

**Proposed Source Control Program in support
of the Northern Everglades and Estuaries
Protection Program**



Proposed Pollutant Source Control Program in support of the Northern Everglades and Estuaries Protection Program

- Objective:

To evolve and expand the existing source control program which is a component of the overall Northern Everglades restoration program.



Water Quality Treatment Train

Program History

- **Surface Water Improvement and Management (SWIM) Act -1987**
 - Chapter 40E-61 – Lake Okeechobee Works of the District (WOD) rule - 1989
- **The Lake Okeechobee Protection Act (LOPA) – 2000**
- **The Northern Everglades and Estuaries Protection Program (NEEPP) - 2007**

District Mandates

- **The Lake Okeechobee Protection Act (LOPA) and the Northern Everglades Legislation**
 - Establish relationship of coordinating agencies
 - Expand the jurisdiction of 40E-61
 - Requires the District to Implement the Lake Okeechobee Protection Plan
 - Requires District to meet Total Maximum Daily Load (TMDL) – 1/1/2015
 - Required the District to modify and update the Lake Okeechobee Operating Permit which is regulated by Florida Department of Environmental Protection (FDEP)

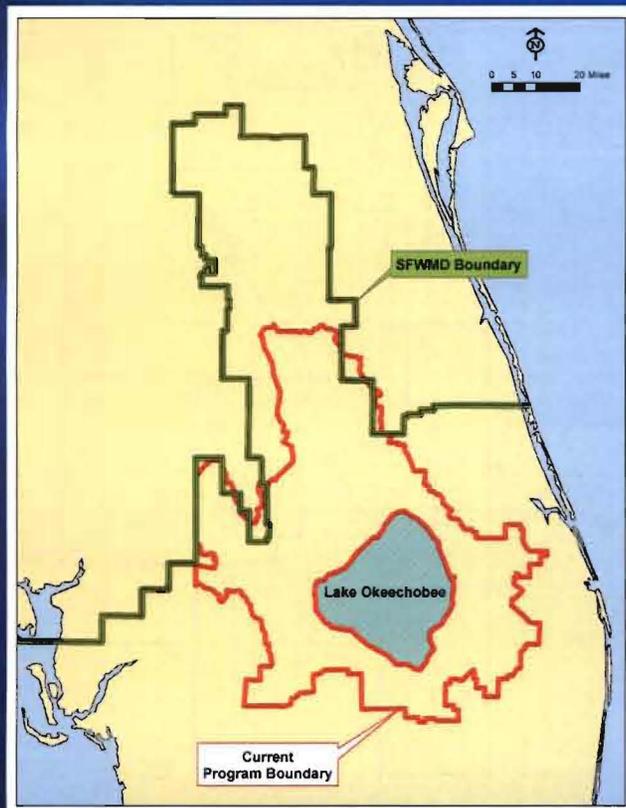


FDEP permit requirements

- **Implement the Lake Okeechobee Protection Plan (LOPP)**
- **Assess compliance with TMDL prior to 2015**
- **Comply with water quality standards to the maximum extent practicable**

