovereign submerged lands. The Department has the authority to review this project under Chapters 253 and 258, F.S., Chapter 18-21, F.A.C., and Section 62-343.075, F.A.C. The proprietary review has determined that portions of this project will occur on sovereign submerged land and will require authorization from the Board of Trustees to use public property.

As staff to the Board of Trustees, we have reviewed the proposed project and it is located within the described boundaries of Board of Trustees Easement No. IWE-29087 dated October 22, 1940 for Culverts 5A and 5; and adjacent to FDOT Easement No. 24574 for SR 78. The Board of Trustees has no objection to the project being constructed on sovereign submerged lands. Therefore, pursuant to Chapter 253.77, Florida Statutes, this permit may be considered as authorization from the Board of Trustees to perform the project.

REASONABLE ASSURANCES:

In issuing this permit, the Department finds that the Corps has provided reasonable assurances based on the following documents:

- 1) U.S. Army Corps of Engineers, Jacksonville District, Herbert Hoover Dike Major Rehabilitation Glades, Hendry, Martin, Okeechobee, and Palm Beach Counties Environmental Assessment and Finding of No Significant Impact (May 2011);
- 2) U.S. Army Corps of Engineers, Jacksonville District, Herbert Hoover Dike Culvert Rehabilitation Project- Culverts 5A and 5 Environmental Resource Permit Application and associated materials (February 1, 2013);

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- 3) United States Army Corps of Engineers, Jacksonville District, Herbert Hoover Dike Culvert Rehabilitation Project-Culverts 5A and 5 Permit Application Request for Additional Information-1 Response Package (March 11, 2013);
- 4) United States Army Corps of Engineers, Jacksonville District, Herbert Hoover Dike Culvert Rehabilitation Project-Culverts 5A and 5 Final Care, Control and Diversion of Water During Construction Plan (March 11, 2013);
- 5) United States Army Corps of Engineers, Jacksonville District, Engineer Regulation 405-1-12, Chapter 12 – Real Estate Roles and Responsibilities for Civil Works: Cost Shared and Full Federal Projects – May 1998 (April 4, 2013);
- 6) South Florida Water Management District, Herbert Hoover Dike Culvert Rehabilitation Project-Culverts 5A and 5 Approval for Bypass Pumping (May 10 2013); and
- 7) United States Army Corps of Engineers, Jacksonville District, Herbert Hoover Dike Culvert Rehabilitation Project-Culverts 5A and 5 Permit Application Request for Additional Information-2 Response Package (May 10, 2013).

The Corps agrees to construct the project in accordance with the provisions of this permit and associated documentation. To the extent sovereign immunity has been waived under 33 U.S.C. §§ 1323 and 1344(t), the Corps' agreement to construct the project in accordance with the provisions of this permit and supporting documentation is an enforceable condition of this permit.

The Corps is the federal sponsor of this project. The Corps and its designees are responsible for activities performed during the period of construction and interim operations. If interim operations or additional activities authorized by this permit are performed by any non-federal sponsors, then the permit may be transferred in advance of such activities, or an additional authorization may be required. All conditions found herein apply to the Corps.

You are advised to read and understand these conditions and drawings prior to commencing the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a contractor, the contractor also should read and understand these conditions and drawings prior to commencing the authorized activities. Failure to comply with these conditions shall constitute grounds for revocation of the permit and appropriate enforcement action by the Department.

You are hereby advised that authorizations may also be required by other state, federal, and local entities. This authorization does not relieve you from the requirements to obtain all other required permits and authorizations.

GENERAL CONDITIONS:

1. This permit, including its general and specific conditions, shall be construed in light of the February 2006 Interagency Cooperative Agreement for Civil Works Projects (ICA) between the Department and the Corps. As recognized in the ICA, the Department has the authority to include reasonable conditions in this permit. All of the conditions in this permit, both general and specific, are enforceable to the extent sovereign immunity has been waived under 33 U.S.C. §§ 1323 and 1344(t). The ICA is incorporated herein by reference.
2. All activities approved shall be implemented as set forth in the drawings incorporated by reference and in compliance with the conditions and requirements of this document. The Corps shall notify the Department in writing of any anticipated changes in:
 - A. operational plans;
 - B. project dimensions, size, or location;
 - C. ability to adhere to permit conditions;
 - D. project description included in the permit; and

E. monitoring plans.

If the Department determines that a modification to the permit is required then the Corps shall apply for and obtain the modification. Department approval of the modification shall be obtained prior to implementing the change, unless the change is determined by the Department to reduce the scope of work from that authorized under the original permit, and will not affect compliance with permit conditions or monitoring requirements.

