

FACT SHEET  
**COMPREHENSIVE EVERGLADES RESTORATION PLAN**  
**Aquifer Storage Recovery Regional Study**  
Construction General (C)  
Congressional Districts: 17, 18, 19, 20, 21, 22, 23, 25

**1. DESCRIPTION**

The April 1999 Comprehensive Everglades Restoration Plan (CERP) proposed regional-scale implementation of aquifer storage and recovery (ASR) facilities as the preferred method of providing freshwater storage in subsurface permeable zones, to supplement surface reservoirs. CERP was approved in the Water Resources Development Act (WRDA) 2000, Public Law (P.L.) 106-541, Section 601(b)(2)(C), December 1999, and authorized some initial projects plus overall design studies. CERP ASR components are proposed to provide storage, and to attenuate releases of nutrient-rich water from Lake Okeechobee to the St. Lucie and Caloosahatchee estuaries in Palm Beach, Martin, Okeechobee, Glades, Lee, and Hendry counties. The estimated total cost of the proposed, fully implemented CERP ASR program (approximately 333 ASR wells plus surface facilities for pumping and treatment), is approximately \$1,700,000,000. Estimated costs shown below are for preliminary engineering and design of the overall CERP ASR program. The final number and location of the proposed ASR wells will be determined through further scientific and engineering investigations. The National Academy of Sciences and the Florida Department of Environmental Protection (FDEP) identified seven specific areas of technical uncertainty associated with the ASR implementation on such an expansive scale. The ASR Regional Study was developed and funded to address these uncertainties, which include aspects of technical and engineering feasibility, and effects and influences of recovered water on the Everglades ecosystem and Lake Okeechobee. Several significant products will result from the ASR Regional Study. These include: 1) regional-scale ground water and surface water modeling products; 2) ecotoxicology studies to quantify the effects of recovered water on representative Floridan plants, macroinvertebrates, and fish; and 3) definition of the processes between Floridan Aquifer matrix and stored water that affect water-quality during storage and recovery; and 4) evaluation of aquifer hydraulics and geotechnical characteristics during expanded ASR implementation.

**2. FUNDING**

Estimated Total Cost	\$56,663,500
Estimated Federal Cost	45,392,500
Allocation thru FY13	19,254,654
Carry In for FY14	30,000
Allocation for FY14	475,802
FY15 President's Budget	0

**3. SPONSOR**

South Florida Water Management District  
3301 Gun Club Road  
West Palm Beach, Florida 33406