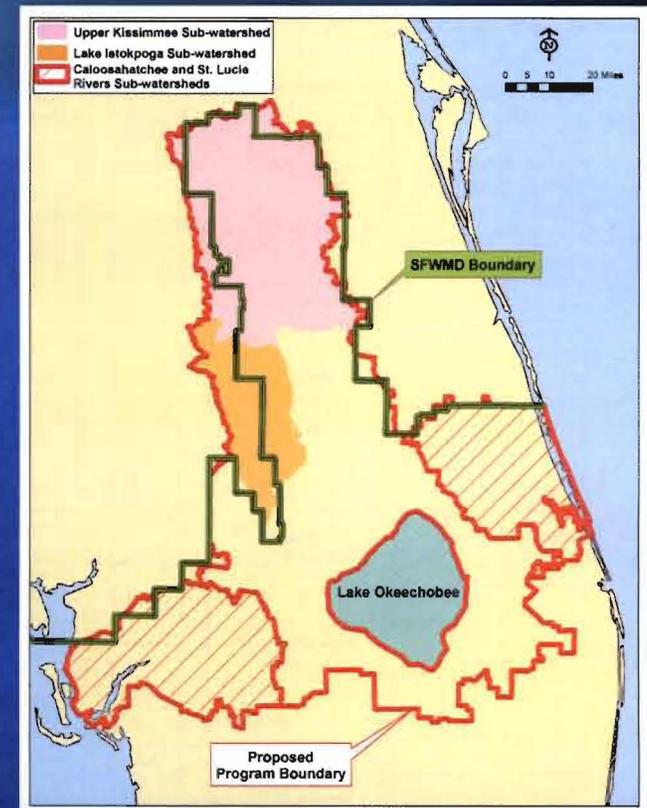
Expanded Program Boundary

Current 40E -61 Boundary



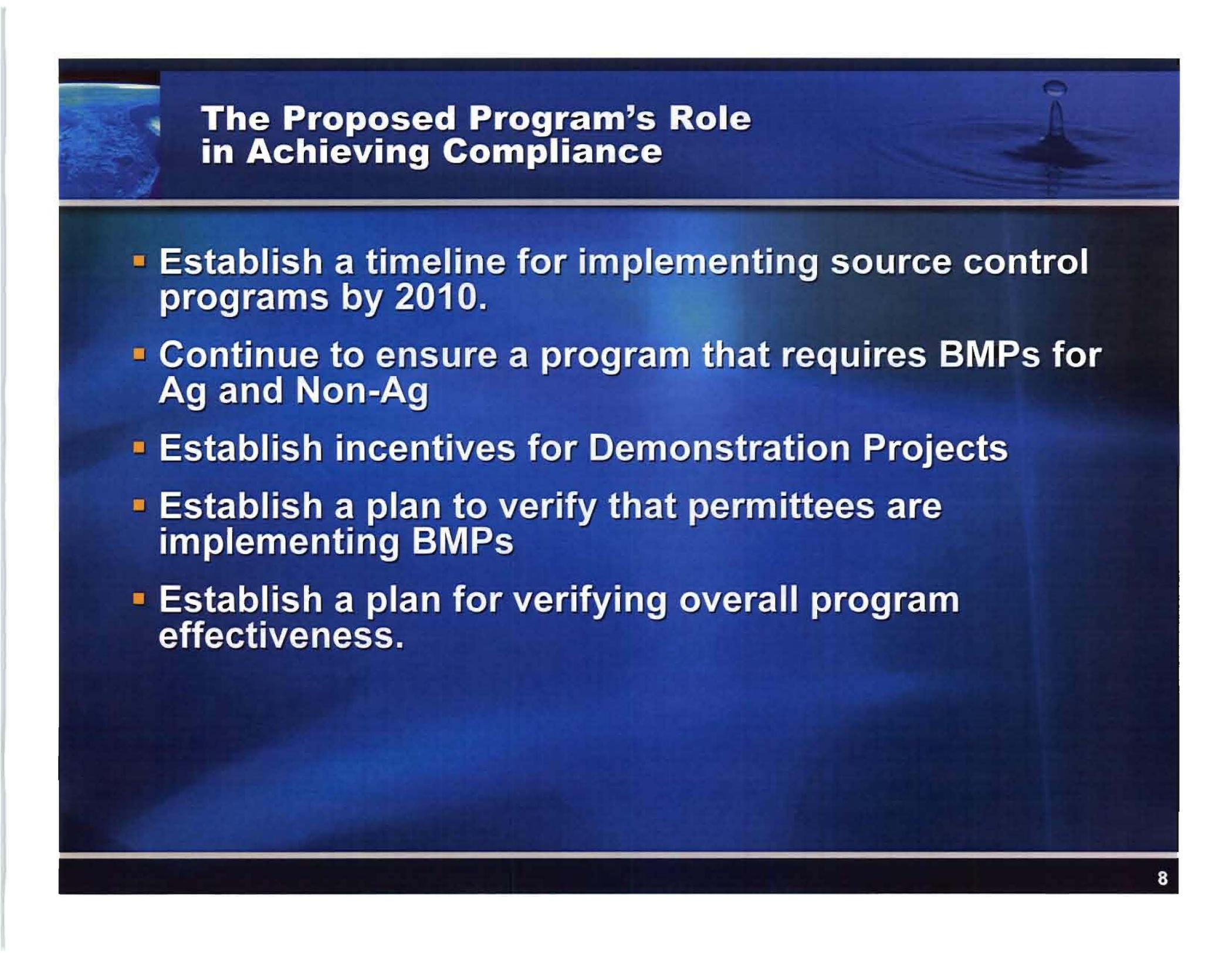
- Upper Kissimmee Sub-watershed
- Lake Istokpoga Sub-watershed
- Caloosahatchee River Sub-watershed
- St. Lucie River Sub-Watershed

Proposed 40E-61 Boundary



Chapter 40E-61 – The Current Program

- **Current Rule**
 - Performance based on limits set in Technical Publication 81-2. Load target – 397 tons by July 1, 1992
 - Permits required a general phosphorus control plan for urban and ag (so no equity among permittees)
- **Selective District monitoring was used to determine parcel level compliance.**



The Proposed Program's Role in Achieving Compliance

- **Establish a timeline for implementing source control programs by 2010.**
- **Continue to ensure a program that requires BMPs for Ag and Non-Ag**
- **Establish incentives for Demonstration Projects**
- **Establish a plan to verify that permittees are implementing BMPs**
- **Establish a plan for verifying overall program effectiveness.**