3. If, for any reason, the Corps does not comply with any condition or limitation specified herein, the Corps shall immediately provide the Department with a written report containing the following information:
 - A. a description of and cause of noncompliance;
 - B. the period of noncompliance, including dates and times;
 - C. the impacts resulting or likely to result from the non-compliance;
 - D. steps being taken to correct the non-compliance; and
 - E. the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Compliance with the provisions of this condition shall not preclude the Department from taking any enforcement action allowed under state law with respect to any non-compliance.

4. The Corps shall obtain any applicable licenses, permits, or other authorizations, which may be required by federal, state, local or special district laws and regulations. Nothing herein constitutes a waiver or approval of other Department permits or authorizations that may be required for other aspects of the total project.
5. Nothing herein conveys to the Corps or creates in the Corps any property right, any interest in real property, any title to land or water, constitutes State recognition or acknowledgment of title, or constitutes authority for the use of Florida's sovereign submerged lands seaward of the mean high-water line or an established erosion control line, unless herein provided, and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State.
6. Any delineation of the extent of a wetland or other surface water submitted as part of the application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this authorization or a formal determination under section 373.421(2), F.S., provides otherwise.
7. Nothing herein authorizes any entrance upon or activities on property, which is not owned or controlled by the Corps or local sponsor, or conveys any vested rights or any exclusive privileges.
8. This document or a copy thereof, complete with all conditions, attachments, modifications, and time extensions shall be kept at the work site of the authorized activity. The Corps shall require the contractor to review this document prior to commencement of the authorized activity.
9. The Corps specifically agrees to allow Department personnel with proper identification, at reasonable times and in compliance with Corps specified safety standards access to the premises where the authorized activity is located or conducted for the purpose of ascertaining compliance with the terms of this document and with the rules of the Department and to have access to and copy any records that shall be kept; to inspect the facility, equipment, practices, or operations regulated or required; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance. Reasonable time may depend on the nature of the concern being investigated.
10. At least forty-eight (48) hours prior to the commencement of authorized activity, the Corps shall submit to the Department a written notice of commencement of activities indicating the anticipated start date and the anticipated completion date.
11. If historic or archaeological artifacts such as, but not limited to, Indian canoes, arrowheads, pottery or physical remains, are discovered at any time on the project site, the Corps shall immediately stop all activities in the

immediate area which disturbed the soil and notify the Department and the State Historic Preservation Officer. In the event that unmarked human remains are encountered during permitted activities, all work shall stop in the immediate area and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

12. Within a reasonable time after completion of construction activities authorized by this permit, the Corps shall submit to the Department a written statement of completion. This statement shall notify the Department that the work has been completed as authorized and shall include a description of the actual work completed. The Department shall be provided a copy, if requested, of any as-built drawings required of the contractor or survey performed by the Corps.

SPECIFIC CONDITIONS:

1. **Addresses.** Reports and notices submitted to the Department in accordance with this permit, unless otherwise specified, shall be submitted to the Department's Office of Ecosystem Projects (OEP), 3900 Commonwealth Boulevard, MS 24, Tallahassee, Florida, 32399-3000, telephone number (850) 245-3166. Electronic copies of reports and notices required by this permit shall also be sent to RPPS_Comp@dep.state.fl.us.
2. **Threatened and Endangered Species.** The Permittee shall coordinate with both the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (FWS) for appropriate guidance, recommendations, and/or necessary authorizations to avoid, minimize, or mitigate impacts to listed species. The Corps shall comply with applicable federal and State law with regard to protected species and agree to consider input from and to comply with any applicable requirements of the FWC to the extent that to do so would not create an irreconcilable conflict with the Corps' federal responsibilities. Should a potential conflict between FWC's requirements and the Corps' federal responsibilities be identified, the Corps shall coordinate with all involved federal and State agencies to determine and implement reasonable alternatives, to the maximum extent practicable, in order to avoid such a conflict. The Permittee and/or the contractor shall instruct all personnel associated with the project that threatened and 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. Other protected species that might be observed in the region include the American alligator, wood stork, Everglades snail kite, eastern indigo snake, West Indian manatee, bald eagle, Audubon's crested caracara, and the Okeechobee gourd. Construction activities shall be kept under surveillance, management, and control to minimize any interference, disturbance, or impact to these and other protected species.

