

# Lower Charlotte Harbor (LCH) Surface Water Improvement and Management (SWIM) Plan

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**&**

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**[sfwmd.gov](http://sfwmd.gov)**

# LCH SWIM Plan



- 2003, SFWMD Governing Board authorized
- 2004 LCH Reconnaissance Report was authorized and completed in May 2006

<https://my.sfwmd.gov/watershed>

## What's required in a SWIM Plan ?

- **WMD responsibilities (Chapter 373.453, F.S.):**
  - **Maintain a list that prioritizes water bodies of regional or statewide significance**
  - **WMDs can develop SWIM plans for water bodies on their priority lists**
  - **SFWMD to give priority to:**
    - **Lake Okeechobee**
    - **Biscayne Bay**
    - **Lake Worth Lagoon**
    - **Indian River Lagoon**

## What's required in a SWIM Plan ?

- Description of the waterbody system: uses, hydrology, causes of degradation ✓
- Identify all governmental units having jurisdiction in its drainage basin ✓
- Description of land uses in the basin ✓
- Identify the point and non-point sources of water pollution discharged to the waterbody and tributaries ✓

## What's required in a SWIM Plan ?

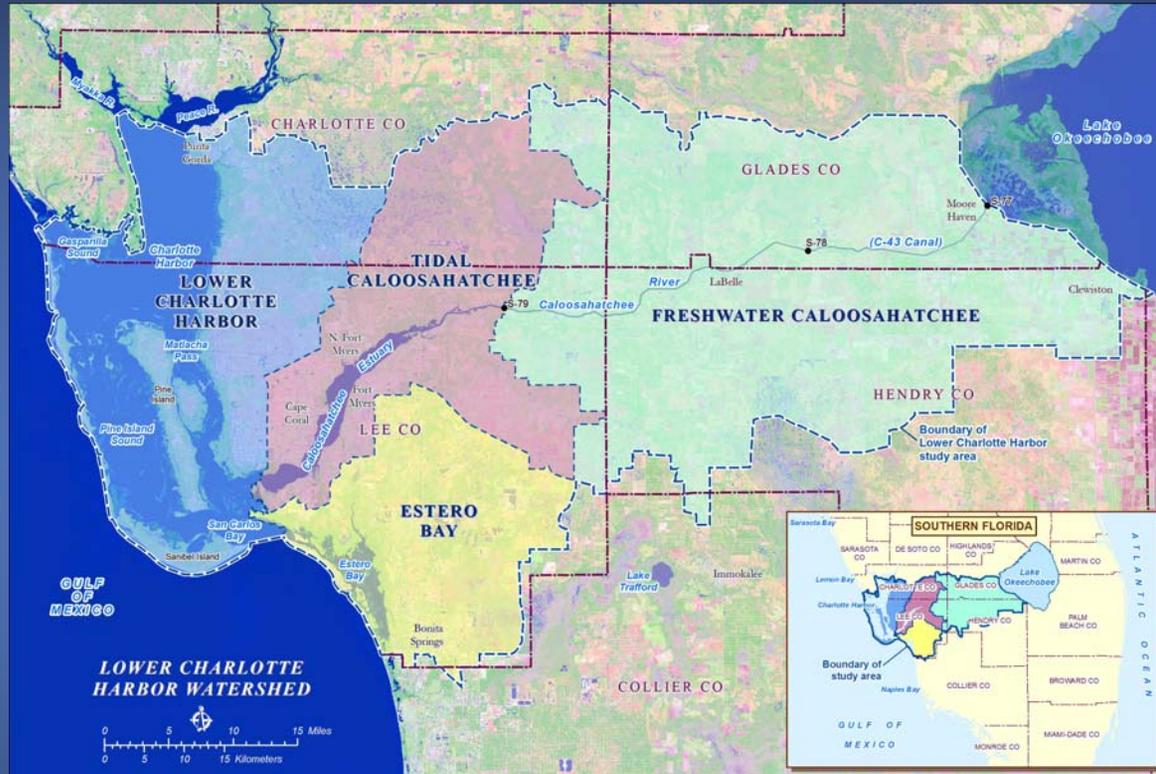
- Description of the strategies and a schedule for related management action for restoring or protecting the waterbody to Class III or better and to help achieve state-adopted TMDLs ✓
- Description of the management actions needed to maintain the waterbody once it has been restored and to prevent future degradation ✓
- Estimation of funding needed to carry out the strategies with a listing of available and potential sources ✓

# LCH SWIM Plan Organization: Watershed Approach

- **Goals** – broad - identify objectives of SFWMD
- **Initiatives** – general - divide the Plan into distinct subject areas
- **Strategies** – detailed - descriptions of the work to be accomplished with approaches and methods
- **Action Steps** – specific - activities needed to reach project delivery with schedule and \$\$