Sub-Watershed monitoring network:

- **District to monitor collective source control program effectiveness (differs from TMDL) at the sub-watershed level**
- **Use load-based performance measures for the combined BMP source control programs.**
- **Optimize the BMP programs if WQ problems are detected.**
- **Identify priority areas of water quality concern.**
- **Provide data to enhance performance of downstream treatment facilities.**

The permitting and BMP strategy

Agricultural Land Use Permits:

- Greater than or equal to 100 acres
 - Recognizes FDACS BMP participants therefore no permit will be required.
 - OR landowner conducts parcel level load monitoring at their expense to demonstrate compliance that BMPs aren't necessary
- 50 to 99 acres land use of citrus, ornamentals, row crops, or sod.
 - SFWMD BMP program required
 - Optional Parcel Level Monitoring
- < 50 acres and 50 to 100 not mentioned above – No notice permits
 - BMP plan



The permitting and BMP strategy

Non-Agricultural Land Use Permits:

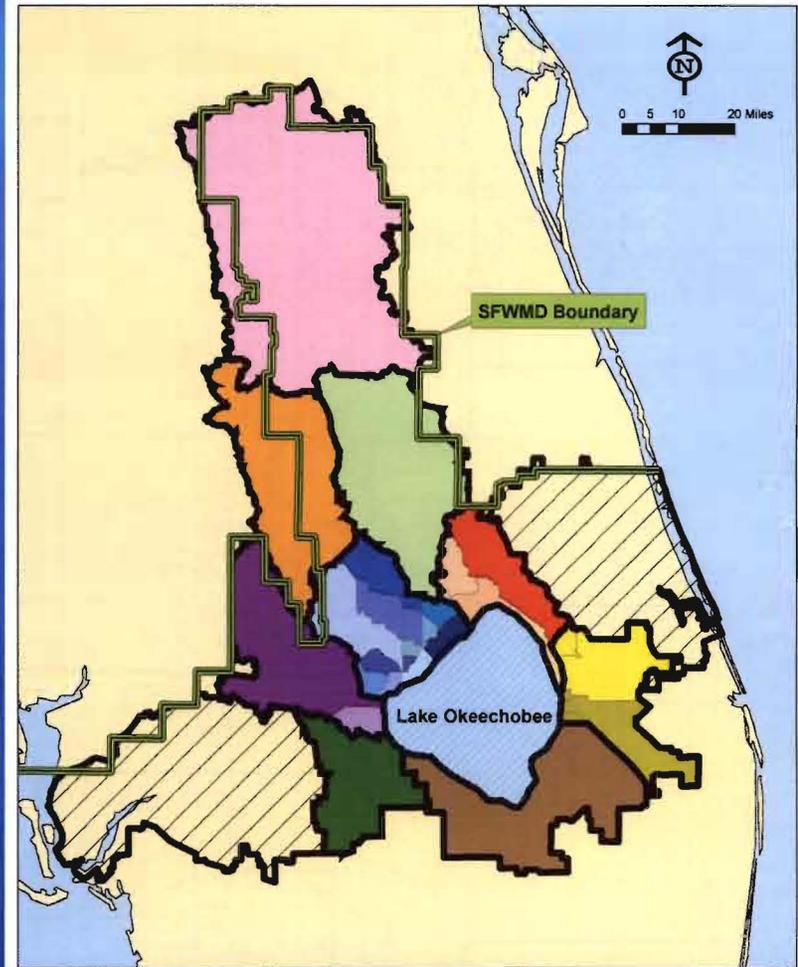
- **Water Control Districts**
- **Municipalities**
- **Counties**
- **Golf Courses**

Comprehensive BMP Plans required

Measuring Collective Program Performance

- **Monitoring by District at sub-watershed or summary basin level to track source control program performance**
- **Five-Year Rolling Avg**
- **Effective BMPs**
 - **Agricultural: 25% reduction of P loads**
 - **Non-Agricultural: 5% reduction of P loads**

LOK WOD Watershed: Sub-watersheds and Summary Basins



South Florida Environmental Report

- **South Florida Environmental Report (SFER)**
 - Report on program activities and implementation, including coordination efforts with other agencies
 - Report on the number of BMP plans implemented and verified
 - Water quality data and evaluation of the source control program performance