CONSTRUCTION

3. **Authorized Construction.** This permit authorizes construction of the Culverts 5A and 5 Replacement Project, as part of the Herbert Hoover Dike Rehabilitation and Repair Project, in accordance with the documentation submitted to the Department on February 1, 2013, March 11, 2013, March 18, 2013, and May 10, 2013. Prior to commencement of construction, the Permittee shall provide final plans and specifications for the subject culvert replacements to the Department for review and determination on whether there are any substantial deviations from the authorized construction. A copy of this permit will be kept on site at all times until construction is complete.
4. **Instructions to Construction Personnel and/or Contractors.** The Permittee shall ensure that all construction personnel working on the project are briefed on the permit conditions and shall give a copy of this permit to each contractor and subcontractor before the authorized work begins. Prior to construction, the Permittee shall schedule a pre-construction meeting and invite the contractor(s), the Department, the South Florida Water Management District, and other environmental regulatory agencies. The Department shall receive at least two weeks' prior notice of the meeting (email is the preferred method of notification). Within 30 days from the Notice-to-Proceed to the contractor or upon Permittee's approval of a proposed construction schedule, whichever occurs first, the Permittee shall provide the proposed construction schedule to the Department at the address identified in Specific Condition No. 1.

5. **Real Estate.** Copies of all real estate authorizations (i.e., right-of-way(s), leases, easements, land certifications by the local sponsor or other legal agreements that authorize the Permittee to perform the activities described herein) shall be provided to the Department, at the address listed in Specific Condition No. 1, prior to award of the solicitation for construction/operational activities. All real estate information should include the tract numbers, folio numbers, section/township/range, and the status of the tracts. Construction activities shall not be permitted to commence on properties where real estate authorizations have not been received. The Department shall receive right-of-way(s), leases, easements, land certifications by the local sponsor or other legal agreements that authorize the Permittee to perform the activities described herein at least seven (7) days prior to award of the solicitation for construction or operational activities.
6. **Environmental Protection Plan.** The Permittee and/or the contractor shall develop an Environmental Protection Plan and the Permittee shall submit the plan to the Department to the addresses listed in Specific Condition No. 1, within 30 days prior to commencement of any construction activities. The Department will review and provide a determination of whether or not the plan is consistent with Department statutes and rules. In accordance with Specific Condition No. 2, the plan shall describe the methods used to protect environmental resources, including fish and wildlife, to ensure that there shall be no unauthorized impacts to listed species as a direct result of construction activities. In accordance with Specific Condition No. 8, the plan should also describe how impacts to wetland resources will be avoided and minimized, including limiting temporary wetland impacts to the extent practicable.
7. **Soil/Sediment Reuse, Testing and Disposal.** If excavated soil or sediment will be reused on-site or transported off-site, the stockpiled material may need to be characterized for residual concentrations of contaminants. Samples shall be analyzed for arsenic, cadmium, chromium, mercury, copper, barium, and organochlorine pesticides using EPA Methods 6020 and 8081, or an equivalent State method, by a laboratory certified under NELAP by the Florida Department of Health.
 - A. **Reuse of Sediment**

Sediment removed from the channels on either side of the culverts that is intended to be reused on-site may need to be sampled and tested depending on the proposed final disposition of the material:

 - i. Sediment may be reused on-site without testing if the material is placed at least 1 foot below final grade, regardless of plans for slope stabilization. Alternatively, the sediment may be blended (disked) into established levees on the landward slope of the levee. Placement of this untested sediment is limited to areas outside of public use corridors.
 - ii. Sediment that will be reused on-site within 1 foot of final grade shall be stockpiled separately from other excavated materials and analyzed for the parameters outlined above. A minimum of two samples shall be taken. The results of the sediment analyses and a recommendation(s) for reuse or disposal shall be submitted to the Department for concurrence on the plans for disposition of the material. Additional sampling and testing may be requested depending on the results and recommendations.
 - B. **Off-site Disposal**

Excavated soils and sediment that will be transported off-site shall be analyzed for the parameters outlined above and the material may be stockpiled on-site until the preliminary analysis is completed. Results of the analyses shall be submitted to the Department. If the excavated material exceeds the Cleanup Target Levels (CTLs) as found in Chapter 62-777, F.A.C., and will be transported to a Solid Waste disposal facility, proper documentation shall also be provided to the Department including, but not limited to, soil transportation and disposal manifests and waste profile documentation.
8. **Wetland Protection.** This project is expected to result in approximately 0.08 acres of permanent and 3.16 acres of temporary impacts to low quality wetlands and/or other surface waters. Project construction in and near wetlands or other surface waters shall at all times be implemented to minimize impacts on these natural resources. Prior to the commencement of construction, effective physical barriers to prevent encroachment into the protected wetlands and other surface waters shall be installed by the Permittee. The Permittee shall notify

the Department in writing at the address identified in Specific Condition No. 1 upon the contractor's placement of staking/fencing/turbidity curtains to schedule a joint inspection of this work. Additionally, the Permittee shall schedule a final site visit with the Department for inspection of the project site after the temporary works have been removed.

