# Chapter 8F: The Lower East Coast Regional Water Supply Plan

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## INTRODUCTION

The Lower East Coast (LEC) Regional Water Supply Plan provides a blueprint to help meet the water resource needs of South Florida through the year 2020. Development of the Plan began in 1992, when the South Florida Water Management District (District or SFWMD), under the authority of state law, initiated an eight-year study of future water needs.

Projections of future population growth for the area indicate almost seven million residents by 2020, with the majority of the population living along the coastal areas. This population growth will create larger demands for both potable and irrigation water. In addition, environmental demands call for significant increases in water supply deliveries to sustain and restore the natural systems of South Florida. The Plan was adopted by the Governing Board of the District in May 2000.

## 2001 LEC PLAN HIGHLIGHTS

In 2001, the District's Water Supply Department began the implementation of several projects (listed below) identified in the LEC Plan that benefit the Everglades. These projects complement the Comprehensive Everglades Restoration Plan (CERP) by increasing the amount of water available for urban users, agriculture and the natural system and are necessary to meet the needs of the Everglades and the future population of South Florida. The LEC Plan includes additional water supply projects that may be needed to help meet the future needs of the region:

- Completed construction and testing of the Hillsboro Canal Aquifer Storage and Recovery (ASR) pilot project
- Funded four Mobile Irrigation Labs that evaluated 500 irrigation systems in seven counties, resulting in saving approximately one billion gallons of water
- Partnered with the Florida Department of Environmental Protection to study potential use of reclaimed water for regional indirect aquifer recharge
- Initiated LEC feasibility analysis and master plan for a regional reuse irrigation distribution system
- Executed cooperative cost-share agreement with Florida Power and Light to determine feasibility of seawater reverse osmosis treatment when co-located with power plants.

# CERP IMPLEMENTATION AND ITS EFFECTS ON LEC PLAN IMPLEMENTATION

A critical part of the LEC Plan is the water supply and water resource development projects identified in CERP (Chapter 7). The Water Supply Department assessed the recent change in the CERP implementation schedule and completion of these projects. From this assessment of CERP-related project schedules, the Water Supply Department identified potential effects on water supply availability.

Incremental five-year modeling of the new schedule for the LEC will take place in late 2001 or early 2002. The modeling will use the same base-case assumptions used to develop the LEC Plan to allow an apples-to-apples comparison. Performance-measure graphics will show "LEC old CERP schedule" and "LEC new CERP schedule." The incremental modeling of simulated water-availability predictions will provide information for the water reservation process, alternative resource development and the establishment of interim performance goals (as required by WRDA 2000). Interim progress goals are also schedule-dependent.

The effort to begin the "Initial CERP Update" (a RECOVER exercise) will commence soon after the beginning of 2002. Following the initial CERP update, modeling of the CERP implementation schedule will begin.

As the LEC Plan implementation continues forward, the Water Supply Department will continue to take into consideration the schedule changes in CERP and the implications those changes will have on the ability to achieve hydrologic restoration targets for the Everglades. The update for the LEC Plan, scheduled to begin in 2003, will cover the period of 2005 through 2025. The update will incorporate the revised schedules or operational plans for CERP.