



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

EVERGLADES FOREVER ACT CONSTRUCTION AND OPERATION AUTHORIZATION

PERMITTEE:

South Florida Water Management District
3301 Gun Club Road
P. O. Box 24680
West Palm Beach, Florida 33416-4680

ATTENTION:

Ms. Carol Ann Wehle

Permit Number: 0131842-009-EM

Date of Issue: January 29, 2009

Project: Stormwater Treatment Area 5/6 (STA-5/6)

Expiration Date: January 29, 2014

County: Hendry, Palm Beach, and Broward

This permit is issued in accordance with the Everglades Forever Act (EFA), Section 373.4592, Florida Statutes (F.S.), authorizing operation and maintenance activities for the existing Stormwater Treatment Area 5 (STA-5) and Stormwater Treatment Area 6 (STA-6), hereinafter referred to as STA-5/6, and construction of the Compartment C Build-Out consisting of Cells 5-4A-B, 5-5A-B, 6-4. The above named permittee is hereby authorized to initiate the activities described on the application, associated drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof. The activities authorized by this permit must be conducted in conformance with all the provisions of this permit. This permit is accompanied by Administrative Order AO-011-EV, which is incorporated herein by reference. Failure to comply with all permit conditions and documents referenced herein shall constitute grounds for revocation of the permit and appropriate enforcement action.

PROJECT DESCRIPTION:

This permit authorizes the operation and maintenance of Stormwater Treatment Area (STA) 5/6, and the construction of Compartment C Build-Out. Operation of Compartment C Build-Out is not authorized at this time. STA-5/6 and Compartment C Build-Out are a component of the Everglades Construction Project (ECP), construction, operation, and maintenance of which is required by the Everglades Forever Act (EFA), Section 373.4592, F.S. The STA-5/6 facility and Compartment C (Figure 1) consist of the following: Inflow Structures; Inflow Works; Interior Treatment Works; Outflow Structures; Outlet Canal and associated Bridges; Seepage Collection and Return Systems; Re-hydration Pump Stations and Structures; the G-351 Structure; the G-357 Divide Structure; the G-404 Pump Station; Diversion Structures (G-406, G-407 and G-408); the G-409 Pump Station; the G-411 Divide Structure; the G-508 Pump Station and associated Bridge; the Southern L-4 Levee Gap; Deer Fence Canal Bridge and Deer Fence Road Improvements; Rotenberger Hydropattern Restoration; Structure Removal; Recreational Facilities; and Structural, Operational and Vegetation Enhancements. Initial construction of this facility was previously authorized and completed under Florida Department of Environmental Protection (Department) EFA Permit No's 0131842-001 and 0236905-001. Structural, operational and vegetation enhancements have been conducted in accordance with the October 2003 *Everglades Protection Area Tributary Basins Long-Term Plan for Achieving Water Quality Goals* and subsequent revisions (Long-Term Plan, Exhibit A). These improvements and enhancements were designed to optimize performance as needed to achieve the phosphorus water quality standard. Additional enhancements to STA-5/6 may occur as part of the adaptive implementation process envisioned in the Long-Term Plan. STA-5/6 and Compartment C are Stormwater Management Systems (SMS) as defined in Subsection 373.403(10), F.S., and therefore state surface water quality standards do not apply, pursuant to Section 373.4142, F.S.

Operation and maintenance activities authorized by this permit involve maintaining water levels within the existing components of STA-5/6 (5-1A-B, 5-2A-B, 5-3A-B, 6-1 & 6-2) to optimize efficiency of the treatment area. Optimization of the treatment wetland is defined by its performance at removing the pollutants, particularly phosphorus, for which the project was designed and providing regional flood control and water supply. Other operation and maintenance activities include: water quality and vegetation monitoring; preparation and submittal of monitoring reports; vegetation maintenance; and maintenance of the water control structures (including canals and levees). Construction activities authorized by this permit involve the creation of Cells 5-4A-B, 5-5A-B and 6-4, located between the existing STA-5 and STA-6. The creation of these Cells (Collectively Compartment C) will unify the existing STA-5 and STA 6 facilities, effectively creating one large STA (STA-5/6). Operations of the Cells 5-4A-B, 5-5A-B and 6-4 (independently or in connection with Cell 6-2) are not authorized under this permit.

STA-5/6 is designed to treat inflows delivered from the L-2/L-3 Borrow Canal which includes agricultural runoff and discharges from the C-139 Basin and C-139 Annex. After introduction to STA-5/6 through inflow structures, water is treated within the existing treatment cells utilizing natural, passive physical and biological processes for nutrient removal. Treated water exits STA-5/6 (via the STA-5/6 Outflow Structures) into the STA-5/6 Discharge Canal. Assuming normal operating conditions, the treatment path culminates with discharges from the northern Flow-ways (5-1 and 5-2 and 5-3 prior to completion of Compartment C Build-Out) directed either to the Miami Canal (via the STA-5/6 Outlet Canal) or to the Rotenberger Wildlife Management Area (WMA) via the G-410 Pump Station. Discharges to the Rotenberger WMA are for the purpose of hydrologic restoration of the approximate 29,000-acre WMA. Discharges from the remainder of the STA-5/6 are directed south via the L-3 Canal downstream of the G-407 Diversion Structure. Wetlands and surface waters located within the receiving water bodies (Rotenberger WMA, Miami Canal, L-3 Canal, the Northwestern portion of the WCA-3A, the L-4 Canal, and the L-3 Canal Extension) are all Class III waters; and the Rotenberger WMA is an Outstanding Florida Water, pursuant to Rule 62-302.700(9)(f)48, Florida Administrative Code (F.A.C.).

PROJECT FACILITIES:

The individual ECP components included in this project are as follows:

I. Inflow Structures and Inflow Works

The L-2/L-3 Canal, located along the west side of the STA-5/6 Project is the primary conveyance/inflow canal for STA-5-1 and 5-2. STA-5, Flow-ways 3 through 5 (STA 5-3, 5-4 and 5-5) and STA-6, Sections 4 and 2 (STA 6-4 and 6-2) will receive flows via the newly constructed Inflow Canal upon completion. The remaining segment of the L-3 Canal south of G-406 and north of G-408 will become the STA-5/6 Seepage Canal. The function of the L-3 Canal section, south of G-408, along the west side of STA-6, Section 1 will remain an inflow/conveyance canal.

A. STA-5

Structures G-342A-M consist of a series of gated concrete box culverts that control inflow into STA-5. North of the G-508 Pump Station, the G-342A and B direct flows into Flow-way 1 and G-342C and D direct flows into Flow-way 2. Structures G-342A-D are situated along the western perimeter levee adjacent to the L-2/L-3 Canal. South of the G-508 Pump Station are the G-342E-M structures, which consist of a series of gated concrete box culverts that control flows from the STA-5/6 Inflow Canal. G-342E-H structures serve Flow-way 3, G-342I and J will serve Flow-way 4 and G-342K and M will serve Flow-way 5. Water is conveyed eastward from these structures to the upstream end of each flow-way, and distributed to the treatment area by means of a spreader canal. Each of the nine G-342 E-M structures consists of a single 10-ft x 6-ft box culvert fitted with a 10-ft x 6-ft control gate at its upstream end. The G-342E and F structures, which currently direct flows into Flow-way 3, will provide a connection from the Inflow Canal to the STA-5/6 Seepage Canal (aka the L-3 Canal). These structures may be used for deliver of water to the Inflow Canal under certain conditions; however, they will normally remain closed. Structures G-353A and B control discharges to Cell 5; structure G-353C controls discharges to Cell 3.

B. STA-6

After completion of the G-508 pump station, flows to the STA-6 treatment cells will be pumped south by the G-508 pump station from the L-2 Canal to the Inflow Canal and then routed through the inflow structures. Emergent treatment cell, STA 6-4, has one inflow structure, G-342N, which consists of two gated 10-ft. x 8-ft. box culverts. Flows to STA-6, Section 2 (STA 6-2) SAV treatment cell will be delivered through Cell 6-4 and controlled by three gated 8-ft. x 8-ft. box culverts (G-396A-C) installed within the west levee of the treatment cell. Inflow works to STA 6-1 include three 8-ft. x 6-ft. gated box culverts (G-353A-C) within the east levee of the L-3 Canal to direct untreated water from the L-3 Canal to the existing inflow/distribution canal.

II. Interior Treatment Works

A. STA-5

The STA-5 interior works are divided into parallel treatment flow-ways, each consisting of two treatment cells in a series flowing in an easterly direction. Flow-way 1 (Cells 1A and 1B), Flow-way 2 (Cells 2A and 2B) and Flow-way 3 (Cells 3A and 3B) provide approximately 6,095 acres of effective treatment area. For Compartment C, Flow-way 4 (Cell 4A and Cell 4B) and Flow-way 5 (Cell 5A and 5B) will provide approximately 4, 126 acres of additional effective treatment area. The western cells ("A" Cells) of each flow-way consist of emergent vegetative communities (EMG); the eastern cells ("B" Cells) consist of submerged aquatic vegetation (SAV) communities. Due to topography, a portion of treatment area located on the west side of Flow-ways 3, 4 and 5 has been identified as ineffective. A confinement berm and spreader canal will be constructed around this area to direct flows from the inflow structures to the effective treatment areas.