9. **Wetland Mitigation and Restoration.** This project will result in approximately 0.08 acres of permanent impacts to surface waters and 3.16 acres of temporary impacts to low quality wetlands and/or surface waters. Mitigation will not be required to offset this minimal impact as it is anticipated that the wetland areas will be restored through natural recruitment.
10. **Water Use Permits.** For activities that require a water use permit from the State, such as, but not limited to, construction dewatering, industrial use of surface or ground water, and public water supply wells, the Corps will require that their contractor(s) submit the required application, fees and applicable site-specific information to the District for authorization in accordance with the requirements of Rules 40E-2 and 40E-20, F.A.C., and as follows:
 - A. **Water Supply Wells.** For activities that require temporary use of a water supply well during construction (e.g. construction trailers), the Corps will require that their contractor(s) obtain all required permits. If the water supply well will serve permanent facilities (e.g., pump station), the Corps will direct the contractor to also submit site-specific information to FDEP OEP. Prior to transfer of the facility to the local sponsor for permanent operations, it is the local sponsor's responsibility to furnish to FDEP OEP a permit request and copies of the well permit for review and authorization by the Department under a separate action.
 - B. **Industrial Use of Surface or Ground Water.** For activities that require industrial use of surface or ground water within or adjacent to the project (e.g. soil-cement mixtures or equipment wash down), the Corps will require that their contractor(s) obtain all required permits. For larger or more complex facilities, the Corps will require the contractor, upon submission to District, a copy of the application and site-specific information is also provided to FDEP OEP.
 - C. **Construction Dewatering.** For activities that require removal of surface or ground water as part of construction, the Corps will require that their contractor(s) will obtain all required permits. If the contractor intends to commence dewatering activities under the conditions of the "No Notice" until a permit is issued, the contractor shall submit a notification to District and FDEP OEP accordingly. The Corps will require the contractor, upon submission to District, to also provide a copy of the application and site-specific information to FDEP OEP. In accordance with General Condition No. 2, the Corps shall also ensure that all proposed modifications to permitted activities proposed by their contractor(s) are submitted to District and FDEP OEP through the same process. All dewatering authorizations or modifications to existing authorizations that may be issued by the District for projects also permitted by FDEP OEP are subject to review for determination of consistency with Department rules and statutes prior to the issuance of authorization from the District.
11. **NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.** The issuance of this Permit does not constitute coverage under the National Pollutant Discharge Elimination System (NPDES) Generic Permit for Stormwater Discharges from Large and Small Construction Activities (CGP) pursuant to Rule 62-621.300(4)(a), F.A.C. Permittee is advised to contact the Department's NPDES Stormwater Program at (850) 245-7522 or toll free at (866) 336-6312 or to download application information at <http://www.dep.state.fl.us/water/stormwater/npdes/construction3.htm#permit> prior to the commencement of any construction.
12. **NPDES General Permit for the Discharge of Produced Ground Water from any Non-Contaminated Site Activity.** The issuance of this permit does not constitute coverage under the NPDES General Permit for the Discharge of Produced Ground Water from any Non-Contaminated Site Activity pursuant to Rule 62-621.300(2), F.A.C. or any other NPDES General Permit. If any offsite discharges will occur due to construction dewatering activities, then coverage under the aforementioned General Permit may be required and the

permittee is advised to review Rule 62-621.300(2), F.A.C. Before discharge of produced ground water can occur, analytical tests on samples of the proposed discharge water shall be performed to determine if contamination exists. If the analytical results comply with applicable criteria for use of the General Permit, then a short summary of the proposed activity and copy of the analytical tests shall be sent to the addresses in Specific Condition No. 1 within one week after discharge begins, and the permittee may proceed with the project component while abiding by all conditions of the General Permit.

