Harmful Nutrients in the Everglades 
Now Reduced by 90%

Phosphorus control programs over the last 20 years have significantly improved Everglades water quality.

Florida has invested more than $1.8 billion in water quality improvements aimed at lowering phosphorus levels. Today, as a result of Florida’s efforts, concentrations within the Everglades have positively responded and are now at 10 ppb.

**FROM 24 PARTS PER BILLION TO 9 PARTS PER BILLION:** The reduction in average phosphorus concentrations in water within the Everglades over the past two decades.

Red dots show areas with levels of phosphorus measuring over 10 parts per billion prior to restoration efforts and today with most areas restored to ecologically healthy water quality.

The monitoring stations above the 10 ppb continue to make significant progress in achieving that standard. Water in Everglades National Park now meets the standard.

**GOV. RICK SCOTT’S RESTORATION STRATEGIES**

**CLEANER WATER FOR THE EVERGLADES**

Now in implementation, **Gov. Rick Scott’s Restoration Strategies** were developed in 2012 to further improve water quality in the Everglades. Projects include 6,500 more acres of new treatment area and 116,000 acre-feet of additional water storage.

Recognizing that more needs to be done to achieve the ultralow phosphorus water quality standard established for the Everglades, Restoration Strategies commit $800 million and projects are now completed or underway.

A flow equalization basin — or FEB — is a reservoir designed to temporarily capture and hold stormwater runoff for release to the Everglades stormwater treatment areas (STAs). By tempering flow rate, FEBs help maintain desired water levels in the STA. **The A-1 Flow Equalization Basin** (pictured above), in Palm Beach County, is part of Florida’s Restoration Strategies Plan for clean water for the Everglades, and assists in optimizing the performance of two nearby stormwater treatment areas in removing phosphorus. It can hold up to 60,000 acre-feet of water up to 4 feet deep, and then delivers water in a controlled manner to the treatment areas. It is surrounded by 21 miles of levees and has 15 associated water control structures.
STORMWATER TREATMENT AREAS (STAs)
NATURE’S CLEAN-UP SYSTEM

The 57,000 acres of stormwater treatment areas – large constructed wetlands – have removed 2,329 metric tons of phosphorus. The natural treatment works by channeling the runoff water through shallow marshes planted with aquatic vegetation that take up or absorb the phosphorus, reducing the amount of nutrients reaching the Everglades.

PHOSPHORUS

Why

PHOSPHORUS IS HARMFUL TO THE EVERGLADES

Though phosphorus is a vital nutrient in natural systems, it is also a component in fertilizer and, in excess, causes undesirable algae and plant growth. It flows across the landscape in stormwater runoff (urban and agriculture), disrupting native plant and wildlife habitats and food sources.

The Everglades is a naturally low-nutrient system and even small amounts of additional nutrients can upset the ecological balance.

The Everglades Forever Act and other legal requirements provided specific guidelines to improve Everglades water quality in the mid-1990s. A regulatory component required improved farming methods to curb phosphorus in stormwater runoff. Another key component provided for initial construction of Stormwater Treatment Areas to help uptake nutrients from water before it flows into the Everglades.

FARMING BEST MANAGEMENT PRACTICES (BMPs)
CURBING PHOSPHORUS AT THE SOURCE

Farming best management practices on agricultural lands have removed 3,058 metric tons of phosphorus. The average reduction of total phosphorus over the last 20 years in agricultural runoff from 470,000 acres south of Lake Okeechobee is 55 percent compared to before the BMP program. This success rate is over double the amount mandated by state law as part of the Everglades Forever Act.

Typical best management practices include improved fertilizer application techniques, control of soil erosion and improved onsite water retention and management techniques.

Florida has invested $1.8 billion to improve water quality
Florida built massive wetlands (stormwater treatment areas) to clean water
Florida worked with agricultural community to control phosphorus at the source

Today, 57,000 acres of stormwater treatment areas and extensive best management practices have removed approximately 5,400 metric tons of phosphorus in water flowing to the Everglades – water conservation areas and Everglades National Park.