

Chapter 4: Northern Everglades and Estuaries Protection Program Projects

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ANNUAL REPORTS

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

- 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 No. 0259591-002 (NEEPP)

Permit Title: Grassy Island Hybrid Wetland Treatment Technology

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

Permit Modification Number: 0259591-003

Specific Condition Requiring Annual Report: 27

Issue Date: December 29, 2010

Expiration Date: December 29, 2015

Reporting Period: May 1, 2011 to April 30, 2012

Report Prepared By: Laura Reilly and Orlando Diaz

Status

Phase I (10 cfs) construction began on Grassy Island in January 2011. The construction completion schedule was provided to the Florida Department of Environmental Protection (FDEP) on March 9, 2011 (Specific Condition 5). In support of the Grassy Island Hybrid Wetland Treatment Technology (HWTT) system deployment, a mesocosm test bed facility was constructed at this site during mid-2010 to characterize the effectiveness of the HWTT system for treating Taylor Creek waters. Operation of the mesocosms was initiated in May 2010 (start-up

phase) and concluded in early March 2011. Construction of Phase II (20 cfs) and Phase III (30 cfs) project build-out has been permitted and is currently underway.

Further details are available in the annual report titled *Implementation of Hybrid Wetland Treatment Technology in the Northern Everglades Watershed: Chapter I Technical Report (Contract # 015853, Watershed Technologies, LLC, Draft, July 28, 2011)*, which was submitted to the FDEP for permitting and interagency review on August 2, 2011. 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

FDEP Permit No. 0287326-001-GL (NEEPP)

Permit Title: Lakeside Ranch Stormwater Treatment Area – Phase 1

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

Permit Modification Numbers: 0287326-002, 0287326-004, 0287326-005, and 0287326-006

Specific Condition Requiring Annual Report: 32

Issue Date: January 21, 2009

Expiration Date: January 21, 2014

Reporting Period: May 1, 2011 to April 30, 2012

Report Prepared By: John Shaffer

Status

Construction continued in concert with the approved schedule. The stormwater treatment area was completed on March 23, 2012. The pump station, S-650, is anticipated to be complete in July 2012. Exotic vegetation was treated in the wetlands of the preservation area in early August 2011, and the subsequent semiannual monitoring event was completed in August 2011. Semiannual monitoring continued at the off-site mitigation area in Nubbin Slough. Monitoring events were conducted in February 2011, and August 2011. These reports are available upon request.

An application for a permit modification is under review by the FDEP, and includes a request for authorization of the Lakeside Ranch Stormwater Treatment Area (South) Phase II.

Problems Encountered

The historic cattle dipping vat (CDV) located at the southeast corner of the Phase 1 footprint is a known contaminated site. Residual arsenic levels necessitated a design change to relocate the north discharge canal away from the contaminated area.

Actions to Address Problems

The Lake Okeechobee Protection Plan permit modification was issued on July 27, 2010, for approved relocation of the northern discharge canal. Groundwater level and arsenic monitoring was conducted from June 2010, through June 2011, during dewatering activities within 2,000 feet of the CDV. On June 24, 2011, the FDEP authorized the cessation of groundwater monitoring. Based on the monitoring data, the construction activities did not appear to be unduly affecting the arsenic plume near the CDV.

LAKESIDE RANCH STORMWATER TREATMENT AREA – PHASE 1

USACE Permit No. 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

Permit Modification Number: Not applicable

Specific Condition Requiring Annual Report: 1

Issue Date: March 12, 2009

Expiration Date: March 12, 2014

Reporting Period: May 1, 2011 to April 30, 2012

Report Prepared By: John Shaffer

Status

See the status for the Lakeside Ranch Stormwater Treatment Area – Phase 1 (FDEP permit) provided above.

Problems Encountered

No problems were encountered.

Actions to Address Problems

None were needed.

LEMKIN CREEK HYBRID WETLAND TREATMENT TECHNOLOGY PROJECT

FDEP Permit No. 47-0254574-002 GL (NEEPP)

Permit Title: Lemkin Creek HWTT

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

Permit Modification Number: 47-0254574-002 GL and 47-0254574-003

Specific Condition Requiring Annual Report: 23

Issue Date: May 5, 2009

Expiration Date: May 5, 2014

Reporting Period: March 1, 2011 to March 1, 2012

Report Prepared By: Orlando Diaz and John Shaffer

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).

A semi-annual report covering the operational period (March 2011 - September 2011), *Implementation of Hybrid Wetland Technology in the Northern Everglades Watershed: Chapter I Technical Report (FDACS Contract # 016939, Watershed Technologies, LLC, Draft March 16, 2012)*, has been received by the SFWMD.

The annual report covering the operational period (March 2011 through March 2012), *Implementation of Hybrid Wetland Treatment Technology in the Northern Everglades Watershed: Chapter I Technical Report (FDACS Contract # 017939, Watershed Technologies, LLC, Draft, July, 2012)*, is anticipated to be submitted to the FDEP for permitting and interagency review in July 2012. 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 No. 0194483-005-GL

Permit Title: Nubbin Slough Stormwater Treatment Area

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

Permit Modification Number: N/A

Specific Condition Requiring Annual Report: 31

Issue Date: March 28, 2007

Expiration Date: March 27, 2012

Reporting Period: May 1, 2011 to April 30, 2012

Report Prepared By: Laura Reilly

Status

The District is not authorized to operate the Nubbin Slough STA facility until the project is officially transferred from the U.S. Army Corps of Engineers (USACE) to the District. An application to renew the District's operation permit has been submitted to the Department, deemed complete, and is being processed.

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, due to the aggradations of sediment in the pump basin.

Actions to Address Problems

The USACE is currently working on design refinements to resolve the operational issues.