Water flow and water elevations are controlled and directed through the STA-5 Flow-ways via interior levees, canals, and the synchronized operation of water control structures (G-343A-O) located between the EMG Cells and SAV Cells. These intermediate structures, G-343A-O, consist of concrete box culverts with upstream gates that control water levels in the western EMG treatment cells and flow into the eastern SAV treatment cells. Each of the G-343A-J structures consists of a single gated 10-ft x 8-ft high box culvert; structures G-343A-D controls Cell 1A, G-343E-H controls Cell 2A and G-343I-J controls Cell 3A. Each of the G-343K-O structures will consist of a single gated 10-ft x 9-ft box culvert; structures G-343K and L controls Cell 4A and G-434M-O controls Cell 5A.. All gates are single leaf slide gates with the exception of Cell 3A, which has double leaf gates. Local and remote operation of the G-343 gates is possible.

Due to topographical challenges, north-south intermediate flow control berms and overflow weirs are provided within STA 5-4A and 5-5B. The berms are approximately 2-ft. high with 50' wide concrete "keyway" weirs. Flow-way 5-4 has eight weirs (G-522E/W to G-525E/W) and Flow-way 5-5 has 12 weirs (G-526E/W to G-531E/W). These berms and weirs are intended to increase detention time and re-distribute flows internally to improve treatment.

B. STA-6

STA-6 consists of a wetland marsh system which utilizes biological treatment technology in the removal of nutrients from stormwater that enters the facility. Wetland vegetation within the STA is managed in conjunction with hydrologic operations to maintain optimal performance levels within the facility. The approximate effective treatment area of STA 6-1 (both cells) is 870 acres, STA 6-2 is 1,387 acres and STA 6-4 is 530 acres for a total effective treatment area of 2,787 acres. The western cell, STA 6-4, consists of an emergent vegetative communities (EMG); the eastern cell for this treatment flow-way, STA 6-2, consists of a submerged aquatic vegetation (SAV) community. STA-6 Section1, Cells 3 and 5 were created using an existing wetland area for treatment.

Water flow and water elevations will be controlled and directed through the Cells 6-4 and 6-2 via an interior levee, canals, and the synchronized operation of water control structures (G-396A-C) located between the EMG and SAV Cells. These intermediate inflow structures, G-396A-C, consist of concrete box culverts with upstream gates that control water levels in the western EMG treatment cell and flow into the eastern SAV treatment cell. Each of the G-396A-C structures consists of a single gated 8-ft x 8-ft box culvert. Local and remote operation of the G-396 gates is

possible. Water flow and elevations for STA 6-1 are controlled through the inflow/outflow structures and distributed via the interior canals; both Area 6-1, Cell 3 and Cell 5 are single treatment cells.

III. STA-5/6 Outflow Structures

Outflow structures will be regularly operated to maintain interior stages at desired levels. Structures will be fully closed when interior stages fall below prescribed levels, for maintenance or when it is desirable to prevent discharges. Newly constructed outflow structures and discharges from Cell 6-2 (Compartment C Build-Out) will require a separate operational authorization and are not authorized to discharge under this permit.

A. STA-5

The G-344A-K outflow structures consist of gated concrete box culverts controlling outflows from the flow-ways to the Discharge Canal. These structures are situated along the eastern perimeter levee. Flow-way 1 (G-344A-B) and Flow-way 2 (G-344C-D) convey treated water from these structures east to the STA-5 Discharge Canal where discharges may be directed either to the Miami Canal (via the STA-5 Outlet Canal) or to Rotenberger WMA (via the G-410 Pump Station). G-344E-F structures serve Flow-way 3, G-344G-H serve Flow-way 4 and G-344I-K serve Flow-way 5. Treated water from Structures G-344E-K is conveyed east to the STA-6 Discharge Canal for delivery south to the L-3/L-4 Canal. Each of the G-344 structures consists of a single gated 10-ft x 10-ft box culvert.

B. STA-6

For STA 6-1, six outflow structures, G-393A-C (Cell 3) and G-354A-C (Cell 5), located along the east perimeter levee release treated water into the STA-6 Discharge Canal. Each structure has a weir structure and gate. The G-352A-C structures, also situated along the east perimeter levee, convey outflows to the Discharge Canal from STA-6-2. These three 10-ft. x 10-ft. structures includes a multi-leaf operable gate to allow release of water from the upper section of the water column to reduce scouring of the collection canal. STA 6-4 will discharge into STA 6-2 through the STA-6-2 inflow structures (G-396A-C).

IV. Discharge Canal, Outlet Canal and Associated Bridges

The Discharge Canal for STA-5/6 is located between the eastern levee of the STA and the Rotenberger WMA. This canal will be continuous along the east side of STA-5/6 and will be able to deliver flows to the north (Miami Canal or Rotenberger WMA) via the STA-5 Outlet Canal or to the south (L-3/L-4 Canals). A Divide Structure, the G-411, will define the limits of the STA-5 Discharge Canal to the north and the STA-6 Discharge Canal to the south. This structure will normally remain closed. The STA-5 Outlet Canal extends south along the eastern boundary of the Rotenberger WMA to connect with the Miami Canal downstream of the G-372 structure (STA-3/4 inflow pump station) to ensure that treated water from STA-5 is not directed into STA-3/4 for re-treatment.

Treated water is directed to the Discharge Canals via the outflow structures along the eastern perimeter levees. The STA-5 Discharge Canal is located on the east side of STA-5, Flow-ways 1 and 2 and continues north along the western and northern boundary of the Rotenberger WMA, ultimately connecting to the Miami Canal south of the G-373 divide structure. The canal adjacent to STA-5 Flow-ways 4 and 5 will complete the connection of the STA-5 Discharge Canal (north section) to the STA-6 Discharge Canal (south section).

In order to provide a means for vehicles to cross the STA-5 Discharge Canal and maintain a continuous access to the Miami Canal, a bridge was constructed across the STA-5 Discharge Canal adjacent to the northeastern portion of the Rotenberger WMA. Access along the west side of the Miami Canal follows the new East Perimeter Levee of the Rotenberger WMA. The L-3 Levee Access Bridge was also constructed over the STA-6 Discharge Canal to provide greater flow capacity and access to the L-3 canal and levee.

V. Seepage Collection and Return Systems

The function of the northern seepage collection canal is to collect and return seepage to the upstream (western) portion of the STA-5, Cells 1A and 1B. This seepage collection canal is located between the northern perimeter levee of Flow-way 1 and the adjacent private property to the north, and extends from the L-2 Canal to the STA-5 discharge canal. The northern seepage canal has two separate operational sections with a divide structure, G-360B, controlling water levels and limiting drawdown in the western section of the canal. This structure has a 36" culvert pipe with a 3-ft x 6-ft flashboard riser/weir plate and is located just east of the G-349A seepage pump station. No operation is envisioned for the G-360B, although flashboards may be added or removed to alter the weir crest height. After completion of Compartment C Build-Out, seepage along the west side of STA-5, Flow-ways 3, 4 and 5 and STA 6-4 will be collected in the STA-5 Seepage Canal (formerly the L-3 Canal). Water levels will be controlled by G-508 seepage pumps.

Seepage return pump stations G-349A and G-349C are located on the north perimeter levee. G-349A is approximately 0.5 mile east of the L-2 Canal and controls the water levels in the western section of the seepage canal; the G-349C, located at the northwest corner of Cell 1B, controls the eastern section. Each station has two pumps with a discharge capacity of 18-27 cfs depending on headwater and tailwater stages, for a combined capacity at each station of 36-54 cfs.

Additional water may be routed into the northern seepage canal via the G-348 structure. G-348 is a single 48" culvert located near the northeast corner of STA-5 and serves to transfer seepage flows from the discharge canal seepage canal to the northern seepage canal. The discharge canal seepage collection canal is approximately 3.3 miles in length and extends from the northeast corner of STA-5 to just south of the Manley Canal. The discharge canal seepage collection canal is located between the discharge canal and adjacent farm fields. A flap gate on the west end of the pipe prevents unintended increases in stages east of G-348 during delivery of supplemental water to STA-5 (via G-349B to the northern seepage canal).

VI. Re-hydration Pump Stations and Structures

Pump station G-507 is located on the northeast side of STA-5, at the point that the discharge canal bends to the east. The purpose of this pump station is to provide supplemental water to the STA by moving water from the STA-5 discharge canal into STA 5-1B during periods of drought. The station has a discharge capacity of 51 cfs and is operated manually.

Pump station G-349B (39 cfs capacity) is also located on the northeast side of STA-5, at the point that the discharge canal bends to the east. The purpose of this pump station is to provide supplemental water to STA 5-1A and STA 5-2A by moving water from the STA-5 discharge canal into the north seepage collection canal during periods of drought. In this mode, pump stations G-349A and G-349C will be activated to pump the water from the seepage collection canals into STA 5-1A and 5-1B, respectively. Gated structure G-519 (2-36" culverts) connects STA 5-1A to STA 5-2A for water supply and is operated manually.

Pump station G-350B (39 cfs capacity) is located at the southeast corner of STA 5-2B at the confluence of the isolated canal area (between Flow-ways 2 and 3) and the STA-5 Discharge Canal. Drought water supply will be provided directly from the STA-5 discharge canal to the isolated canal area between Flow-ways 2 and 3, via the G-350B pump station. Culvert structures G-520 (2-48" culverts) and G-521 (2-48" culverts) will connect from this isolated canal to STA 5-2A and STA 5-3A respectively, for water supply. Both structures have manually operated gates.

Pump station G-509 (100 cfs capacity), which is being constructed as part of the Compartment C Build-Out is located on the eastern levee between STA-5, Flow-ways 4B and 5B at the discharge canal. Drought water supply will be pumped directly from the STA-6 Discharge Canal to STA 5 Cell 4B and Cell 5B for delivery to the other

cells, both SAV and EMG, through gated 36" culvert structures (single or dual). All nine culvert structures G-510 through G-518 have manually operated gates.

