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This fact sheet is provided as a reference to encourage a greater understanding of the various issues related to managing water in South Florida. Moving Water South into Florida Bay

The 1,000 square-mile Florida Bay in Everglades National Park is the southernmost portion of America's Everglades ecosystem and one of the largest seagrass meadows in the world. 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 its freshwater input. The other major source for freshwater flows into the bay is Taylor Slough in the southeastern part of Everglades National Park. The South Florida Water Management District is implementing a plan to get more freshwater to flow into Taylor Slough to reach Florida Bay.

Background

- Periodic droughts such as 1987 and 2015 have left the waters of Florida Bay too salty, contributing to vast seagrass die offs.
- The extreme high salinity in 2015 was the result of a 16-month, localized rainfall deficit:
 - 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.
 - As a result of the rainfall deficit, salinity in parts of Florida Bay was more than twice as high as ocean water.
- The ability to move more water from existing water quality treatment system into Everglades National Park is limited by federal operational plans, bird species protection, and other significant factors, which – as always – require adequate rainfall so there's enough extra water to move.

Project Benefits

- For years with average rainfall, the improvements will double the flow of water directly into Taylor Slough by as much as 6.5 billion gallons more freshwater per year.
- The additional water reaching the bay during dry season and wet season will meet stringent water quality standards.
- These actions will help reduce salinity levels and promote the recovery of seagrasses.

Project Elements

The required features of the plan include:

- Connecting two canals to directly deposit water through the L-31 West Canal into Taylor Slough.
- Sending additional water through the S-328 structure into the L-31 West Canal directly to the headwaters of Taylor Slough.
- Rebuilding a levee and weir and adding plugs along the L-31 West Canal to encourage the flow of more water towards Taylor Slough. This will also keep more water in Everglades National Park.
- Removing flapgates at the S-332i Pump Station to promote more flow.



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Plan to Help Florida Bay

For more information on the plan to help Florida Bay please visit <u>www.sfwmd.gov/floridabay</u>

Supplemental features of the plan that will also help deliver water include:

- Installing several plugs in the L-31 West Canal to reduce drainage from Everglades National Park and to promote overland flow of water into Taylor Slough.
- Modifying a weir at the S-332D structure to promote overland flow of water to the detention area into headwaters of Taylor Slough.
- Increasing the pumping capacity at S-199 and S-200 pump stations, which will send more water flowing towards Taylor Slough and Everglades National Park, ultimately reaching Florida Bay.
- Removing vegetation to increase the quantity of water flowing through the detentions areas into Taylor Slough.

Some of the improvements require Corps permitting. All of the proposed improvements will cost the SFWMD less than \$3.3 million and could be completed before the start of the next dry season in November if the Corps approves the necessary permits quickly.