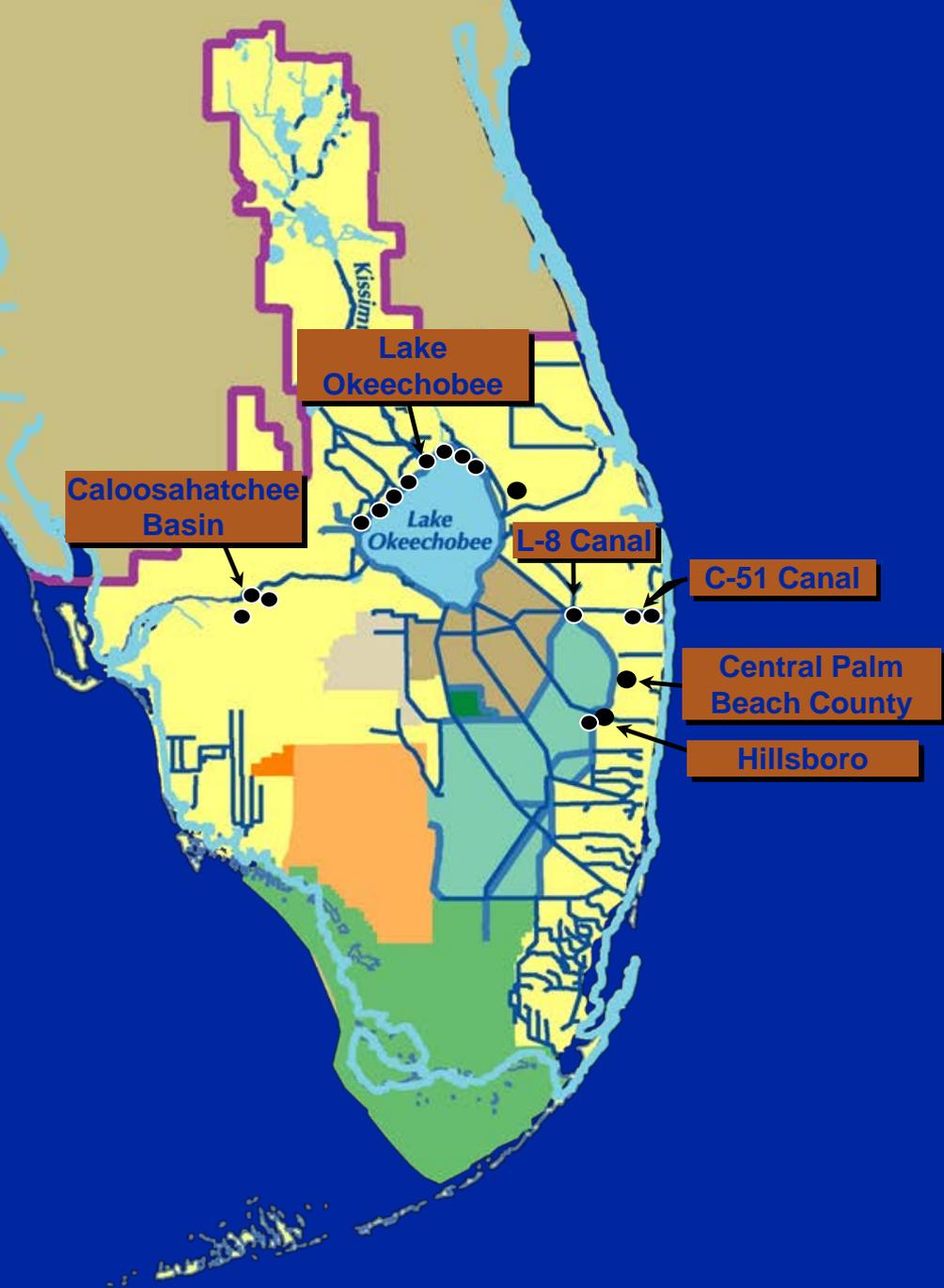
**4. STATUS**

Several scientific and engineering studies are complete and a non-decisional, interim report for the public was published in 2009. The report was completed with participation from multi-agency, multi-disciplinary state and Federal team members.

Several products of the ASR regional study are at or near completion. Two types of regional-scale groundwater flow models were calibrated in FY 2009. Regional-scale pumping scenarios were simulated using these flow models in FY 2010. Ecotoxicology studies were conducted at both ASR pilot sites during FY 2009, and were completed in FY 2010. Water-quality changes during ASR testing, and effects of recovered water on surface water impoundments ongoing as well as other technical studies to assess uncertainties in regional-scale implementation of ASR. A final report will be completed by FY 2013 summarizing all results of the ASR Regional Study.

The Lake Okeechobee ASR Pilot Project TDR was certified on January 21, 2014 and presents the findings from the Lake Okeechobee ASR Pilot Project and the Hillsboro ASR Project. The ASR Regional Study, Technical Data Report is being developed to assess uncertainties in regional-scale implementation of ASR. The Lake Okeechobee ASR Pilot Project TDR findings and the various hydrogeological, geophysical and geotechnical studies, geotechnical studies to determine the potential for rock fracturing related to pressures during aquifer recharge, microbiological investigations, groundwater modeling, ecotoxicological studies, will be included in the ASR Regional Study. Additionally, the report will include a response to the questions and concerns identified by the CROGEE and the 1999 ASR Issue Team.

# CERP ASR REGIONAL STUDY



<b>CERP ASR Sites</b>	<b>Wells</b>
Lake Okeechobee	200
Caloosahatchee	44
L-8 Basin	10
C-51 Basin	34
Central PBC	15
Hillsboro	30
<b>TOTAL</b>	<b>333</b>

*Note: Design Capacity for each ASR well = 5 million gallons per day (mgd).*