VII. G-351 Structure

The G-351 structure, which includes two gated 10-ft. x 9-ft. box culverts, will divide the STA-5/6 Inflow Canal from the remaining section of the L-3 Canal to the south of G-408. This structure will normally remain closed allowing the two inflow canals to operate at different levels. Under certain conditions, the G-351 gates may be operated to allow connection of the STA 5/6 Inflow Canal to the L-3 Canal for delivery of water to the flow-ways.

VIII. G-357 Divide Structure

G-357 is a two barrel box culvert with a twin lift gate control system. This structure prevents water movement between the Miami and L-4 canals during the operation of the G-404 pump station.

IX. G-404 Pump Station

G-404 is a pump station with a total capacity of 570 cfs. G-404 is located at the confluence of the Miami Canal and the L-4 borrow canal. It functions to direct water into and move water westerly in the L-4 borrow canal in order to supply treated water to locations that historically received water from the L-3 borrow canal.

X. Diversion Structures

There is a single diversion structure (G-407) located within the L-3 Canal that may be operated to allow diversion of stormwater around STA-5/6 to WCA-3A via the Seepage/L-3 Canal. Diversions may be necessary during certain events that compromise the safe operation of the facilities, when stage elevations of waters, rates of inflows, or the duration of sustained inundation creates conditions threatening the survival of marsh vegetation and the treatment efficiency of the project, to avoid hydrological and nutrient overloading the STA or when water supply needs require it. The G-407 Diversion Structure, which is located near the southwest corner of STA 6-1, is the southernmost diversion structure. This structure has two gated 10-ft. x 9-ft. box culverts and provides access over the L-3 Canal. During normal operations, G-407 will remain closed.

Two other structures, G-406 and G-408, can be operated to facilitate diversion of stormwater around STA-5/6. The northernmost structure, the G-406, is located just south of the Deer Fence Canal. This structure includes two 10-ft. x 9-ft. gated box culverts and an overflow weir at elevation 21.75 ft. NGVD. Operation of the gates diverts flow from the north (the L-2/L-3 Canal) to the Seepage/L-3 Canal, by-passing the G-508 Pump Station and Inflow Canal. The weir controls upstream water levels in the L-2 Canal. When the G-508 pump station is unavailable, the G-406 structure may be used to deliver water to the STA-5/6 Inflow Canal (via the G-342E and F structures) and/or south to STA-6 (via the G-408, G-351 and inflow structures); the G-407 would remain closed during these routine operations.

The G-408 Diversion Structure is located between G-406 and G-407 at the northwest corner of STA 6-1. This structure has two gated 10-ft. x 9-ft. box culverts and divides the Seepage/L-3 Canal located along the west side of the project from the L-3 Canal to the south. When the G-508 pump station is unavailable, the G-406 structure may be used to deliver water to the STA-5/6 Inflow Canal (via the G-342E and F structures) and/or south to STA-6 (via the G-408, G-351 and inflow structures); the G-407 would remain closed.

XI. G-409 Pump Station

G-409 is a pump station with a total capacity of 190 cfs. G-409 is located south of STA-6, Section 1, upstream of the G-155 structure on the existing levee which connects to the L-28 levee immediately to the east. It functions to supply irrigation water to the Seminole Tribe of Florida's Big Cypress Reservation.

XII. G-411 Divide Structure

The G-411 Divide Structure is located within the discharge canal at the northeast corner of STA 5-3B. This structure divides the discharges from STA-5, Flow-ways 1 and 2, and the remaining flow-ways for STA-5 and all of

STA-6. The G-411 structure has two gated 10-ft. x 8-ft. box culverts that will provide flexibility on directing discharge flows either to the north or south. Under normal operations, the structure will be closed to direct discharges from Flow-ways 1 and 2 to the Miami Canal and all other Flow-ways / cells to WCA-3A via the L-3 Canal Extension.

XIII. G-508 Pump Station and associated Bridge

Pump Station G-508 draws water from the L-2/L-3 Canal and releases it into the STA-5/6 Inflow Canal for delivery to the treatment areas. This pump station is located in the northwestern corner of STA 5-3 at the confluence of the L-2/L-3 Canal and Deer Fence Canal. This pump station serves Flow-ways 3-5 and STA-6-4/6-2. G-508 pump station includes three-470 cfs pumps (plus one back-up pump) and two 110 cfs pumps (1,630 cfs total inflow rate), two-25 cfs seepage pumps (plus one back-up pump), a pump station enclosure and an intake canal. A north-south bridge will be constructed over the intake canal to provide a continuation for access along the east levee of the L-3 Canal.

XIV. Southern L-4 Levee Gap

The G-404 pump station is located at the confluence of the Miami Canal and the L-4 borrow canal and directs water westward in the L-4 canal for water delivery to western WCA 3A and the Seminole Tribe of Florida's Big Cypress Reservation. Directly north of the point that the existing L-3 extension canal turns south, a small canal connects the L-4 borrow canal to the L-3 extension canal.

XV. Deer Fence Canal Bridge and Deer Fence Road

Deer Fence Canal Bridge is a 100 ft. two lane pre-stressed concrete bridge (Deer Fence Canal Bridge). Approximately 170 ft. of limerock road connects the bridge to Deer Fence Road. Deer Fence Road from the East line of County Road 835 right-of-way East has been paved (approximately 200 feet); Deer Fence Road from the end of the pavement to Deer Fence Bridge has been graded. A surface water management system associated with the paving of Deer Fence Road and two 72 inch culverts in the S&M Canal have been constructed. The Deer Fence Bridge and Deer Fence Road improvements provide the U.S. Sugar Corporation access to its Unit 2 Ranch. The two 72 inch culverts in the S&M Canal are necessary to access a 500 acre wetland tract to the north.

XVI. Rotenberger Hydropattern Restoration

The G-410 pump station allows a portion of STA-5 discharges to be routed to the Rotenberger WMA and ultimately to the Miami Canal via Rotenberger WMA discharge structures G-402A-D. The remainder of STA-5 discharges are directed to the Miami Canal via the STA-5 Discharge and Outlet Canals.

Project features include 240 cubic foot per second (cfs) electric powered pump station (G-410) consisting of two 48-inch vertical axial pumps. Discharges from the G-410 pump station are distributed in Rotenberger WMA through a one-mile long spreader canal which is parallel to the west perimeter levee of the Rotenberger WMA. The spreader canal is connected to a 2-1/2 mile long borrow canal, for a total spreader canal length of 3-1/2 miles. Discharges out of Rotenberger WMA are directed into the Miami Canal via three 54-inch diameter gated culverts (G-402 A-C) and one 42-inch diameter gated culvert (G-402D), along the east side of Rotenberger WMA. There is also a 1/4 mile long collection canal upstream of each gated culvert.

The District operates the G-410 pump station to achieve an initial hydro pattern restoration target based on a 31-year average stage prediction by the Natural Systems Model (NSM). The NSM and the South Florida Water Management Model are currently the best available technology to estimate historic water levels within the Everglades, including Rotenberger WMA. Data will be collected during restoration and recommendations will be made for operational modifications to maximize environmental benefits to Rotenberger WMA.

XVII. Structure Removal

Over time, the following structures have been removed from STA-5/6: G-155; G-350A re-hydration pump station; and G-604. The G-600 pump station will also be removed. The G-601, G-602 and G-603 structures are no longer operated.

XVIII. Recreational Facilities

In fulfillment of the public access and recreation requirements of the EFA Subsection 373.4592 (4)(a) F.S., and as further described in Subsection 373.1391(1)(a) and (b) F.S., recreational facilities are proposed at STA-5. The proposed recreational facilities shall be designed to ensure compatibility with the restoration goals of the ECP and the water quality and hydrological purposes of the STAs. The proposed STA-5/6 facilities include the following:

- An information kiosk, trailhead, a composting toilet, an asphalt parking area with parking for vehicles with trailers, landscaping, pedestrian gates, signage and fencing as needed to define public access areas and to protect sensitive equipment
- One multi-use trail on top of the levee to accommodate all user groups, hiking, biking, equestrian, and bird watching
- One Americans with Disabilities Act (ADA) compliant boardwalk/viewing platform with associated bird blind, providing enhanced recreation opportunities for bird-watching, photography, hiking, biking and waterfowl hunting.

LOCATION:

STA-5/6 resides on District-owned lands between the C-139 Basin and C-139 Annex to the west and the Rotenberger Wildlife Management Area (Rotenberger WMA) to the east.

The project is located within the following property descriptions in Palm Beach, Broward, and Hendry County:

- STA-5/6 Inflow and Outflow Structures, Inflow Works, Interior Treatment Works, Seepage Collection and Return Systems, Re-hydration Pump Stations and Structures, STA-5 and STA-6 Discharge Canals and Recreational Facilities. Sections 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, and 36, Township 46 South, Range 34 East; Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 35 and 36, Township 47 South, Range 34 East; and Section 1, Township 48 South, Range 34 East, Hendry County, Florida and Section 6, Township 48 South, Range 35 East, Palm Beach County, Florida
- STA-5/6 Outlet Canal. A parcel of land located in Sections 19, 20, 21, 22, 26, 27, 28, 29, 30 and 35, Township 46 South, Range 35 East together with a parcel located in Section 2, Township 47 South, Range 35 East, Palm Beach County, Florida
- G-357 Structure. Section 6, Township 48 South, Range 36 East, Broward County, Florida
- G-351 Inflow Structure. Section 26, Township 47 South, Range 34 East, Hendry County, Florida
- G-406 Diversion Structure. Section 33, Township 46 South, Range 34 East, Hendry County, Florida
- G-407 Diversion Structure. Section 1, Township 48 South, Range 34 East, Hendry County, Florida
- G-408 Diversion Structure. Section 26, Township 47, Range 34 East, Hendry County, Florida
- G-404 Pump Station. Sections 6 and 7, Township 48 South, Range 36 East, Broward County, Florida
- Southern L-4 Gap. Section 9, Township 48 South, Range 35 East, Broward County, Florida
- G-409 Pump Station. Section 12, Township 48 South, Range 34 East, Hendry County, Florida
- G-411 Divide Structure. Section 1, Township 47 South, Range 34 East, Hendry County, Florida
- G-508 Pump Station and Bridge. Section 33, Township 46 South, Range 34 East, and Section 4, Township 47 South, Range 34 East, Hendry County, Florida
- Deer Fence Road Improvements. Sections 31 and 32, Township 46 South, Range 34 East, Hendry County

GENERAL CONDITIONS:

In accordance with Subsection 373.4592(9)(g) of the EFA, this permit may include any standard conditions provided by Department rule which are appropriate and consistent with the EFA.

