

# Fact Sheet – Restoring Everglades Water Quality

June 13, 2012

## 1. Summary

On June 6, 2012, the U.S. Environmental Protection Agency (EPA) received a submission from the State of Florida to address the water quality requirements of the federal Clean Water Act (CWA) for waters flowing into the Everglades. On June 13, Gwen Keyes-Fleming, the EPA Region 4 Regional Administrator, informed the Secretary of the Florida Department of Environmental Protection (FDEP) that the submission addresses EPA objections to prior draft water-discharge permits submitted by the FDEP, meets the water quality goals in our September 3, 2010 Amended Determination (AD) and establishes an enforceable framework for ensuring compliance with the Clean Water Act (CWA) and its applicable regulations. EPA and FDEP have also entered into an agreement, known as the Framework Agreement, that establishes additional understandings and commitments of the two agencies to assure the State's submission proceeds without unnecessary delay and the water quality requirements of the CWA are met as soon as practicable.

The State's submission includes an FDEP water-discharge permit issued to the South Florida Water Management District (SFWMD) under the CWA and an enforcement consent order between the two state agencies. The submission contains a suite of projects, to be built and implemented by the South SFWMD that will reduce phosphorus discharges into the Everglades to meet the water quality requirements of the CWA. The State submission will require more than \$875 million in investment to construct these projects. EPA retains authority to enforce the permit requirements and will play a strong oversight role under the Framework Agreement between EPA and FDEP.

The following documents are included in the State's submission:

Draft permit and exhibits - The draft National Pollutant Discharge Elimination System (NPDES) permit and exhibits provide the terms of the authorization for the discharge of surface water from five (5) Stormwater Treatment Areas (STAs) into the Everglades.

Consent Order – The consent order between FDEP and the SFWMD includes a suite of corrective actions and deadlines to be implemented by the SFWMD to achieve the CWA discharge limit for phosphorus. It is not expected that the discharges from the marsh treatment system will achieve the discharge limit until the suite of corrective actions have been implemented.

Framework Agreement – The Water Quality Restoration Framework Agreement details the additional understandings and commitments between EPA and FDEP regarding FDEP and EPA actions to assure the state’s proposal proceeds without unnecessary delay.

Restoration Strategies Document– FDEP provided EPA with a technical support document that describes the corrective actions to be taken and the underlying science upon which the corrective actions are based.

In addition, an on-going collaborative science process among the State, District, and Federal governments will monitor the progress of water quality improvements, conduct ongoing evaluations of phosphorus treatment performance, and identify opportunities for mid-course improvements based on evolving science.

## 2. Background

*Phosphorus Pollution in the Everglades:* Phosphorus is a nutrient that comes from both natural sources and fertilizers. Too much phosphorous causes chemical and biological changes that degrade natural systems, such as wetlands, lakes and coastal areas. The Everglades ecosystem is especially sensitive to phosphorus pollution. Excess phosphorus is being released into the Everglades as runoff primarily from farms to the north.

*Litigation and Subsequent EPA Action:* In response to an April 14, 2010 order by Judge Alan Gold of the U.S. District Court of the Southern District of Florida, EPA produced a plan on September 3, 2010, known as the “Amended Determination,” that established a blueprint for Florida on how to achieve the state’s water quality standard for total phosphorus in water delivered to the Everglades. EPA also provided a technical recommendation for how clean the discharges into the Everglades need to be (a water quality based effluent limit, or WQBEL<sup>1</sup>).

The Amended Determination gave Florida the opportunity to submit an alternative plan to EPA, as long as that plan was scientifically defensible and achieved Clean Water Act requirements as soon as practicable. On October 6, 2011, Florida provided an alternative plan to EPA that identified a suite of projects to be built and implemented by the SFWMD in order to achieve the total phosphorus clean water standard in water delivered to the Everglades. EPA, FDEP and

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<sup>1</sup> FDEP’s plan is based on an alternative water quality based effluent limit (WQBEL) that EPA has found to be scientifically defensible. The WQBEL limits total phosphorus in discharges from the STAs as follows: The discharge must not exceed: (1) 13 parts per billion (ppb) measured as an annual flow-weighted mean (FWM) in more than 3 years out of 5 on a rolling annual basis; and (2) 19 ppb measured as an annual flow-weighted mean in any year.

SFWMD then engaged in extensive discussions about the State's plan in which EPA recommended enhanced water treatment projects and other features to improve water quality protections and the parties developed an enforceable framework of permits and State orders to achieve the phosphorous reductions.