13. **Construction Best Management Practices (BMPs).** At all times during construction and maintenance activities that could generate project-generated turbidity, the Permittee shall use best management techniques for erosion and sedimentation control. At least 30 days prior to commencement of construction activities for each contract or phase, the Permittee shall submit the contractor's plan which details the use of sediment controls to minimize the suspension and transport of soils, levee materials, and roadway materials into waters adjacent to or downstream of the construction site to the Department for a review and determination of consistency with Department rules and statutes at the address listed in Specific Condition No. 1. Acceptable plan formats may include Erosion Control Plans, Storm Water Pollution Prevention Plans (SWPPP) or an Environmental Protection Plan (EPP). Modifications to the site specific plan may necessitate further review and a determination of consistency with Department rules and statutes. Sediment barriers shall remain in place until all adjacent construction activities are complete.
 - A. **Turbidity Barriers.** During work within or immediately adjacent to existing surface waters of the Lake Okeechobee, Class I waters and the HHD landward toe ditch, Class III waters, floating turbidity barriers that extend to such depths as to provide coverage of the entire water column shall be installed both upstream and downstream of the construction area. Turbidity barriers/curtains or other appropriate measures shall be installed to prevent turbidity from escaping from the areas being excavated, backfilled or other work areas.
 - B. **Adjacent Wetlands.** Wetlands and Preserve Areas adjacent to construction activities shall be staked and fenced off with construction fencing or other effective physical barriers to prevent encroachment into these wetlands prior to the commencement of construction. All areas of exposed soils shall be isolated from wetlands and surface waters to prevent erosion and deposition of sediments into these wetlands during permitted construction activities. All excavated or dredged material shall be placed strategically to prevent the transport of any material into wetlands and surface waters both during and after completion of the construction.
 - C. **Inspections.** Once installation of the erosion controls identified through the plan(s) has been completed, the Permittee shall contact the Department at the address listed in Specific Condition No. 1 to determine whether inspections of the installed controls are necessary. The Permittee shall be responsible for ensuring that erosion control devices are inspected and maintained daily during all phases of construction. Turbidity barriers and erosion control devices shall be inspected daily, maintained in good working order, and relocated or stabilized as necessary during construction to prevent surface water quality violations.
 - D. **Site Stabilization.** All graded areas shall be stabilized and vegetated immediately after construction to prevent erosion. All screens, silt fences, sheet pile, and other turbidity control devices and preventive operation procedures shall remain in place for the duration of the project and maintained until all turbidity has subsided, the project site has been stabilized, and the turbidity level at the point of discharge from the construction or maintenance work area to receiving waters meets state standards. Once these conditions are met, turbidity and erosion control devices shall be removed within a timely manner and prior to final completion of construction. If there are multiple work zones within a contract or phase, individual work zones shall be stabilized if there will be a significant lag time prior to completion of the entire contract.
14. **Mixing Zone.** A 150 meter mixing zone around the construction work area of Culverts 5A and 5 is hereby authorized under this permit for a period not to exceed the permit expiration date, or within two weeks after all construction activities which may result in turbidity are completed, whichever is earlier, in accordance with Rule 62-4.242 and 62-4.244, F.A.C. A maximum of 29 nephelometric turbidity units (NTU) for turbidity above

background shall not be exceeded beyond the 150 meter mixing zone in the Class I and Class III surface waters contained within the construction area. Notification of any non-compliance events shall be submitted electronically within 24 hours of such event to the address in Specific Condition No. 1. The Department may, as a result of any non-compliance event, require the Corps to perform flow and stage monitoring at the boundary or boundaries of the mixing zone. Compliance with the authorized mixing zone shall be reported in the quarterly reports required by Specific Condition No. 15.

15. **Turbidity Monitoring During Construction and Maintenance.** Effective means of turbidity control, such as, but not limited to, turbidity curtains shall be employed during all construction or maintenance activities that could result in project-generated turbidity levels beyond the work area that have the potential to be discharged to the receiving water body. Turbidity control measures shall be in accordance with Specific Condition No. 13 and best management practices contained in the Erosion Control Plan, Storm Water Pollution Prevention Plan (SWPPP) or Environmental Protection Plan (EPP) referenced in Specific Condition No. 6.

Turbidity Standard

- A. Turbidity shall not exceed 29 Nephelometric Turbidity Units (NTUs) above background in Class I and Class III receiving waters.

Sampling Protocols

- B. Sampling and analyses shall be performed as required by Chapter 62-160, F.A.C. (FDEP Standard Operating Procedures (FDEP-SOP), located at <http://www.dep.state.fl.us/water/sas/sop/sops.htm>). Field turbidity monitoring equipment and personnel trained to use it shall be available on site at all times during construction or maintenance activities that could result in project-generated turbidity levels beyond the work area that have the potential to be discharged to the receiving water body.
- C. During construction or maintenance activities, the Permittee shall monitor turbidity levels at least twice daily, with samples taken a minimum of once every four hours during all operations, at the following locations:
- i. Background Sample(s): One background sample station, at least 30.5 meters (100 feet) upstream of each construction or maintenance work area, in the adjacent canal or water body, outside any visible plume generated by the construction or maintenance activity; and clearly outside of the influence of construction activities.
 - ii. Compliance Sample(s): One monitoring station located no greater than 150 meters (492 feet) downstream of the work site and within the densest portion of any visible turbidity plume.
- D. For monitoring purposes, work areas are defined by the turbidity curtains.
- E. If there are multiple work areas where construction is creating a visible turbidity plume, each construction activity shall be monitored separately.

Turbidity Exceedance

- F. The following measures shall be taken whenever project-generated turbidity levels exceed the standard stated above in any receiving waters:
- i. Immediately cease all project activities contributing to elevated turbidity;
 - ii. Notify the Department by phone and at RPPS_Comp@dep.state.fl.us within 24 hours;
 - iii. Identify the possible cause of the violation;

- iv. Modify work procedures that may have contributed to the violation such as installing additional turbidity or erosion protection devices; repairing any non-functional turbidity containment devices, stabilizing exposed soils, and checking calibration of the meter; and
- v. Work shall not resume until the activities can be conducted in compliance with the turbidity standards. Please provide notification to the Department at RPPS_Comp@dep.state.fl.us when compliance is achieved. If compliance is achieved after normal business hours, then please notify the Department on the next consecutive business day.