1. **Enforcement.** The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 373.129, 403.141, 403.727, 403.859 through 403.861 F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. **Scope of permit.** This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. **Limitation of rights.** The issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the STA-5/6 project which are not addressed in this permit. However, this permit is in lieu of other permits under Part IV of Chapter 373, F.S., pursuant to Subsection 373.4592(9)(c), F.S.
4. **Limitations upon title.** This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. **Liability.** This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall hold and save the Department harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.
6. **Operation and maintenance responsibilities.** The permittee shall properly operate and maintain the STA and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. **Access Rights.** The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted for the following purposes:
 - A. Access to, and the right to, copy any records that must be kept under conditions of the permit
 - B. Inspection of the facility, equipment, practices, or operations regulated or required under this permit
 - C. Sampling or monitoring of any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules

Reasonable time may depend on the nature of the concern being investigated.

8. **Noncompliance.** If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - A. A description of and cause of noncompliance
 - B. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit
9. **Records as evidence.** In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111, F.S. and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. **Changes in Law.** The permittee agrees to comply with changes in applicable Department rules and applicable Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida law.
11. **Transferability.** This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-343.130, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. **Permit at Work Site.** This permit or a copy thereof shall be kept at the work site of the permitted activity. For the purposes of this permit the work site shall be defined as the South Florida Water Management District Headquarters located at 3301 Gun Club Road in West Palm Beach, Florida.
13. **Records Retention.** The permittee shall comply with the following:
 - A. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department
 - B. The permittee shall hold at the STA or other location designated by this permit records of all monitoring information required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five years from the date of the sample, measurement, report, and application unless otherwise specified by Department rule
 - C. Records of monitoring information shall include the following:
 1. The date, exact place, and time of sampling or measurements
 2. The person responsible for performing the sampling or measurements
 3. The dates analyses were performed or the appropriate code as required by Chapter 62.160 F.A.C.
 4. The person responsible for performing the analyses
 5. The analytical techniques or methods used, including but not limited to MDL (Method Detection Limit)
 6. The results of such analyses, including identification of potential outlier values
14. **Requests for Information.** When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

15. **External Agency Requirements.** Should any other regulatory agency require changes to the permitted system, the permittee shall notify the Department in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.
16. **Sovereign Lands.** The permittee is hereby advised that Florida law states: No person shall commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund or the Department of Environmental Protection under Chapter 253, until such person has received from the Board of Trustees of the Internal Improvement Trust Fund the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.
17. **Artifacts.** If historic or archaeological artifacts such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time on the project site, the permittee shall immediately stop all activities which disturb the soil and notify the Department and the State Historic Preservation Officer.

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 Division of Environmental Assessment and Restoration, Restoration Planning and Permitting Section, 2600 Blair Stone Road, MS 3560, Tallahassee, Florida, 32399-2400, telephone no. (850) 245-8346 and to the Department's Southeast District Office, Water Resource Management and Environmental Planning, 400 North Congress Avenue, Suite 200, West Palm Beach, Florida 33401, telephone no. (561) 681-6600. Electronic copies of reports and notices required by this permit shall be sent to RPPS_Comp@dep.state.fl.us.
2. **Related Permits.** The Department and the permittee acknowledge the issuance of other permits related to STA-5/6. STA-5/6 previously operated under EFA Permit No's. 0131842 and 0236905 and portions of the facility currently operate under NPDES Permit No's. FL0177954 and FL0473804. Additional related permits include Department Permit No. 0289306 which authorizes temporary dewatering activities associated with the STAs and Non-ECP structures, and the U.S. Army Corps of Engineers 404 Permit No. 199404532. An additional authorization by the U.S. Army Corps of Engineers is anticipated to be issued subsequent to the completion of the Compartment B and C Environmental Impact Statement. This STA-5/6 EFA permit, upon issuance, shall supersede and replace the former STA-5 and STA-6 EFA Permits issued by the Department.
3. **Public Use.** The recreational facilities located within the STA-5/6 Project shall be maintained to ensure compatibility with the restoration goals of the ECP and the water quality and hydrological purposes of the STAs. This permit does not absolve the permittee from the responsibility of obtaining other permits (federal, state, or local) which may be required for the activities occurring at these sites.

Conditions for Construction, Operation and Maintenance

4. **Project Construction.** The permittee shall ensure that Compartment C is constructed consistent with the design documents. During any construction and modification of Compartment C and associated works, the permittee shall take all reasonable precautions to minimize the suspension and transport of soils, levee materials, and roadway materials into waters adjacent to or downstream of the construction site. In addition, during construction, the permittee shall perform turbidity monitoring in accordance with Specific Condition 25.
5. **Project Operation and Maintenance.** The permittee shall operate and maintain STA-5/6 consistent with the design documents, as may be modified and reflected on the record drawings, operations criteria, and operation plan required by Specific Condition 10. Operation of the individual components of Compartment C Build-Out (including Cell 6-4 once hydrologically connected to Cell 6-2) are not authorized under this permit. The

treatment cells existing at the time of permit issuance (STA-5-1, 5-2, 5-3, 6-1 and 6-2) are authorized to maintain existing operation.

6. **As-Built Certification and Record Drawings.** Within 60 days after completion of any construction for the existing Cells of STA-5/6, or Compartment C, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law. Construction is considered complete when the associated construction contract is completed and closed out. The statement of completion and certification shall be based on on-site observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the Department that STA-5/6 is ready for inspection. Additionally, if deviation from the approved drawings is discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawing. All surveyed dimensions and elevations shall be certified by a registered surveyor
7. **Contaminated Sites and Residual Agrichemicals.** The Permittee shall address all contaminated sites within the project footprint in accordance with all applicable Department statutes and rules including but not limited to Chapters 62-770, 62-780, and 62-785, F.A.C. The Permittee shall address any agricultural chemical residuals in the project footprint in accordance with the *"Protocol For Assessment, Remediation And Post-Remediation Monitoring For Environmental Contaminants On Everglades Restoration Projects"* (Protocol) dated March 14, 2008 so that risk to the environment is minimized based upon the projected use of the property. Regardless of any remedial action plan, the Chapter 62-777, F.A.C. cleanup target levels, or the Protocol, the Permittee shall address all contamination within the project footprint, to minimize to the maximum extent practicable any detrimental impacts to Threatened or Endangered species. As a corrective action, the Department may require limitations on property access or use as part of the Permittee's Land Management Plan for the project area. All corrective actions must be completed prior to initial operation or use of the project. Documentation of completion of corrective actions must be submitted to the Department no later than 90 days prior to the initial operation or use of the completed project, unless the Department approves an alternative schedule. The Permittee shall secure written concurrence from the Department that the corrective actions have been completed based upon applicable protocols and the projected land use, prior to initial operation of the completed project. If contamination is discovered after initial operations, the Permittee shall send to the Department at the address listed in Specific Condition No. 1 an assessment and remedial action plan for Department approval. Upon the Department's approval, the Permittee shall implement the assessment and remedial action plan and provide quarterly reports to the Department on the progress of the remediation until the cleanup is completed to the Department's satisfaction.
8. **Vegetation and Operational Enhancements.** Vegetation and operational enhancements shall be implemented to optimize performance as needed to achieve the phosphorus criterion in the EPA. Vegetation and operational enhancements shall be coordinated with the Department to determine whether a modification to the permit is required.
9. **Pump Station Maintenance.** Maintenance requirements for the pump stations include operation of the pumps for approximately 2 to 4 hours per month, as necessary, to maintain their mechanical integrity. Therefore, temporary operation of the pump stations for maintenance purposes is allowed and is not subject to the discharge criteria of the specific conditions of this permit. However, the permittee shall document all such temporary maintenance operations, and shall include all such discharge flows and loads as a part of the monitoring requirements of this permit.
10. **STA Operation Plan and Modifications.** Upon completion of the scheduled Long-Term Plan improvements and enhancements and within 90 days of the completion of any additional Long-Term Plan improvements and enhancements (the Compartment C Build-out), the permittee shall submit to the Department, at the addresses

listed in Specific Condition 1, an updated Operations Plan for the STA-5/6 facility, as applicable, subject to modification under the conditions set forth below.

If at any time changes to the STA-5/6 Operations Plan are warranted to optimize facility operation, and upon verification of data to be supplied by the permittee that justifies the need for such modification, the Operations Plan may be modified as mutually agreed upon by the Department and the permittee. The Operations Plan shall also include the information described in A-H, below.

Under emergency conditions that threaten the safety of life, property, or the STA-5/6 facility, the permittee may modify the operations of STA-5/6 and immediately employ any remedial means to protect life and property in accordance with the emergency provisions of Chapter 373, F.S. The permittee shall notify the Department within 48 hours of such occurrence and shall provide data justifying the need to employ the emergency modifications to operations of STA-5/6.

