

Chapter 4: Northern Everglades and Estuaries Protection Program Projects

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ANNUAL REPORTS

For the reporting period, annual reports for Northern Everglades and Estuaries Protection Program (NEEPP) projects are presented as appendices to this chapter, as follows:

- Appendix 4-1: Annual Permit Report for Lake Okeechobee Water Control Structures Operation
- Appendix 4-2: Annual Permit Report for the Taylor Creek Stormwater Treatment Area

PERMIT INFORMATION UPDATES

GRASSY ISLAND HYBRID WETLAND TREATMENT TECHNOLOGY PROJECT

FDEP Permit 0259591

Permit Title: Grassy Island Hybrid Wetland Treatment Technology

Permit Administrator: Permit Acquisition and Compliance Section, Office of Everglades Policy and Coordination

Original Permit Number: 0259591-002

Permit Modification Numbers (in order of issuance):

0259591-003

0259591-004

0259591-005

Specific Condition Requiring Annual Report: 27

Original Issue Date: December 29, 2010

Expiration Date: December 29, 2015

Reporting Period: July 1, 2012 to June 30, 2013 (based on FDACS contract deliverable schedule)

Report Prepared By: Laura Reilly and Orlando Diaz

Status

Construction of Phase II (20 cfs) was completed in June 2012. The Phase III (30 cfs) project build-out has been permitted, and completed in June 2013. The as-builts for Phase II were submitted to the Department on August 27, 2013.

The Phase II operation permit (20 cfs) was issued in November 2012, and was initiated in December 2012. Construction of Phase III also began in December 2012. Construction activities limited Phase II operation to 15 cfs.

All monitoring and reporting was completed in accordance with the permit, and resulting data and information will be included in the annual report. The District and Watershed Technologies, LLC, are co-permittees for this project. All monitoring and reporting was conducted by Watershed Technologies under a contract administered through the Florida Department of Agriculture and Consumer Services (FDACS).

Further details will be available in the annual report, *Implementation of Hybrid Wetland Treatment Technology in the Northern Everglades Watershed: Chapter I Technical Report (Contract # 018907, Watershed Technologies, LLC)*, which will be submitted to the FDEP for permitting and interagency review when it is available, which is scheduled for August 2013. All reports are available upon request.

Problems Encountered

No problems were encountered.

Actions to Address Problems

None were needed.

LAKESIDE RANCH STORMWATER TREATMENT AREA – PHASE 1 (STA NORTH)

FDEP Permit 0287326

Permit Title: Lakeside Ranch Stormwater Treatment Area – Phase 1 (STA North)

Permit Administrator: Permit Acquisition and Compliance Section, Office of Everglades Policy and Coordination

Original Permit Number: 0287326-001

Permit Modification Numbers (in order of issuance):

0287326-002

0287326-004

0287326-005

0287326-006

0287326-003-GL

Specific Condition Requiring Annual Report: 32

Original Issue Date: January 21, 2009 (Phase I)

Renewal Date: May 4, 2012 (Major Modification for Phase II)

Expiration Date: May 4, 2017

Reporting Period: May 1, 2012 to April 30, 2013

Report Prepared By: Leslye Waugh

Status

The S-650 pump station was completed in July 2012. The as-built certification form and record drawings were submitted on October 10, 2012. A permit renewal and authorization (0287326-003-GL) of the Lakeside Ranch Stormwater Treatment Area (South) Phase II was issued by the FDEP on May 4, 2012.

Start-up monitoring was initiated on August 26, 2012, and the subsequent monitoring report was submitted to DEP on February 27, 2013. FDEP approved the operational (flow-through) and stabilization phase of the Lakeside Ranch STA Phase I on March 29, 2013.

Problems Encountered

During Tropical Storm Isaac in August 2012, a 100-year storm event, heavy rains resulted in the washout of a 48-inch pipe culvert located in the Interim Outfall Canal. Because the Interim Outfall Canal was a temporary feature, the pipe culvert had only been designed to withstand a 25-year storm event.

Due to the lack of vegetation to stabilize the soils, washouts occurred at the southeast corner of Cell 3 during construction of the STA and testing of the pump station.

Actions to Address Problems

Because of the culvert washout, the District redesigned the discharge feature to a riprap weir to prevent future washouts. Revised as-built drawings were submitted to FDEP on February 21, 2013.

The washouts in Cell 3 will be restored to original design elevations, and the graded area will be planted with giant bulrush to stabilize soils and provide for biologically based water quality treatment.

