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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.



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Kissimmee River Restoration Project

When restoration construction is completed by the U.S. Army Corps of Engineers in 2015, 40 square miles of Kissimmee River and floodplain ecosystem will be affected, including almost 25,000 acres of wetlands and 40 miles of historic river channel. Extensive environmental monitoring is ongoing by the South Florida Water Management District to evaluate ecosystem responses to the canal backfilling and other physical changes. Following the construction work, appropriate hydrology will be applied to the physically restored portions of the river in order to fully realize the restoration objectives. The District will continue to scientifically document ecosystem responses throughout all restoration phases.

Background

- The Kissimmee River once meandered for 103 miles through central Florida. Its floodplain, reaching up to three miles wide, was inundated for long periods by heavy seasonal rains. Wetland plants, wading birds and fish thrived there.
- Prolonged flooding after hurricanes in the 1940s had severe impacts on people living in the region. As part of the federal Central and Southern Florida Project (intended to lessen flooding and temper South Florida's weather extremes), the Kissimmee River was cut and dredged into a 30-foot-deep straightaway: the C-38 canal.
- While flood control benefits were achieved, significant environmental consequences were also noted. Waterfowl numbers fell more than 90 percent and Bald Eagle nesting declined by 75 percent. Wading birds also declined along the river and floodplains.
- After extensive research, planning and coordination, Congress authorized in 1992 a joint state-federal project to restore ecological integrity to a 22-mile section of the channelized river while maintaining regional flood protection.

Project Status

- Construction for environmental restoration began in June 1999 and three phases are now complete – refilling 14 miles of canal and reestablishing continuous water flow to 24 miles of the river.
- Seasonal rains and flows now inundate 7,700 acres of restored floodplain habitat.
- The remaining phases of construction began in 2011 and will be complete in 2015. This will backfill another 9 miles of canal and restore flow to 16.4 additional miles of the river.
- To provide the continuous water flows necessary to fully implement river restoration, work is also under way to increase storage capacity in the Kissimmee Chain of Lakes – the headwaters of the river system.
- The acquisition of more than 100,000 acres of land needed for Kissimmee River Restoration and Headwaters Revitalization is substantially complete.

(more)

Interim Environmental Results are Encouraging

- Specific performance measures have been established for the Kissimmee restoration project and progress updates are published annually in the *South Florida Environmental Report*.
- Full ecological response to the physical aspects of restoration construction is expected after implementation of the headwaters revitalization component, which includes changes to Kissimmee Chain of Lakes water regulation schedules to help provide more natural flow conditions for the river.
- Comprehensive monitoring of the first phase of construction (completed in 2001) for more than 10 years has documented that the river and its floodplain have already improved in remarkable ways, surpassing at times the anticipated environmental response. These improvements (based on changes to-date) are compared with conditions observed before restoration began:
 - ✓ The aquatic wading bird population in the restored river and floodplain region is more than five times greater than before restoration.
 - ✓ Duck species including Fulvous Whistling Duck, Northern Pintail, Northern Shoveler, American Wigeon and Ring-necked Duck have returned to the floodplain after being absent during the 40-plus years that the system was channelized.
 - ✓ Similarly, several shorebird species including American Avocet, Black-necked Stilt, Dowitcher, Greater Yellowlegs, Semipalmated Plover, Least Sandpiper, Spotted Sandpiper and Western Sandpiper have also returned to the river and floodplain.
 - ✓ The number of aquatic wading birds, including white ibis, great egret, snowy egret and little blue heron, has increased significantly, in some years more than double the restoration target.
 - ✓ Organic deposits on the river bottom decreased by 71 percent, reestablishing sand bars and providing new habitat for shorebirds and invertebrates, including native clams.
 - ✓ The area of wetland vegetation in the Phase I area has surpassed the predicted 80 percent of floodplain area (up from 37 percent prior to restoration), although some marsh vegetation has not yet fully recovered.
 - ✓ Dissolved oxygen levels have increased to a range normally observed in minimally impacted Florida streams. This is critical for the long-term survival of fish and other aquatic organisms.
 - ✓ Largemouth bass and sunfishes now comprise 64 percent of the fish community, up from 38 percent.
- Ecological monitoring will continue for at least five years after the hydrologic component has been implemented, at which time final evaluations of the restoration project's success will be documented.

For more information on Kissimmee River Restoration and the District's ecological monitoring program, visit www.sfwmd.gov/kissimmee. For details on the restoration construction schedule, visit the U.S. Army Corps of Engineers Jacksonville District [Ecosystem Restoration](#) webpage.