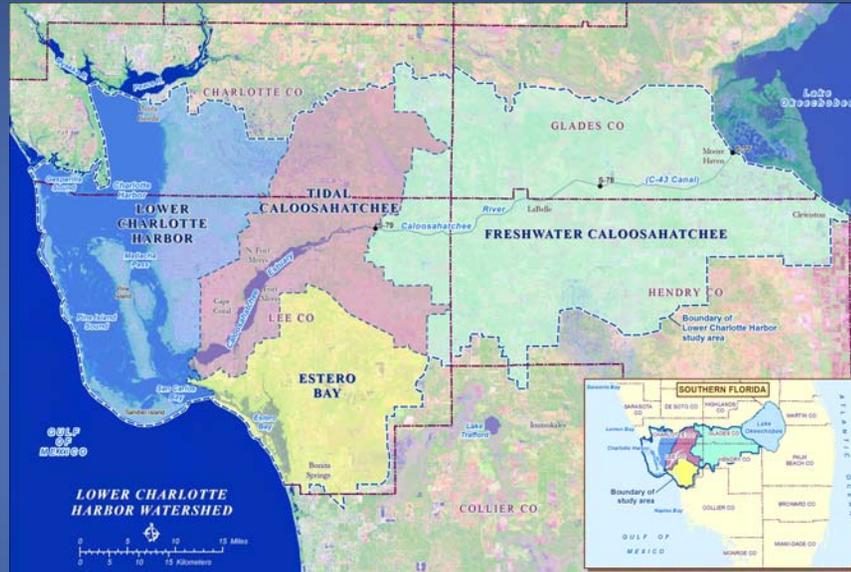


# Lower Charlotte Harbor Watershed



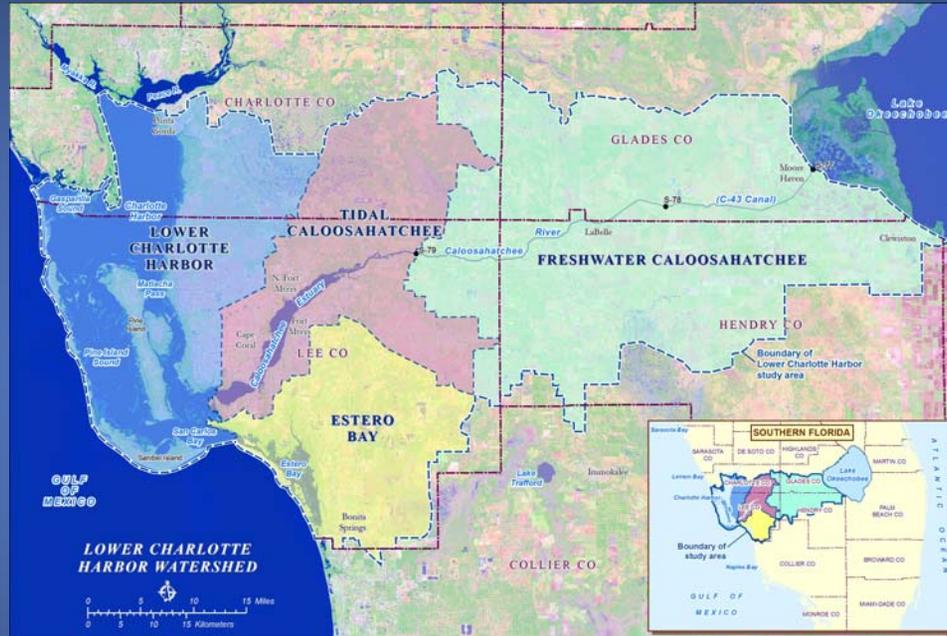
- Encompasses 2,230 square miles with 1,900 square miles of land area
- Extends 60 miles along the Lower West Gulf Coast of Florida
- 75 miles at its widest point from San Carlos Bay to Lake Okeechobee
- Includes tidal and freshwater Caloosahatchee River

# Conditions Leading to Need for Restoration and Protection



- Construction of C-43 Canal, agricultural uses and urban growth
  - Reduced water clarity, increased contaminants and nutrients, and reduced dissolved oxygen
  - Altered the volume, quality, and timing characteristics of freshwater reaching the estuary

# Conditions Leading to Need for Restoration and Protection



- Changes in salinity patterns
  - Declines in seagrass beds and impacts to all levels of flora and fauna
- FDEP has listed 40 waterbody segments in Lower Charlotte Harbor as not meeting water quality standards

## LCH SWIM Goals



- **Protect and improve surface water quality**
- **Preserve and restore native ecosystems where appropriate**
- **Maintain integrity and functions of water resources and related natural systems**
- **Improve degraded water resources and related natural systems to a more natural functionality**

# LCH SWIM Initiatives

1. Water Quality
2. Stormwater Quantity
3. Watershed Master Planning and Implementation
4. Habitat Assessment, Protection and Restoration
5. Outreach
6. Funding



# 1. Water Quality Initiative



- Utilize the Existing Water Quality Monitoring Network to Assess the Origin and Fate of Pollutants
- Hydrologic and Hydrodynamic Water Quality Modeling
- Enhancement and Maintenance of Surface Waters

## 2. Stormwater Quantity Initiative



- Improve the Timing and Volume of Freshwater Flows into Lower Charlotte Harbor
- Regulatory Assessment



### 3. Watershed Master Planning and Implementation

- Evaluate Existing Stormwater Master Plans
- Assist in the Development of Local Stormwater Master Plans and Implementation Schedules
- Partner with Local Governments to Implement Stormwater Master Plans

## 4. Habitat Assessment, Protection and Restoration



- Habitat Mapping and Resource Assessment
- Habitat Enhancement and Restoration

## 5. Outreach

- Public Education and Outreach
- Regulatory Outreach



## 6. Funding

### ■ Funding Initiative



# Summary

- This is the beginning of an ongoing effort
- The Plan is meant to be updated periodically and include findings from:
  - the Southwest Florida Feasibility Study and
  - as Total Maximum Daily Load allocations are developed by FDEP

## Comments

Any comments regarding the draft LCH SWIM Plan should be sent to the below contact by October 31, 2007:

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## **LCH SWIM Plan Adoption Schedule**

- **October 24, 2007 - Local Workshop**
- **November 5, 2007- Local Public Hearing**
- **November 8, 2007 - Brief WRAC members**
- **December 2007- SFWMD Governing Board Approval to send to FDEP and local governmental agencies**
- **February 2008 – SFWMD Governing Board Adoption**

# SFWMD LCH SWIM Plan Adoption Process

