



The Lake Okeechobee Protection Plan 2011 Update (LOPP) should be a list of policy and spending recommendations that will guide the Legislature and agencies in crafting the laws, rules and budgets necessary to meet the plan's goals. The plan should focus on bold and specific policies and spending. The following are suggestions regarding source control, water quality treatment, and dispersed water management (DWM).

Improving Water Quality through Strengthened Source Controls

Improving water quality in the Northern Everglades by 2015 is mandated in the Lake Okeechobee Protection Act and is an essential priority for Everglades restoration. Source control offers the least expensive solution to improve water quality in the Northern Everglades.

Nutrient Source Control: LOPP should refocus on reducing quantities of nutrients imported into the Lake Okeechobee watershed. Nutrient use must be balanced in individual basins as well as watershed-wide. Assumptions that phosphorus will be assimilated into the landscape and tributaries should be reconsidered. Best Management Practices (BMPs) should focus on achieving water quality goals rather than agronomic rates of fertilizer use. The LOPP should provide that BMPs generally preclude phosphorus fertilizer application to pastures, and preclude the addition of phosphorus to feed in cow-calf operations and soil amendments. Funds should be allocated to the FY 2011-12 budget to support the development, rulemaking, and implementation of heightened source controls.

Biosolid Controls: LOPP revisions should include a provision for South Florida Water Management District (SFWMD) efforts to aid in the enforcement of the 2007 law effectively prohibiting land application of Class B biosolids, and should include mechanisms to assure that Class AA biosolids are only utilized at appropriate levels on crops specifically requiring fertilization. Class AA material should be phased out within the Okeechobee, St. Lucie, and Caloosahatchee basins. BMPs should strongly discourage biosolid application in any form. Wastewater plant operators shipping AA materials to sites impacting the Northern Everglades should document the agronomic soil and plant tissue tests for phosphorus and nitrogen to indicate the need for the application of that fertilizer.

Controlling Urban Nutrient Sources: LOPP revisions should reaffirm the need for new watershed, basin or statewide stormwater rules. Environmental Resource Permit (ERP) rules should be revised to require developers to demonstrate that total nitrogen and total phosphorus loading in stormwater does not exceed pre-development natural conditions. Monitoring of phosphorus and nitrogen should become an ERP permit condition in the Okeechobee basin. ERP rules specific to the basin should be revised to require "low impact development" techniques and use of "Florida Friendly" native landscaping that generally avoids the need for supplemental irrigation. Finally, the use of reclaimed water should be discouraged for residential and landscape irrigation, and only utilized if there is an affirmative demonstration that the wastewater will not add nutrients to downstream waters.





Set Clear Targets for the Use of Dispersed Water Management

LOPP revisions should substantially increase the use of DWM using Payments for Environmental Services (PES), easements, or other incentives. DWM should be adopted in the LOPP as the primary strategy to attain additional water storage and slow the rate of runoff and stormwater flow toward Lake Okeechobee. Funding for dispersed storage should be significantly increased, whereas the level of effort directed toward planning and design of government owned conventionally-engineered and built reservoirs should be reduced. The LOPP should provide standards for, and assistance to, landowners for design and engineering of DWM projects.

Maximizing the Benefits of Water Quality Treatment

In conjunction with the above recommendations, water quality treatment is also a necessary part of the solution. Treatment is an expensive alternative to prevention, uses land that could be put to other uses, and requires major investments of public and private funds. Audubon suggests the following strategies for improving treatment while reducing costs.

Stormwater Treatment Areas: LOPP revisions should provide for more aggressive pursuit of Stormwater Treatment Area (STA) design and implementation in basins tributary to Lake Okeechobee. Optimal treatment construction locations should be pinpointed through the nutrient loading model. Furthermore, innovative private partnership mechanisms should be considered to reduce the public expense. PES should also be used to encourage private landowners to construct and operate treatment facilities.



Alternative Treatment: LOPP revisions should increase emphasis upon technologies to remove phosphorus and nitrogen through chemical precipitation, algal turf scrubbers, and similar mechanisms on a “Pay for Performance” basis. In particular, funding for the evaluation and demonstration of technologies that harvest algae biomass and suspended sediments from Lake Okeechobee’s water column and thus reduce phosphorus entrapped in lake sediments without dredging should be expedited.