LAKESIDE RANCH STORMWATER TREATMENT AREA – PHASE 1

USACE Permit SAJ-2008-2003 (IP-AAZ)

Permit Title: Lakeside Ranch Stormwater Treatment Area – Phase 1

Permit Administrator: Permit Acquisition and Compliance Section, Office of Everglades Policy and Coordination

Original Permit Number: SAJ-2008-2003 (IP-AAZ)

Permit Modification Numbers (in order of issuance):
None

Specific Condition Requiring Annual Report: 1

Original Issue Date: March 12, 2009

Expiration Date: March 12, 2014

Reporting Period: May 1, 2012 to April 30, 2013

Report Prepared By: Leslye Waugh

Status

The S-650 pump station was completed in July 2012. The as-built certification form and record drawings were submitted on October 10, 2012. Monitoring events for the onsite preserve mitigation area were completed in May 2012 and October 2012. Monitoring continued at the off-site mitigation area in Nubbin Slough. Exotic vegetation was treated in the wetlands of the preservation area in March and April 2013. Associated reports are available upon request.

Problems Encountered

During Tropical Storm Isaac in August 2012, a 100-year storm event, heavy rains resulted in the washout of a 48-inch pipe culvert located in the Interim Outfall Canal. Because the Interim Outfall Canal was a temporary feature, the pipe culvert had only been designed to withstand a 25-year storm event.

Actions to Address Problems

Because of the culvert washout, the District redesigned the discharge feature to a riprap weir to prevent future washouts. Revised as-built drawings were submitted to the USACE in July 2013.

LEMKIN CREEK HYBRID WETLAND TREATMENT TECHNOLOGY PROJECT

FDEP Permit 47-0254574

Permit Title: Lemkin Creek HWTT

Permit Administrator: Permit Acquisition and Compliance Section, Office of Everglades Policy and Coordination

Original Permit Number: 47-0254574-001-GL

Permit Modification Numbers (in order of issuance):

47-0254574-002-GL

47-0254574-003-GL

Specific Condition Requiring Annual Report: 23

Original Issue Date: May 5, 2009

Expiration Date: May 5, 2014

Reporting Period: July 1, 2012 to June 30, 2013 (based on FDACS contract deliverable schedule)

Report Prepared By: John Shaffer and Orlando Diaz

Status

Flow-through operations continued throughout the reporting period. All monitoring and reporting was completed in accordance with the permit, and resulting data and information were included in the annual report. The District and Watershed Technologies, LLC, are co-permittees for this project. All monitoring and reporting was conducted by Watershed Technologies under a contract administered through the Florida Department of Agriculture and Consumer Services (FDACS).

The annual report covering the operational period (July 2012 - June 2013), *Implementation of Hybrid Wetland Treatment Technology in the Northern Everglades Watershed: Chapter I Technical Report (FDACS Contract #018907, Watershed Technologies, LLC, August 2013)*, is anticipated to be submitted to the FDEP for permitting and interagency review in August 2013. All reports and data are available upon request.

Problems Encountered

No problems were encountered.

Actions to Address Problems

None were needed.

NUBBIN SLOUGH STORMWATER TREATMENT AREA

FDEP Permit 0194483

Permit Title: Nubbin Slough Stormwater Treatment Area

Permit Administrator: Permit Acquisition & Compliance Section, Office of Everglades Policy and Coordination

Original Permit Number: 0194483-005-GL

Permit Modification Numbers (in order of issuance):
0194483-012-GL (*permit renewal*)

Specific Condition Requiring Annual Report: 24

Original Issue Date: March 28, 2007

Renewal Date: October 24, 2012

Expiration Date: October 24, 2017

Reporting Period: May 1, 2012 to April 30, 2013

Report Prepared By: Laura Reilly

Status

The District is not yet authorized to operate the Nubbin Slough STA facility until the project is officially transferred from the U.S. Army Corps of Engineers (USACE). An application to renew the District's operation permit has been submitted to the FDEP, deemed complete, and was issued on October 24, 2012.

Problems Encountered

The District has not proceeded with any of the operational activities specified in this permit because responsibility for the project has not yet been transferred from the USACE to the District. Also, an annual report for the Nubbin Slough STA has not been prepared because the facility has been inoperable. This is due to a series of mechanical issues uncovered during pump tests, and, more recently, to the aggradations of sediment in the pump basin.

Actions to Address Problems

The USACE provided specification and authorization to the District to perform repairs for the additional deficiencies identified in 2012. The District was able to complete repairs to the pump station bypass weir, and grouted two of the drainage pipes underneath the levees. However, high groundwater has impeded progress in locating and grouting the remaining pipes, which number between 12 and 18, under the STA Cell 1 levee. Work will not be able to resume until groundwater levels recede.