Monitoring Logs and Reports

- G. Turbidity monitoring results shall be compiled daily and summarized quarterly (every three calendar months) by project component beginning with the first calendar month in which construction or maintenance activities occur that could generate turbidity in receiving waters and continuing until all construction, dredging, stabilization and/or excavation is completed. Monitoring data with supporting documents shall be submitted to the Department quarterly, to the address identified in Specific Condition No. 1 or by email to the RPPS_Comp@dep.state.fl.us. If no construction activities occur that could generate turbidity and the project site has been stabilized, during the entire or a specific portion of the quarterly monitoring period, this shall be noted in the report and include information regarding continuation of monitoring.
- H. Daily monitoring logs shall clearly identify the following information:
 - i. Dates and time of sampling and analysis;
 - ii. Name of individual collecting samples;
 - iii. Identification of the specific instrument unit(s) used for sample collection and analysis, include brand and model.
 - iv. Measurement value and reporting units;
 - v. Water depth;
 - vi. Depth of sample;
 - vii. Weather conditions;
 - viii. Water level stage in the canal or water body and direction of flow;
 - ix. Clear description of project component activities taking place at the time of sampling that may have contributed to turbidity;
- I. Quarterly reports shall include the following information:
 - i. Project name and current permit number;
 - ii. Summary of construction activities that have taken place (e.g., construction progress meeting minutes, SWPPP Inspection Reports, or other relevant information may be submitted to fulfill this requirement);
 - iii. Statement describing the methods used in collection, handling, storage, and analysis of the samples;
 - iv. Statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, and accuracy of the data;
 - v. Statement regarding sampling results, the net difference between compliance and background results, and whether the turbidity levels are in compliance;
 - vi. Summary of any significant compliance issues and how they were resolved;
 - vii. Statement which explains any gaps in sampling activity (e.g., contractor not onsite, work shut down due to weather conditions);
 - viii. Map indicating the sampling locations and construction activity taken place during the reporting period;
 - ix. Signature and statement of authenticity by a properly trained individual indicating that the instrument meets the outlined specifications and has been calibrated.

- J. If no construction or maintenance activity occurs that could contribute to turbidity generation in receiving waters and the project site(s) are stabilized such that a rain event will not generate turbidity in receiving waters during the entire quarterly monitoring period(s), the Permittee may submit a written statement to the RPPS_Comp@dep.state.fl.us in lieu of a quarterly report.
16. **Surface Waters.** All construction work in surface waters of Lake Okeechobee, Class I Waters of the State, and the HHD landward toe ditch, Class III Waters of the State, shall be conducted in a manner to comply with State Water Quality Standards.
17. **Haul Roads and Project Access.** The Permittee intends to utilize existing roads and points of entry for the HHD, as well as HHD right-of-way, to access the project sites. The Permittee will notify the Department in writing of any temporary access ramps prior to their construction. Such temporary access ramps will be removed and the areas restored to the pre-existing conditions by the completion of project construction.
18. **Solid and Hazardous Waste.** The Permittee's construction personnel and/or contractor shall properly handle, store, and dispose of any solid and hazardous waste encountered while completing this project as follows:
- A. Unacceptable and prohibited materials encountered shall be temporarily stored in containers to prevent spillages and potential stormwater, ground, and/or groundwater contamination. Storage time shall be limited to thirty (30) days. Materials shall be disposed of at an approved and permitted site.
- B. Construction and Demolition (C&D) debris and residuals commingled with Class I or Class III material shall be considered Class I or Class III material, respectively, pursuant to Rule 62-701.200(19), F.A.C. C&D debris and residuals commingled with both Classes I and III material shall be considered Class I material. Said materials classified as Class I or Class III material shall be disposed of at an approved and permitted facility within thirty (30) days of encountering such materials.
- C. A waste determination shall be performed on any segregated potential hazardous waste. If any waste is determined to be hazardous waste, arrangements shall be made to transport said waste via a licensed hazardous waste transporter to an approved hazardous waste disposal site. Temporary storage of such hazardous waste shall not exceed thirty (30) days. Any hazardous waste encountered shall be managed in accordance with the provisions of Chapter 62-730, F.A.C.
- D. All processing of vegetative matter and clean, untreated wood that is made into wood chips, shall be processed and removed within sixty (60) days of encountering such materials. All woody vegetative matter and clean wood that will not be processed into wood chips or burned on site shall be removed within sixty (60) days of encountering these materials. Treated or painted wood shall not be chipped or burned and shall be containerized and disposed of at an approved and permitted facility within thirty (30) days of encountering such materials. Local disposal of treated and painted wood is limited to a Class I landfill or a lined Class III landfill.
19. **Operation, Maintenance, Repair, Replacement and Rehabilitation.** The Permittee shall maintain the restored levee cross-section and structures as needed in the future such that the stability of the HHD levee is enhanced, seepage and piping are reduced, and its capability to convey stormwater runoff and provide water supply is not adversely impacted. Routine inspections shall be performed by the Permittee to confirm that the restored area's slope and grass cover are adequate, the landward toe ditch is unobstructed, and the hydraulic connections between the new structures and other culverts and lateral ditches are fully functional. No changes to operations are proposed under this authorization.
20. **Manatee Conditions for Construction.** The Permittee shall comply with the following conditions intended to protect manatees from direct project effects:
- A. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The Permittee shall advise all

construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

- B. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- C. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- D. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- E. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- F. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

MONITORING, REPORTS AND NOTICES

21. **Annual Status Report.** The Permittee shall submit an "Annual Status Report" to the Department detailing the construction activities. These reports shall be submitted to the Department no later than March 1st of each year. If additional reporting modifications are required, the Permittee may request a modification to the annual report submission date and upon approval by the Department, the Permittee may modify the Annual Report submission date to coincide with other reporting requirements and time periods needed for data acquisition and analysis. The reports shall be submitted on an annual basis for projects exceeding one year of construction. In addition to the permit number and name of the permit administrator, the Annual Reports shall contain, at a minimum, the following information: the project component name, an evaluation of the success of the project component in achieving its objectives, problems encountered during the period covered, actions taken to address problems encountered, and the information listed below:

A. General Information.

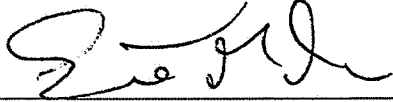
- i. Permit number;
- ii. Permit name;
- iii. Permit administrator;
- iv. Summary of monitoring results from work conducted under Specific Condition Nos. 14, 15 and 16;
- v. Evaluation of project success in achieving its objectives;
- vi. Problems encountered during period covered;
- vii. Actions taken to address problems encountered; and,
- viii. Any additional information specifically required by the conditions of this permit.

- B. Construction/Interim Operations.** A construction and/or operations summary shall include, at a minimum, for each phase/contract of the project:
- i. Construction/Inspections Progress Report;
 - ii. Annual Water Quality Monitoring Summary Report;
 - iii. Annual Facility Inspection Report; and
 - iv. Project Components Completed To Date Report.
- C. Implementation Schedules.** When appropriate, the Corps shall include information on:
- i. Program/Project level adaptive management;
 - ii. Project design modifications; and,
 - iii. Implementation of remedial measures in the event of noncompliance with permit conditions.

RENEWALS AND MODIFICATIONS

- 22. Future Phases.** This permit does not authorize any construction or operation activities associated with future phases of the Herbert Hoover Dike Rehabilitation and Repair Project. Future phases shall require separate review and approval by the Department.
- 23. Permit Renewal.** At least 60 days prior to the expiration of this permit, the Permittee shall apply for renewal of this permit if construction activities are not likely to be completed by the permit expiration date.
- 24. Permit Modifications.** The Permittee shall submit to the Department prior to implementation any proposed modifications to the Herbert Hoover Dike Rehabilitation and Repair Project for a determination of whether or not a permit modification will be required.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**



Ernie Marks, Director
Office of Ecosystem Projects

EM/dn/th

Attachments:

Exhibit 1: Figure 1: Location Map of Culverts to be Replaced
Exhibit 2: Figure 2: Manatee Idle Speed/ No Wake Sign

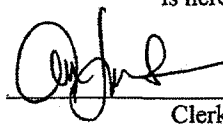
Copies furnished to:

Eric Summa, USACE	Stan Ganthier, FDEP
Jim McAdams, USACE	Ernie Marks, FDEP
Ivan Acosta, USACE	Stacey Feken, FDEP
Aaron Lassiter, USACE	Frank Powell, FDEP
FWCConservationPlanningServices@myfwc.com	Deinna Nicholson, FDEP
DCPPermits@deo.myflorida.com	Jerilyn Ashworth, FDEP
compliancepermits@dos.state.fl.us	Paul Julian, FDEP
Sharon Kocis, USFWS	Marissa Krueger, FDEP
Michael Hart, FDOS	Kenny Hayman, FDEP
Ray Scott, FDACS	Kelli Edson, FDEP
Rebecca Elliot, FDACS	Brian Dougherty, FDEP
Mark Schulz, FDOT	Patrick Gillespie, FDEP
Larry Hilton, Glades County Manager	
Russell Echols, Glades County Commissioner	
Temperince Morgan, SFWMD	
Nimmy Jeyakumar, SFWMD	
Gregory Walker, FDEP, Division of Recreation and Parks	
Marsha Rickman, FDEP, Division of Recreation and Parks	
Samantha Browne, FDEP, Division of Recreation and Parks	
Judy Warrick, FDEP, Division of State Lands	
William Rueckert, FDEP	