- A. **Minimum Water Level Targets to Avoid Dryout.** In accordance with the relevant design documents, the permittee shall, to the maximum extent practicable, maintain a minimum static water level of 0.5 feet above the average ground elevation of the treatment cells to avoid dryout of the treatment cells, subject to available water from the upstream watershed.
- B. **Responding to Dryout Conditions.** The permittee shall evaluate and correct potential adverse dryout effects on the water quality performance of STA-5/6. If the compliance requirements in this permit are not met due to dryout conditions, then the permittee shall propose modifications to the Operations Plan and Monitoring Plan as appropriate and submit the revised plan(s) to the Department for review and approval.
- C. **Maximum Water Level Targets.** The permittee shall ensure, to the maximum extent practicable, that maximum water depths of 4.0 feet above the average ground elevation of the treatment cells will not be exceeded in order to avoid long-term damage to the treatment vegetation and protection of project levees.
- D. **Operational Envelope.** The permittee shall ensure to the maximum extent practicable that authorized operation of the existing components of the facility do not exceed the operational envelope for STA-5 and STA-6 (this permit does not authorize operations for Compartment C Build-Out), as set forth in the existing STA-5 and STA-6 Operations Plans.
- E. **Phosphorus Uptake Optimization.** Operations shall be conducted to distribute the flows and water levels within STA-5/6 to optimize the phosphorus reduction performance and shall be updated as necessary to include the results of the permittee's Process Development and Engineering (PDE) program being implemented as a part of the Long-Term Plan.
- F. **Operations Plan Modifications.** The STA-5/6 Operations Plan should be reviewed and may be revised as appropriate based on operational experience, research results, downstream monitoring and upstream levels of service.
- G. **Hydropattern Restoration.** STA-5/6 shall be operated in such a manner as to be consistent with the activities proposed to restore the hydropattern of the EPA, as described in Specific Condition 11 below.

11. **Hydropattern Restoration.** In accordance with Subsection 373.4592(4)(b), F.S., the permittee shall operate the STAs in order to improve and restore the Everglades water supply and hydroperiod. The permittee shall operate the ECP to provide additional increased flow to the EPA through the modification of historical operational practices for regulatory releases from Lake Okeechobee and the Water Conservation Areas. The STAs shall be operated to achieve the goal of providing additional flows to the EPA and shall, to the maximum extent practicable, be coordinated with and consistent with the Lower East Coast Water Supply Plan, the Lake Okeechobee and Water Conservation Area Regulation Schedules, Comprehensive Everglades Restoration Plan (CERP), and the entitlement of the Seminole Tribe of Florida to surface water withdrawals under the Water Rights Compact (P.L. 100-228).
12. **Rotenberger WMA Restoration.** This permit authorizes discharges to Rotenberger Wildlife Management Area, according to the following terms and conditions:

Operation and Maintenance of Rotenberger Wildlife Management Area Hydropattern Restoration

- A. **Project Operation and Maintenance.** The permittee shall operate and maintain the Rotenberger Wildlife Management Area Hydropattern Restoration Project consistent with the following:
 - The conceptual Design Document for the Everglades Protection Project, dated February 15, 1994
 - The General Design Memorandum for STA-5 and Rotenberger Tract Restoration, dated July 1996
 - The final engineering plans for Rotenberger Wildlife Management Area Hydropattern Restoration, submitted to the Department on May 15, 2000
 - The Summary of Revised Hydrologic Simulations for Rotenberger dated August 15, 2000

By operating in accordance with these documents, the objectives of the ECP will be achieved, as outlined in the EFA, 373.4592(9)(e) and 373.4592(9)(h), F.S. To the extent that there is a conflict with the above documents, the permit conditions shall control.

1. **Emergency Releases into Rotenberger.** Water releases from STA-5/6 or other sources, if available, into Rotenberger may be made on an emergency basis for the purpose of extinguishing wildfires within Rotenberger.
2. **Pump Stations Testing and Maintenance.** Maintenance requirements for the pump stations include operation of the pumps for approximately 2 to 4 hours per month, as necessary, to maintain their mechanical integrity. Therefore, temporary operation of the pump stations for testing and maintenance purposes is authorized.

If the permitted facilities are demonstrated to be not achieving compliance with the requirements of this permit, the permittee shall modify the Operations Plan as appropriate. The Rotenberger Wildlife Management Area Hydropattern Restoration Project, including applicable operation and maintenance activities, may be further modified for standard engineering practices pursuant to Subsection 373.4592(9)(j)(3) of the EFA.

B. Monitoring and Reporting.

1. The permittee will monitor headwater and tailwater stages, and pump information at the G-410 pump stations and utilize appropriate pump discharge relationships to estimate surface inflow to the Rotenberger.
2. The permittee will monitor headwater and tailwater stages at the G-402 structures and utilize appropriate stage discharge relationships to estimate surface outflows from the Rotenberger.

3. The permittee will monitor rainfall and ET at nearby stations in order to estimate these components of the Rotenberger water budget.
4. Annual estimates of inflows and outflows will be reported in the annual South Florida Environmental Report.

13. Implementation of Source Control Programs.

- A. **Implementation.** The permittee shall continue to implement source control programs in each of the contributing basins in accordance with the Long-Term Plan, Chapter 40E-63, F.A.C., and other applicable programs. Basins that do not presently include source control programs shall be monitored to determine if such programs are necessary in the event that phosphorus loads to the facility from these basins limit the facility's ability to achieve the permit effluent limit.
- B. **Performance.** On an annual basis, the permittee shall evaluate the performance of source controls in the contributing basins and include the findings in the annual report required in Specific Condition 29. The report shall include phosphorus loads from the basins and shall describe trends and compare current loads to those determined necessary to achieve the permit effluent limit.
- C. **Improvements.** If the permit effluent limit is not achieved and if the inflow loads determined necessary to achieve the permit effluent limit are exceeded, the permittee shall submit schedules and strategies for source control improvements necessary to achieve the permit effluent limit in the annual report.

- 14. Minimization of Wetland Impacts.** In accordance with Subsection 373.4592(9)(e)3, F.S., of the EFA, the permittee shall provide reasonable assurances that any wetland impacts associated with STA-5/6 activities will be minimized to the maximum extent practicable and consistent with the documents on file with the Department.
- 15. Water Quantity and Flooding Impacts.** The permittee shall be responsible for ensuring that STA-5/6 is operated so as not to adversely affect adjacent lands with regards to flooding impacts and water supply needs of the region. The permittee shall hold and save the Department harmless for any and all damages, claims, or liabilities, which may arise from water quantity and/or flooding impacts resulting from the construction and operation of STA-5/6.

Phosphorus Conditions

- 16. Phosphorus Standard.** Pursuant to Subsection 373.4592(4) (e)2, F.S., the Department adopted a 10 parts per billion (ppb) numeric criterion for phosphorus in the EPA, which was approved by the United States Environmental Protection Agency (EPA) on January 24, 2005. The compliance methodology for determining achievement of the phosphorus numeric criterion was revised and adopted by the Department on May 5, 2005, and the revised rule (62-302.540 F.A.C.) was approved by the U.S. EPA on July 27, 2005. Achievement of the criterion shall be determined through the limitation set forth in Table 1 below.
- 17. Start-Up Phase.** During the initial Start-Up Phase of a new cell or new flow-way, the permittee shall monitor phosphorus concentrations within the facility to demonstrate that the project is achieving a net reduction in phosphorus. Portions of STA-5/6 may operate independently of each other. Under those circumstances, Start-Up Phase operation and monitoring within the new treatment area shall be performed as follows:
- i. **Establishment of Marsh Vegetation.** The permittee shall manage water depths in the treatment cells to facilitate the recruitment of marsh vegetation in accordance with the Operations Plan, which may include recirculating waters within the STA.

- ii. ***Start-Up Monitoring.*** On a weekly basis, the permittee shall monitor total phosphorus at the upstream side of inflow structure(s). Total phosphorus shall also be monitored on a weekly basis on the upstream side of the outflow structures.
 - iii. ***Phosphorus Start-Up Test.*** The Phosphorus Start-Up Test for an individual flow-way or cell is based on when the above samples demonstrate, over a four-week period, a net reduction in phosphorus occurs. This net reduction shall be deemed to occur when the 4-week geometric mean total phosphorus water column concentration from samples collected at the applicable outflow structures is less than the 4-week geometric mean total phosphorus water column concentration collected at the applicable inflow structure(s).
 - iv. ***Discharge Operations.*** Discharge operations, from an individual flow-way or cell that has passed the Phosphorus Start-Up Test described above, may commence once Initial Start-Up Phase documentation and all supporting data and analyses are submitted to the Department via regular or electronic mail. For flow-ways that have not met these tests within six months after issuance of the permit, the permittee shall submit status updates regarding progress toward and identifying strategies and timelines to achieve this test.
 - v. ***Initiation of Individual Flow-way (Stabilization and Routine Operation) Discharges and Monitoring.*** Once flow-through discharges from a flow-way begin, the permittee shall initiate routine water quality monitoring for that flow-way consistent with the monitoring program described in this permit.
18. **Stabilization Phase (Flow-through Operations)**– An STA enters the Stabilization Phase after each of three antecedent conditions: (1) once flow-through operations begin following the initial start-up of a new treatment cell; (2) when a treatment cell is undergoing implementation of Long-Term Plan enhancements that may have adverse impacts on STA performance, or (3) when a treatment cell undergoing for recovery activities associated with a major event that compromises the structural integrity or performance of the STA. During the Stabilization Phase the treatment vegetation will be maturing and the STA performance will generally be improving toward achieving the permit effluent limitation. However, the overall performance of the STA is extremely difficult to evaluate and predict. It is anticipated that the treatment vegetation will require one to three years after flow-through operations begin for the affected cells to continue to improve toward achieving the permit effluent limit. During the stabilization phase the effluent limitation shall apply. Once the facility achieves the effluent limitation it shall enter the Routine Operations Phase. During the Stabilization Phase, exceedance of the effluent limitation is anticipated; however, the STA shall be deemed in compliance as long as the actions described in this condition and all other applicable permit conditions are met.

