

## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

## **GET THE FACTS**

May 11, 2016

The recent Florida Bay seagrass die-off has led to a public discussion about freshwater flows into Florida Bay, with opinions expressed in newspapers by public officials and interested private parties.

The hydrology of Florida Bay is complex and has been substantially altered by human interaction over time. SFWMD scientists have conducted extensive technical analysis to better understand how fresh water reaches the bay.

## The Facts:

- Historically, Lake Okeechobee combined with direct rainfall to hydrate the entire Everglades ecosystem, including Florida Bay.
- In today's managed system, the largest single source of fresh water into Florida Bay is direct rainfall over the bay itself, which accounts for more than 45 percent of freshwater inputs.
- The major source for much of the remaining freshwater flows into the bay is Taylor Slough in the southeastern part of Everglades National Park.
- Flows from Shark River Slough into central and northeastern Florida Bay, where the major seagrass die-off occurred, are minimal and typically occur only in the wet season.
- At times, water from Lake Okeechobee treated in the District's Stormwater Treatment Areas and directed southward pushes clean water into the Everglades.
- The recent seagrass die-off is a result of a 16-month, localized rainfall deficit:
  - o From May 2014 through August 2015, the Taylor Slough watershed received 25-35 inches of direct rainfall the lowest total for any part of the District's 16-county region.
  - o As a result of the rainfall deficit, salinity in parts of Florida Bay was more than twice as high as ocean water.

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**The South Florida Water Management District** is a regional governmental agency that manages water resources in the southern part of the state. It is the oldest and largest of the state's

five water management districts. Our mission is to protect South Florida's water resources by balancing and improving flood control, water supply, water quality and natural systems.