Executed in Tallahassee, Florida

FILING AND ACKNOWLEDGMENT

FILED, on this date, under 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk

6/14/2013
Date

EXHIBIT 1

Figure 1. Location map of the Herbert Hoover Dike Culverts to be Replaced.

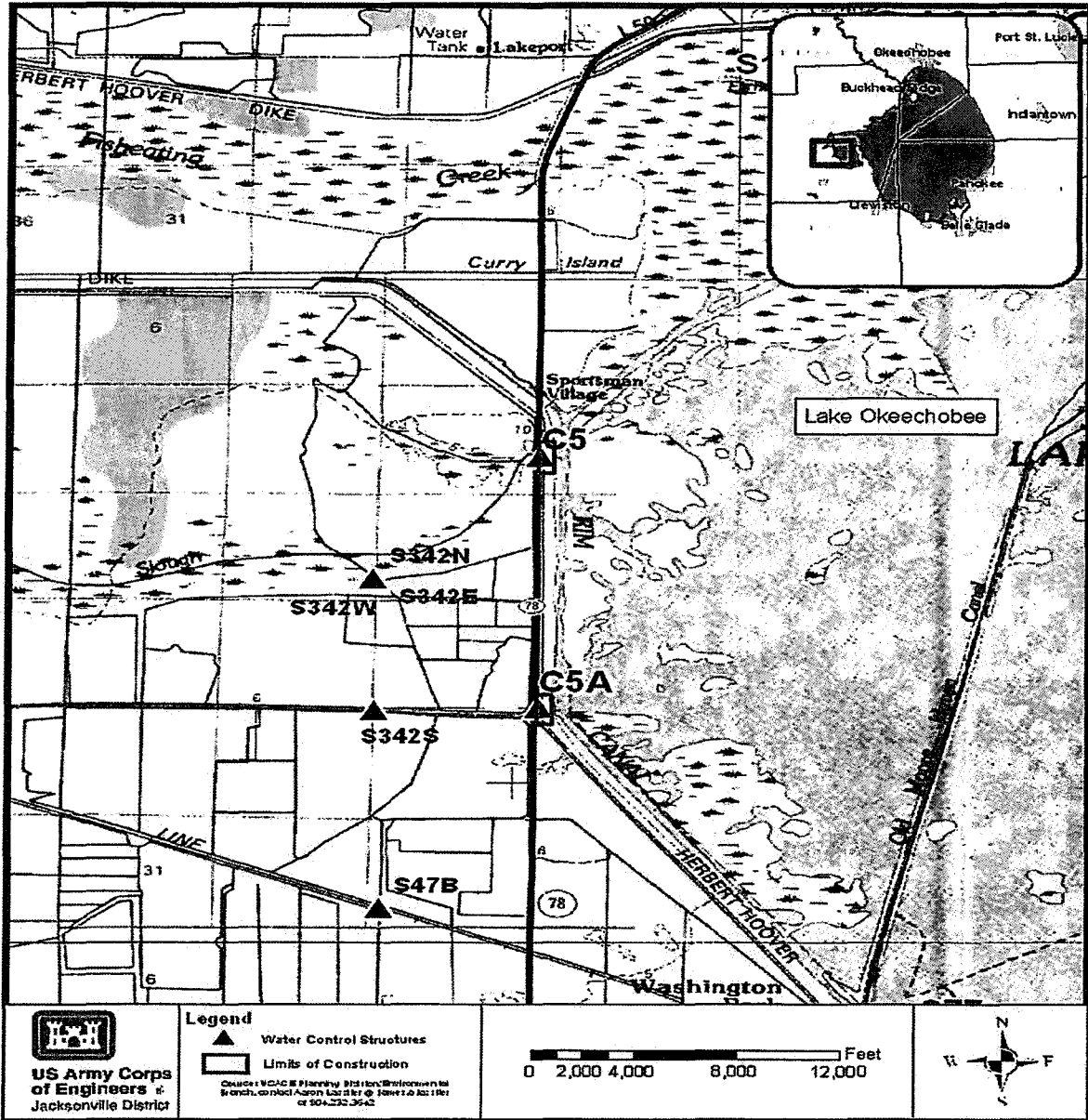


EXHIBIT 2:

Figure 2. Manatee No Wake/ Idle Speed Sign