If a flow-way is determined to be incapable of operating or performing effectively as a result of the impacts caused by one or more of the above mentioned circumstances, within 60 days the District shall submit strategies and timelines identified as being the most effective in restoring the impacted flow-way(s) and achieving the permit effluent limit. The District's strategies and timelines shall include, at a minimum, the following:

1. Identify the cause of the incident which resulted in the facility not achieving the effluent limitation;
2. A statement that the facility was being properly operated at the time of the incident;
3. The period of the anticipated stabilization phase; and,
4. Any remedial steps employed to ensure that the stabilization period will be as minimal as possible..

The timely submittal and implementation of these strategies and timelines in conjunction with the Department's review and approval of such submittals and compliance with all other applicable conditions set forth in this permit shall constitute compliance.

In addition to the reporting associated with this condition and as part of the annual reporting requirements of the permit, the District shall provide an assessment of the facility and the steps being taken to meet the permit effluent limit. As part of the first annual report following any adverse impact to the facility, and each subsequent year until the facility achieves the permit effluent limit, the 12 month rolling flow-weighted mean TP concentration of the STA outflow shall be assessed as to whether there is a trend in improvement of performance relative to prior years. If the trend analysis that is applied to this data indicates that there is not a trend in improvement of performance, the permittee shall report as to the causes behind the lack of performance improvement. If during a subsequent annual report the trend analysis applied to these data indicate that there is not a trend in improvement of performance after the affected flow-way has been in flow-through operation for 24 months, the annual report shall include any remedial measures necessary to achieve improved facility performance by the end of next year, and shall provide an estimate of when the permit effluent limit shall be achieved.

- 19. Routine Operations Phase -** During the Routine Operations Phase, discharges from the STA shall meet the permit effluent limitations set forth in Table 1 below.
- 20. Operational Envelope.** As a part of the annual reporting requirements in Specific Condition 28, the District shall provide an annual assessment as to whether the existing components of the STA-5/6 facility are operating within or outside the operational envelope. The assessment shall be based on annual inflow volumes and phosphorus loads and shall compare flows and loads to the corresponding maximum values contained in the operational envelope described in the current STA-5 and STA-6 Operations Plans. If the annual inflow volumes or phosphorus loads exceed the corresponding maximum values of the operational envelope during an annual compliance period, the District shall conduct a review of potential causes and include this review in the annual report. The review shall include a comparison of the relationships between rainfall, runoff, and phosphorus loads from the compliance year with historical data. Departmental concurrence shall be obtained prior to initiating Lake Okeechobee regulatory or water supply releases that would result in an exceedance of the maximum levels of flow or phosphorus loads contained in the operational envelope.

Factors Impacting Compliance

- 21. Factors Outside the Permittee's Control.** In the event that non-compliance or failure to achieve performance objectives results for any of the reasons other than those below, the permittee shall take appropriate remedial measures.
- A. Anomalous Rainfall.** Compliance with the effluent limitation shall not be tested in water years when the rainfall in the source basins fall outside the range of values that occurred during the period of model simulation if sufficient supplemental flows are not available to maintain wet conditions in STA-5/6. A joint field inspection between the Department and the District will be undertaken to verify if the facility has resulted in dryout conditions that would impact compliance. In these instances, results from adjacent years will be treated as consecutive for purposes of testing compliance. The Department may make similar adjustments where emergency discharges occur.
 - B. Random Variation.** The permittee shall report any statistical uncertainty in the methodology using acceptable scientific methods.
 - C. Other Factors.** Unavoidable legal barriers or restraints, including those arising from actions or regulations not under the control of the permittee (e.g. Lake Okeechobee Regulation schedule and WCA-3A Regulation schedule).
 - D. Emergency Conditions.** Discharges from STA-5/6 outflow structures or diversion of waters through G-407 as defined in the project description shall also be allowed in accordance with the emergency provisions of Chapter 373, F.S., or when water conditions within STA-5/6 may damage existing marsh vegetation. When a diversion event or series of proximal diversion events is anticipated due to aforementioned conditions, the permittee shall notify the Department of the anticipated event.

Conditions for Parameters Other than Total Phosphorus

22. Comparison of Outflows to Inflows. For all water quality parameters indicated in Table 2 of this permit other than total phosphorus, mercury, and dissolved oxygen, inflow and outflow samples collected at water quality monitoring sites shall be used to determine compliance with this specific condition. Compliance with this specific condition shall be evaluated as follows:

- A. If the annual average outflow concentration does not cause or contribute to violations of applicable Class III water quality standards, then the STA shall be deemed in compliance with this condition.
- B. If the annual average concentration at the outflow station causes or contributes to violations of applicable Class III water quality standards, but is of equal or better quality than, the annual average concentration at the inflow stations, then the STA shall be deemed in compliance with this condition.
- C. If the annual average concentration at the outflow causes or contributes to violations of applicable Class III water quality standards, and also exceeds the annual average concentration at the inflow station, then the STA shall be deemed out of compliance with this condition.

23. Dissolved Oxygen. The dissolved oxygen parameter shall meet the requirements set forth in the Everglades Marsh Dissolved Oxygen Site Specific Alternative Criteria (DO SSAC, Exhibit C). Compliance with the DO SSAC shall be evaluated annually using a statistical analysis to compare dissolved oxygen levels at the outflows to predicted model values. The specific methods for determining compliance are set forth in the DO SSAC which was adopted by Secretarial Order on January 26, 2004, and approved by the U.S. Environmental Protection Agency as a revision to the State of Florida's water quality standards on June 16, 2004.

24. Turbidity Monitoring. Effective means of turbidity control, such as, but not limited to, turbidity curtains or the discontinuance of flow activity to and from the affected cell(s), shall be employed during all construction or maintenance activities that may create turbidity so that turbidity shall not exceed 29 NTUs above background in the receiving waters. Turbidity controls and/or preventive operation procedures shall remain in place until all turbidity has subsided and the turbidity level at the point of discharge to receiving waters meets state standards.

Turbidity monitoring equipment and personnel trained to use it shall be available on site at all times during construction or maintenance activities that result in project-generated turbidity levels in the receiving water body. The permittee shall monitor turbidity levels at least twice daily at a minimum of 4 hours apart during these activities as follows:

A. Monitoring samples shall be taken at the following locations:

- 1. Background Sample(s): At affected cell/flowway inflow monitoring stations or at least 1000 feet upstream of any construction or maintenance activities that may generate turbidity within a canal or conveyance feature outside of the treatment facility.
- 2. Compliance Sample(s): Upstream of the affected cell/flowway outflow monitoring stations or no greater than 150 meters downstream of any construction or maintenance activities that may generate turbidity and within any visible plume.

B. Turbidity monitoring results shall be summarized quarterly (every three calendar months) by project component, beginning with the first calendar month in which construction or maintenance projects occur that could generate turbidity in receiving waters and continuing until all maintenance is completed. Monitoring data with supporting documents shall be submitted to the Department quarterly during the period of actual construction. The reports shall clearly identify the following information:

1. Permit number
2. Dates and time of sampling and analysis
3. A statement describing the methods used in collection, handling, storage and analysis of the samples
4. A clear description of project component activities taking place at the time of sampling
5. A map indicating the sampling locations
6. A statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data

C. Monitoring reports shall also include the following information for each sample that is taken:

1. Water depth
2. Depth of sample
3. Weather conditions
4. Water level stage and direction of flow

In the event that project-generated turbidity levels in receiving waters exceed 29 NTUs above background in the receiving waters, project component activities contributing to elevated turbidity levels shall immediately cease, and the Department shall be notified immediately. Work shall not resume until the work can be conducted in compliance with the aforementioned turbidity standard. In such cases where turbid conditions will be attributed to activities associated with dewatering, the District shall comply with the turbidity requirements set forth in the dewatering permit issued by the Department in lieu of the above requirements.

SPECIFIC CONDITIONS FOR MONITORING PROGRAM

In accordance with Subsection 373.4592(9)(h), F.S., the following monitoring conditions are intended to assess the water quality of the discharges of STA-5/6 and achievement of the permit effluent limit.

25. Monitoring Program. Monitoring performed in accordance with this permit shall include the vegetation and water quality and quantity parameters listed below and in Table 2.

- A. **Long-Term Plan Monitoring Program.** The permittee shall continue to implement the portions of the PDE component of the Long-Term Plan that are related to this permit. This program shall evaluate the effectiveness of the STAs in improving water quality and maintaining designated and existing beneficial uses of the receiving waters. Results of the monitoring efforts shall be reported as part of the annual South Florida Environmental Report (SFER).
1. **Aerial Vegetation Photographs and Mapping.** Aerial vegetation photographs and mapping shall be conducted in accordance with the PDE components of the Long-Term Plan.
 2. **Mercury Monitoring Program.** The permittee shall monitor mercury in accordance with the approved Mercury Monitoring Plan, which is hereby incorporated by reference and made a part of this permit as Exhibit D.
 3. **Routine Research and Monitoring Program.** The permittee shall conduct long term monitoring at the outflow monitoring stations, the inflow monitoring stations and report the results to the Department, in accordance with the annual reporting requirements of this permit. Data from this

program may provide the basis for additional permit compliance requirements. The permittee shall also conduct monitoring at additional stations as defined in the PDE element of the Long-Term Plan.