Path to Optimization

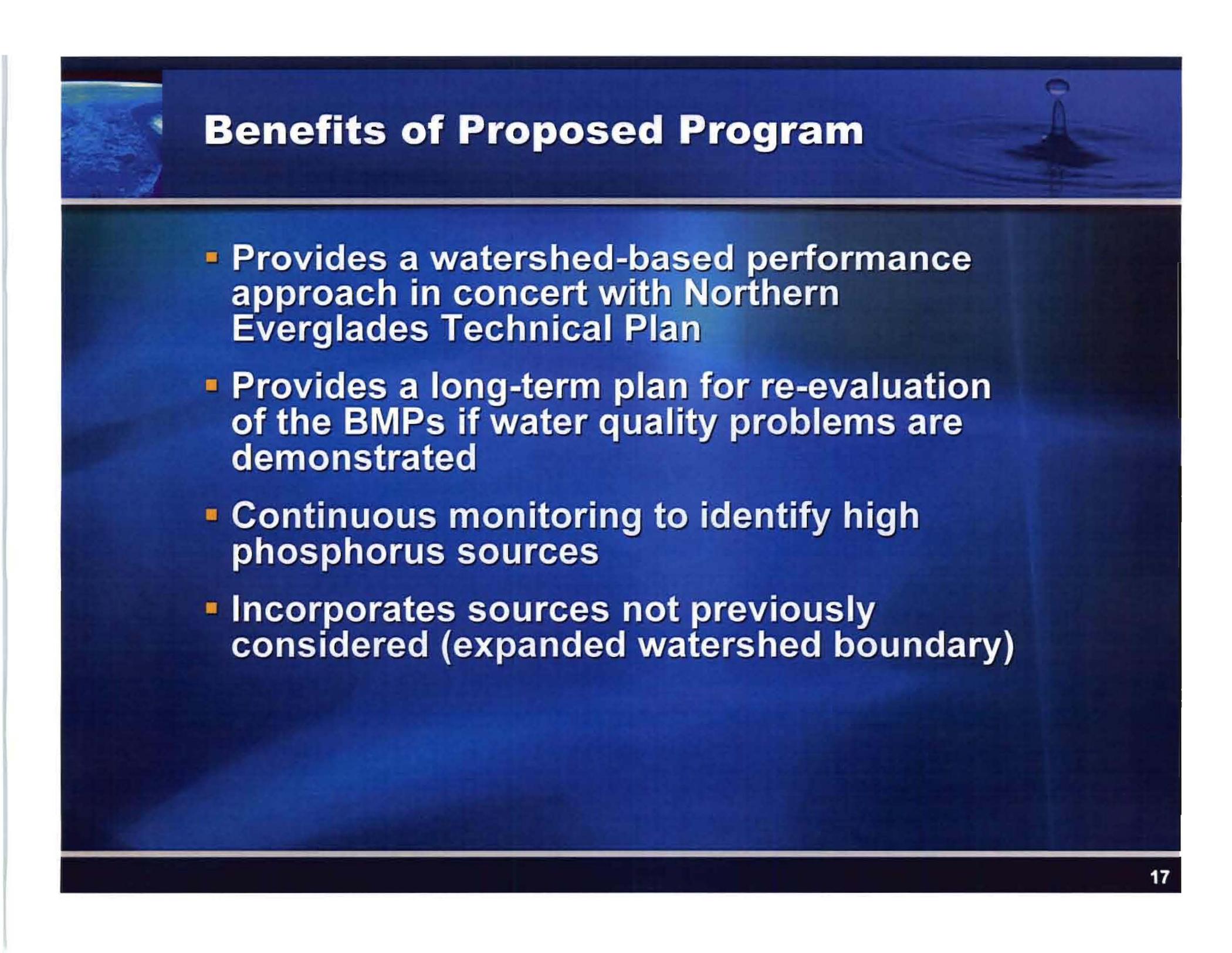
- If program optimization is triggered:
 - First Instance
 - More intensive BMP verification
 - Optimize monitoring in the summary basin to pinpoint areas of concern
 - Additional permitting requirements
 - Allow 2 year response time
 - Second Instance
 - BMP optimization required

Chapter 40E-61 Rulemaking Timeline

- **2008 Workshops**
 - July 31 – Kissimmee
 - August 1 – Okeechobee
 - August 21 – Okeechobee
 - August 28 – Kissimmee
 - September 3 – Belle Glade
- **Complete Rule Process by early 2009**

Benefits of Proposed Program

- **All Ag landowners will be required to monitor or implement BMPs**
- **Non-Ag will be required to implement BMPs**
- **More defined in terms of BMP requirements**
- **BMP verifications performed over the long-term**



Benefits of Proposed Program

- **Provides a watershed-based performance approach in concert with Northern Everglades Technical Plan**
- **Provides a long-term plan for re-evaluation of the BMPs if water quality problems are demonstrated**
- **Continuous monitoring to identify high phosphorus sources**
- **Incorporates sources not previously considered (expanded watershed boundary)**

Questions?