EPA reviewed the NPDES permit submitted by FDEP for the five (5) STAs and on June 27, 2011 and objected to the permit on four issues; the inclusion of a compliance schedule, the management of water that does not enter the treatment facility, and specific monitoring requirements. Florida requested a hearing on the objections, and that hearing was held on March 13, 2012. EPA reviewed the written and oral comments and on May 7, 2012, EPA reaffirmed its objections which triggered a 30 day window for Florida to submit permits revised to meet our objections.

On June 6, 2012, the EPA received a revised NPDES permit, a proposed enforcement consent order and supporting materials from Florida for the STAs that are operated by the SFWMD. Based on our review, the revised permit addresses EPA's objections to prior permits submitted to EPA. EPA also reviewed the proposed consent order to confirm that it does not change obligations under the permit as revised to meet the objections.

### 3. Treatment Projects

The projects in the State's submission include an additional 7,300 acres of wetland treatment systems (STAs) that filter and clean the water before release to the Everglades. The plan also includes new components, called Flow Equalization Basins (FEBs), that will store approximately 110,000 acre-ft of water and slowly release the water to the wetland treatment systems. There are currently about 60,000 acres of these wetland treatment systems already in place or under construction. The new plan represents an 11% increase in treatment size above the current 60,000 treatment acres with significantly improved operations through the use of FEBs. The FEB's will improve operations of the STAs by stabilizing the flow of water through the systems during the year.

The State's submission specifies dates for achieving the State's standards for water discharges from the STA's. For water discharged into the central part of the Everglades which flows toward Everglades National Park, the date is 2018; for water discharged into the Arthur R. Marshall Loxahatchee National Wildlife Refuge in the eastern part of the Everglades, the date is 2024; and for water discharged into the western part of the Everglades near the federal reservations of the Seminole Tribe of Indians and the Miccosukee Tribe of Indians of Florida, the date is 2025. EPA is hopeful the timetable can be accelerated if circumstances and resources permit. The State submission will enable on-the-ground work to begin as soon as possible to improve water quality in the Everglades.

#### 4. Accountability Framework

The FDEP water discharge permit that will be issued to the SFWMD will incorporate a limit for total phosphorus (called a Water Quality Based Effluent Limit, or WQBEL) and require the SFWMD to meet it, upon issuance of a final permit. Because it is impossible to meet the limit immediately the commitment to build and implement these water quality improvement projects will be formalized in an enforcement order between FDEP and SFWMD. The permit will incorporate the detailed project descriptions and related schedules contained in the enforcement order which will enable EPA to take enforcement action if the schedule is not met, the projects are not built as prescribed, or other conditions of the permit are violated.

To memorialize the roles of the agencies, FDEP and EPA signed the Everglades Water Quality Restoration Framework Agreement. This agreement identifies the specific roles of the two agencies during the issuance of the permit and consent order, and during implementation of the corrective actions. The agreement also establishes a commitment for the EPA Regional Administrator and the FDEP Secretary to meet every six months to review the status and the effectiveness of the restoration projects, and to resolve any issues that arise from the ongoing science review to assure that timely progress is made in meeting clean water standards.

A cornerstone of this restoration is the ongoing monitoring and reporting requirements in the permit and consent order. The consent order would include a specific suite of monitoring provisions to require reporting to FDEP and EPA of weekly STA performance data, and total phosphorus levels twice a year while the proposed consent order is in effect, as well as downstream monitoring to assess the effect of the discharges on the Everglades. Once the corrective actions under the consent order are complete, the permit's monitoring provisions, which include both midyear and full year assessments of compliance with the WQBEL, would continue to provide necessary monitoring. The results of this monitoring will be reported to FDEP and EPA and if the levels identified in the WQBEL are exceeded, the conditions responsible for the observed concentrations will be identified and specific strategies and milestones to address the exceedances will be developed and implemented.

#### 5. Summary

The Obama Administration is firmly committed to protecting and restoring the Everglades, an extraordinary ecosystem and international treasure. The Administration has reinvigorated Federal leadership in Everglades restoration, investing more than \$1.4 billion to jump start construction projects and protect essential habitat on working lands. In partnership with the State of Florida, progress includes restoring more than 3,000 acres of the floodplains along the Kissimmee River,

breaking ground on the first mile of bridging for the Tamiami Trail and starting implementation of key components of the Comprehensive Everglades Restoration Plan.

This effort puts the State on the long-awaited path to achieve the final levels of phosphorus removal that will protect the Everglades, paving the way for other major restoration projects that depend on clean water.

6. For More Information

Contact: EPA Region 4 Office of External Affairs (404) 562-8327. To view submission documents go to <http://depnewsroom.wordpress.com/hot-topics/everglades/>