26. **Diversions.** The District shall notify the Department within 48 hours of any unanticipated diversions of flow through the G-407 gated structure. The District shall notify the Department as soon as practicable in advance of anticipated diversions, with the exception of routine maintenance activities. The submitted notification shall include a description of the circumstances related to the diversion and a projection of the anticipated duration of the diversion. All diversions occurring through the G-407 structure shall be monitored for the parameters Total Phosphorus and Calculated Flow listed in the Table 2 below. As soon as practicable after cessation of all diversions, the District shall submit a summary of the data collected from the table below, and identify the duration of the diversions.
27. **Inspection Reports.** The permittee shall submit annual inspection reports to the Department evaluating the integrity and functionality of the above-ground levees and structures, including pump stations. Annual inspection reports shall be prepared by field staff trained by a Professional Engineer and reviewed by the designated superintendent of the area prior to submittal to the Department. The cover letter of the inspection report should summarize site conditions and work that was completed in response to inadequacies that may have been found during regular inspections. Every five years, at a minimum, each permitted facility shall have an inspection by a Professional Engineer registered in the State of Florida, and the subsequent inspection report shall be signed and sealed by that Professional Engineer and submitted to the Department. A Professional Engineer or the District's Dam Safety Officer shall review and approve major repair plans or remedial work associated with inadequacies identified during routine and formal inspections. All reporting shall be submitted to the Department in March with the initial 5-year inspection report for STA 5-1, 5-2, 5-3, 6-1 and 6-2 due in 2012. The second 5-year inspection report for STA 5/6, including the Compartment C Build-out components, will be due in March 2017.
28. **Annual Monitoring Reports.** All studies, monitoring reports and technical submittals required by this permit shall be submitted to the Department in an "Annual Report". The annual reporting requirements under this permit shall be incorporated into the SFER and submitted to the Department no later than March 1 of each year. Each Annual Report shall present the information for the previous water year, from May 1 to April 30. If additional reporting modifications are required, and upon approval by the Department, the permittee may modify the Annual Report submission date to coincide with multiple reporting requirements and time periods needed for data acquisition and analysis. In addition to the permit number, and name of the permit administrator, the Annual Reports shall contain, at a minimum, the following information:
- A. **Quality Assurance and Quality Control.** Sampling and monitoring data shall be collected, analyzed, reported and retained in accordance with Chapter 62-160, F.A.C. Any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health (DOH) under Chapter 64E-1, F.A.C., where such certification is required by Rule 62-160.300, F.A.C. The laboratory must be certified for all specific method/ analyte combinations that are used to comply with this permit. The analytical method used shall be appropriate so as to determine if the sample complies with Class III surface water quality standards as specified in Chapter 62-302, F.A.C. All field activities including on-site tests and sample collection, whether performed by a laboratory or another organization, must follow all applicable procedures described in DEP-SOP-001/01 (February 1, 2004). Alternate field procedures and laboratory methods may be used if they have been approved according to the requirements of Rules 62-160.220, and 62-160.330, F.A.C.

B. Water Quality Data. Records of monitoring information shall include all applicable laboratory information specified in Rule 62-160.340(2), F.A.C. including the following:

1. Date, location, and time of sampling or measurements
2. Person responsible for performing the sampling or measurements
3. Dates analyses were performed or the appropriate code as required by Chapter 62-160, F.A.C.
4. Laboratory/ Person responsible for performing the analyses
5. Analytical techniques or methods used, including method detection limit (MDL) and practical quantification limits (PQL)
6. Results of such analyses, including appropriate data qualifiers, and all compounds detected
7. Depth of sampling
8. Flow conditions and weather conditions at time of sampling
9. Monthly flow volumes

In addition, the following records must be kept on file for reference during the duration of the project but are not required to be submitted in annual reports.

10. Field sampling and laboratory quality manuals
11. Sampling and analysis notes, as required under Ch. 62-160 FAC and NELAC Quality Systems (2003), respectively

C. Performance Evaluation. The Annual Report shall provide a performance evaluation for STA-5/6 containing the following information:

1. The operations status of the STA, stating whether the STA is in start-up, stabilization or routine operations
2. A comparison of inflow water quality data with outflow water quality data an appropriate statistical test with a 95% confidence interval and based on statistical distributional assumptions (e.g., Student's t-test or Mann-Whitney test);
3. A comparison of outflow phosphorus concentrations with the permit effluent limit for STA-5/6 and between the current reporting year and previous years
4. An assessment of the inflow volumes and phosphorus loads during the year relative to the anticipated operational envelope contained in the STA-5 and STA-6 Operations Plans.

Calculations for any reporting which require averaging of measurements shall be weighted by flow value.

D. Herbicide and Pesticide Tracking. The permittee shall provide in each annual report, information regarding the application of herbicides and pesticides used to exclude/eliminate undesirable vegetation and pests within STA-5/6. Such reporting shall include the names, concentrations, locations, and quantities of all herbicides and pesticides used, and a statement certifying that the permittee has adhered to manufacturer application guidelines.

E. Implementation Schedules. The Annual Report shall provide details on the following:

1. Implementation of projects affecting flows and loads to STA-5/6
2. Source Control implementation and optimization
3. STA design modifications
4. Improvements, enhancements, and strategies that have been initiated and/or completed within the previous year.

5. Any delays in the implementation of the improvements, enhancements, or strategies and the duration of the delays
 6. The operational status of the STA, stating whether the STA is in Start-up, Stabilization or Routine Operations. If the facility is in Stabilization operations during the reporting period, the report shall also include the date at which the facility entered the Stabilization Phase and the length of time it remained or is expected to remain in that phase
 7. Achievement of effluent limitations and/ or implementation of STA Recovery Plans
 8. Whether revisions and/or additions to the improvements, enhancements, and strategies are recommended
 9. Implementation of remedial measures in the event of non-compliance with permit conditions
 10. Whether the facility was operated within or outside of the operational envelope
29. **Removal of Parameters.** Upon demonstration that a specific parameter(s) is not present or is found consistently in compliance with Class III Water Quality Standards, the permittee may request a modification to the monitoring program as appropriate. A minimum of one year's worth of data, for those parameters being sampled quarterly or more frequently, will be required prior to the Department approving any modification to the monitoring program. Parameters sampled semi-annually or annually will be examined on a case-by-case basis. The Department may approve a reduction of the monitoring frequency or waive the monitoring requirement for parameters that consistently are reported as in compliance with state water quality standards.
30. **Addition of Parameters.** If the Department has reason to believe that additional parameters exist that may cause or contribute to water quality violations in the receiving waters, those parameters shall be added to the monitoring section of this permit as a permit modification.
31. **Public Health, Safety, or Welfare.** Pursuant to Subsection 373.4592(9)(h)3, F.S., discharges from STA-5/6 shall not pose a serious danger to the public health, safety, or welfare. If warranted by additional information, the Department may include additional monitoring or compliance conditions in this permit, in accordance with Subsections 373.4592(9)(g) and (11)(a) 2, F.S.
32. **Emergency Suspension of Sampling.** Under hurricane, tropical storm warnings, or other extreme weather conditions, the permittee's normal sampling schedule may be suspended if necessary. The permittee shall notify the Department of any anticipated sampling suspension associated with hurricanes, tropical storms, or other extreme weather events that may require deviation from the normal sampling schedule. Within 14 days following the cessation of emergency conditions, the permittee shall notify the Department of when normal sampling is expected to resume.

Renewals and Modifications

33. **Permit Renewal.** At least 60 days prior to the expiration of this permit, the permittee shall apply for renewal of this permit. Renewal may be for a period of up to 5 years in accordance with Subsection 373.4592(9)(f), F.S.
34. **Permit Modifications for STA Optimization.** Pursuant to Subsections 373.4592(3)(b)-(e) and (9)(j), F.S. and the PDE component of the Long-Term Plan, the permittee may submit proposed modifications to STA-5/6 through the adaptive implementation process identified in the Long-Term Plan. Within 30 days after receipt of such a submittal, the Department shall notify the permittee as to whether a permit modification is necessary. Minor modifications can be processed in letter format. The Department shall determine whether the modification is minor or major based on the nature and magnitude of the proposed modification and the potential for the modification to have environmental impacts that are significantly different from those previously considered by the Department for the activity, pursuant to Rule 62-343.100, F.A.C. The permittee shall be required to publish a notice of application pursuant to Subsections 373.413 (3) and (4), F.S., as

Permittee: South Florida Water Management District
Project: Stormwater Treatment Area 5/6
FDEP File No.: 0131842-009-EM
Page 23 of 28

applicable, for any requested permit modification determined to be major in accordance with this specific condition.

35. Department Review and Approval. Where conditions in this permit require Department review and approval of remedial actions or plan modifications to be implemented pursuant to this permit, the Department will consult with the permittee to ascertain whether mutual agreement can be reached. If mutual agreement on the remedial actions or plan modifications cannot be reached, the action of the Department will be deemed final agency action and will be subject to judicial or administrative review, as appropriate.

MONITORING REQUIRED:

Key for Table 1

Sample Type: G = Grab sample
 FPC = Flow proportionate composite sample
 INSITU = In Situ field sample
 CAL = Calculated parameter
 PR = Pump record
 RG = Rain Gauge

Sample Locations: Inflow Sites = STA-5: G-342A-D, G-342E&F and G-351
 STA-6: G-396 B and G-353B
 Outflow Sites = STA-5: G-344A-D; G-344F; G-344H and G-344J
 STA-6: G-352B, G-354C and G-393B
 Diversion Site = G-407

Sample Frequency: W = Weekly
 BI-W = Once every other week (26 samplings per year)
 Q = Quarterly
 DAV = Daily averages of continuous sampling
 DAC = Daily accumulation of continuous sampling

DISCHARGE LIMITATIONS:

Table 1: Discharge Limitations and Associated Monitoring Requirements

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Daily Minimum	Daily Maximum	Annual Average	Monitoring Frequency	Sample Type	Sample Point
Phosphorus, Total (as P) (ppb)	--	--	10 ppb ^{1,2}	Weekly	7-day flow proportioned composite	outflow
Phosphorus, Total (as P) (ppb)	--	--	Report ¹	Weekly	7-day flow proportioned composite	inflow
Oxygen, Dissolved (DO) (mg/L)	Report See Specific Condition 23			Weekly	Grab (Meter)	outflow
Oxygen, Dissolved (DO) (mg/L)	Report See Specific Condition 23			Weekly	Grab (Meter)	inflow
Flow (cfs) --	Report	See Specific Condition 17 Report	See Specific Condition 17	Continuous	Recorder	Inflow/ outflow

¹ Monitoring results for this parameter shall be reported as a monthly average and as an annual average. The "monthly average" is a flow-weighted mean of the weekly effluent samples. The "annual average" shall be computed for each water year (May-April) and is equal to the flow-weighted mean concentration for the water year.

² The 10 ppb effluent limit represents the phosphorus criterion set forth in Rule 62-302.540(4)(a), F.A.C. and is consistent with Section 301(b)(1)(C) of the CWA. A water quality based effluent limitation (WQBEL) for phosphorus will be established in accordance with Rule 62-650 F.A.C. and Section 373.4592 Florida Statutes by December 31, 2010 and will be a major permit modification. It is recognized that the ultimate WQBEL to be developed may be higher than a flow-weighted mean of 10 ppb. The antibacksliding provisions of the CWA and NPDES regulations do not apply to an effluent limitation with a delayed compliance date, until the date of compliance. In this case, restrictions on backsliding would not apply to the 10 ppb permit effluent limit until the established WQBEL takes effect at the end of the compliance schedule.

Table 2: STA-5/6 Routine Monitoring Program				
PARAMETER	UNITS	SAMPLE TYPE	SAMPLING FREQUENCY	SAMPLING LOCATION
Dissolved Oxygen	mg/l	INSITU	W	Inflow and outflow
Mercury	See attached Exhibit D Mercury Monitoring Program			
pH	SU	INSITU	W	Inflow and outflow
Specific Conductance	µmhos	INSITU	W	Inflow and outflow
Temperature	Deg C	INSITU	W	Inflow and outflow
Total Phosphorus (water) ³	mg/l	FPC/G	W	Inflow, outflow and diversion
Total Kjeldahl Nitrogen (TKN) ⁴	mg/l	G	BI-W	Inflow and outflow
Turbidity	NTU	G	See Specific Condition 24	Inflow and outflow
Nitrate + Nitrite	mg/l	G	BI-W	Inflow and outflow
Sulfate	mg/l	G	BI-W	Inflow and outflow
Flow	CFS	PR	DAV	Inflow and outflow
Flow ⁵	CFS	CAL	DAV	Inflow, outflow and diversion
Rainfall Volume	in	RG	DAC	Rainfall Sampling Station

³ During diversions, Grab sampling will be conducted at G-407, see Specific Condition 26

⁴ Total Nitrogen (TN) is calculated from TKN and nitrate-nitrite values (TN=(nitrate/nitrite) + (TKN)).

⁵ During diversions, G-407 will be monitored for flow, see Specific Condition 26

Permittee: South Florida Water Management District
Project: Stormwater Treatment Area 5/6
FDEP File No.: 0131842-009-EM
Page 26 of 28

DONE AND ORDERED on this 29th day of January, 2009 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Jerry Brooks, Director
Division of Environmental Assessment and Restoration

JB/em/swf/kje

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52(7), F.S., with the designated deputy clerk, receipt of which is hereby acknowledged.

 1/29/09

Clerk Date

ELECTRONIC COPIES FURNISHED TO:

PARTIES REQUESTING NOTICE:

Miccosukee Tribe of Indians of Florida, c/o Dexter Lehtinen, Esq.
Miccosukee Tribe of Indians of Florida, c/o Kelly Brooks, Esq.
United States Sugar Corporation, c/o Bubba Wade
Seminole Tribe of Indians of Florida, c/o Stephen A. Walker, Esq.
Sugar Cane Growers Cooperative, Roth Farms, Inc., and Wedgeworth Farms, Inc.,
c/o William H. Green, Esq.
Keith Saxe, Esq., U. S. Department of Justice
Jay Gelderman, Esq., U.S. Department of Justice
Michael Stevens, U.S. Department of the Interior
Jeffrey J. Ward, Sugar Cane Growers Cooperative
Philip S. Parsons, Landers & Parsons
Helen Hickman, Brown & Caldwell
Tom MacVicar, MacVicar, Frederico, & Lamb
Charles Lee, Florida Audubon Society
Leslie Feliciano, Katz Barron

ADDITIONAL COPIES FURNISHED TO:

Jon Steverson, Governor's Office
Jeff Koons, Commissioner, Palm Beach County
W.T. Maddox, Jr., Commissioner, Hendry County
Stacy Ritter, Commissioner, Broward County
Pam Repp, U.S. Fish and Wildlife Service
Sharon Kocis, U.S. Fish and Wildlife Service

Permittee: South Florida Water Management District
Project: Stormwater Treatment Area 5/6
FDEP File No.: 0131842-009-EM
Page 27 of 28

Jim Quinn, FL. Dept. of Community Affairs
Charles Oravetz, Nat. Marine Fisheries Service
Laura Kammerer, FL. Dept. of State- Historical Resources
Don Klima, U.S. Advisory Council on Historic Preservation
Johanna Mattson, Dept. of Community Affairs
Ray Eubanks, Dept. of Community Affairs
Laura Kammerer, Dept. of State, Div. of Historical Resources
Ray Scott, Dept. of Agriculture and Consumer Services
Rebecca Elliot, Dept. of Agriculture and Consumer Services
John Childe, Friends of the Everglades
David Reiner, Friends of the Everglades
Col. Paul Grosskruger, USACOE, Jacksonville
Lloyd Pike, Esq., USACOE, Jacksonville
Philip Mancusi-Ungaro, Esq., USEPA, Atlanta
Roosevelt Childress, USEPA, Atlanta
Gina Fonzi, USEPA, Atlanta
Dan Scheidt, USEPA, Athens
Eric Hughes, USEPA, Jacksonville
Janet Bussell, The Everglades Foundation
Sylvia Pelizza, Loxahatchee National Wildlife Refuge
Mark Musaus, Loxahatchee National Wildlife Refuge
Mike Zimmerman, Everglades National Park
Mary Ann Poole, Florida Fish and Wildlife Conservation Commission
Joe Walsh, Florida Fish and Wildlife Conservation Commission, Vero Beach
Mike Anderson, Florida Fish and Wildlife Conservation Commission, West Palm Beach
Sheryl Wood, SFWMD, West Palm Beach
Gary Goforth, Gary Goforth Inc., Stuart
Joe Albers, SFWMD, West Palm
Ken Ammon, SFWMD, West Palm
Terrie Bates, SFWMD West Palm
Ron Bearzotti, SFWMD West Palm
Kirk Burns, SFWMD West Palm
Linda Crean, SFWMD West Palm
Deb Drum, SFWMD, West Palm
George Hwa, SFWMD, West Palm
Nicole Howard, SFWMD, West Palm
Delia Ivanoff, SFWMD, West Palm
Julianne LaRock, SFWMD West Palm
Neil Larson, SWMD, West Palm
Pam Lehr, SFWMD, West Palm
Linda Lindstrom, SFWMD West Palm
Paul Linton, SFWMD, West Palm
Jeremy McBryan, SFWMD, West Palm
Chip Merriam, SFWMD West Palm
Tracey Piccone, SFWMD West Palm
Kathy Pietro, SFWMD West Palm
Dean Powell, SFWMD West Palm
Garth Redfield, SFWMD, West Palm
Sherry Scott, SFWMD West Palm
Sean Sculley, SFWMD, West Palm
Susan Sylvester, SFWMD, West Palm
Stuart VanHorn, SFWMD, West Palm

Permittee: South Florida Water Management District
Project: Stormwater Treatment Area 5/6
FDEP File No.: 0131842-009-EM
Page 28 of 28

Georgia Vince, SFWMD, West Palm
Eric Summa, USACE
Jim McAdams, USACE, Jacksonville
Alisa Zarbo, USACE, Jacksonville
Lauren Aiello, FDEP
Brian Dougherty, FDEP
Judy Warrick, FDEP, Division of State Lands
Steve Watson, FDEP Division of Recreation and Parks
Tracy Robb, FDEP, West Palm Beach
Greg Knecht, FDEP, Tallahassee
Kenneth Hayman, FDEP, Tallahassee
Daryll Joyner, FDEP, Tallahassee
Ernie Marks, FDEP, Tallahassee
Frank Nearhoof, FDEP, Tallahassee
Stacey Feken, FDEP, Tallahassee
Tom Atkeson, FDEP, Tallahassee
John Outland, FDEP, Tallahassee
Chad Kennedy, FDEP, Tallahassee
Dianne Hughes, FDEP, Tallahassee
Inger Hansen, FDEP, West Palm Beach
Doreen Irwin, FDEP, Tallahassee
Kelli Edson, FDEP, Tallahassee