KISSIMMEE RIVER | Restoration Project

FACTS & INFORMATION

FEBRUARY 2017

The Kissimmee River Restoration project was authorized by Congress in 1992 and is sponsored by the U.S. Army Corps of Engineers (USACE) and the South Florida Water Management District (SFWMD), the non-federal sponsor. When restoration is completed in 2020, more than 40 square miles of river-floodplain ecosystem will be restored, including almost 20,000 acres of wetlands and 44 miles of historic river channel.

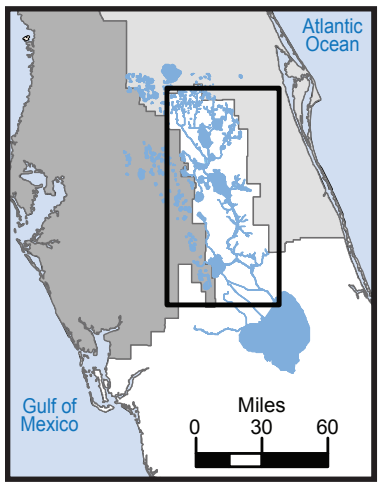
BACKGROUND

- The Kissimmee River once meandered for 103 miles through central Florida. Its floodplain, reaching up to two miles wide, was inundated for long periods by heavy seasonal rains. Wetland plants, wading birds and fish thrived there.
- Prolonged flooding caused severe impacts to humans so Florida officials asked Congress for assistance. Congress tasked the U.S. Army Corps of Engineers and between 1962 and 1971, the Corps cut and dredged the Kissimmee River into a 30-foot deep straightaway called the C-38 canal. The project achieved flood reduction benefits, but it also harmed the river-floodplain ecosystem.
- After extensive planning, construction for environmental restoration began in 1999. As of today, the project is more than halfway complete.
- In the lower Kissimmee River Basin, Phase 1 construction was completed in 2001 and Phase 4 was completed in 2010, restoring continuous water flows to approximately 19 miles of the Kissimmee River. Phases 2 and 3 are now underway and includes backfilling the C-38 canal, and restoring flow to nine miles of the river.
- Approximately 99 percent of lands needed to complete Kissimmee River Restoration have been acquired — a total of 102,061 acres.

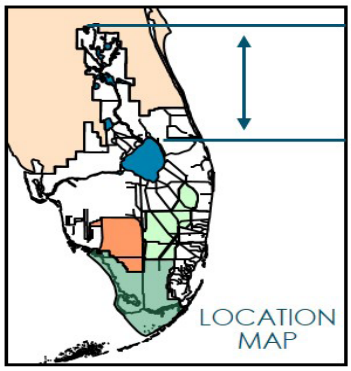
ENVIRONMENTAL RESULTS

The river and its floodplain have improved in remarkable ways, surpassing at times the anticipated environmental response. Comprehensive monitoring for the past five years has documented these results. Improvements are compared with conditions existing prior to restoration.

- Wetland plants are thriving in the floodplain, including pickerelweed, arrowhead, Carolina willow and buttonbush.
- Undesirable floating and mat-forming plants have been replaced by emergent plants native to the historic river.
- Organic deposits on the river bottom decreased by 71 percent, reestablishing sand bars and providing new habitat for shorebirds and invertebrates, including native clams.
- Dissolved oxygen, which is critical for the long-term survival of fish and other aquatic organisms, has increased up to six-fold.
- Largemouth bass and sunfishes now comprise 63 percent of the fish community — prior to restoration, they represented only 38 percent.
- Long-legged wading bird populations, including white ibis, great egret, snowy egret and little blue heron, have increased significantly, in some years increasing at greater than double the restoration expectation.
- Ducks have returned to the river, including American widgeon, northern pintail, northern shoveler, ring-necked duck, and black-bellied whistling duck.
- Eight shorebird species, absent before restoration, have returned to the river and floodplain, including breeding black-necked stilts.



KISSIMMEE RIVER | Restoration Project



Restoration efforts have resulted in environmental improvements that have exceeded expectations during many of the years post-Phase 1 and 4A. Densities of annual duck species, as well as long-legged wading birds have increased. In addition, improvements to foraging habitat may support the return of the endangered Snail Kite.

Images: Snail Kite, Great Blue Heron and Blue-Winged Teal.

COMPLETED: HEADWATERS

- Oasis Levee
- Hatchineha Estates Sewer System
- C-36 widening (CONTRACT 2B)
- C-35 operation/dredging (CONTRACT 2A)
- C-37 widening (CONTRACT 2B1)

2019

- C-37 Embankment Armoring (CONTRACT 2B2)
- Sparks-Candler & Bronson Levee Gaps
- Headwaters Revitalization Regulation Schedule Implementation

UPPER BASIN
KISSIMMEE HEADWATERS

LOWER BASIN
KISSIMMEE RIVER (C-38)

2010: REACH 4B

CONTRACT 13B
- 3.5 miles C-38 backfill
- 4.3 miles oxbow restoration
- Avon Park fence construction

REACH 4B (2010)

2020: REACHES 2 & 3

CONTRACT 9
- CSX Railroad Bridge elevation

CONTRACTS 10 & 12
- 8.5 miles C-38 backfill
- S-65C removal

CONTRACT 10A
- 2.8 miles oxbow restoration in Reaches 2 and 3

CONTRACT 10B
- Backfill ditch to encourage sheet flow

CONTRACT 12A
- S-69 weir
- 0.6 miles C-38 backfill

CONTRACT 15
- River Acres flood protection

CONTRACT 15A
- Complete supplemental work

CONTRACT 18
- .67 miles oxbow restoration

CONTRACT 18A
- S-65EX1 spillway

CONTRACT 18B
- S-65D Boat Ramp

REACHES 2&3

REACH 4A (2007)

REACH 1 (2001)

COMPLETED: REACHES 1, 4A, 4B

CONTRACTS 1, 3, 4A, 4B, 4C, 5, 6A1A, 6A1B, 6A2, 7,7B, 8, 11, 11A, 13A, 13B, 14B

- S-65 modifications
- Spoil mound degrade; culvert installation
- S-65A tieback levee gap/culvert modification
- 1.9 mile Reach 4A backfill; .9 miles oxbow restoration; weir removal; spoil mound removal; degrade spoil; Avon Park fence
- Radio Tower construction (replaces S-65 Tower)
- Test backfill
- 7.5 miles Reach 1 backfill; 1 mile river channel restoration; degrade spoil; S-65B removal
- Istokpoga Canal: S-67 (replaces G-85); tieback levee; canal dredging; degrade spoil; boat ramp
- S-68, S-83/84 spillway additions; S65D/S-65DX spillway modifications (to increase discharge capacity)
- U.S. Highway 98 Bridge elevation, resurfacing and culverts
- S-65DX1 box culverts
- S-65DX2 spillway addition

Not to Scale

To be completed (projected dates)

Completed

FOR MORE INFORMATION

TIPHANIE JINKS
USACE Project Manager
P.O. Box 4970
Jacksonville, FL 32232-0019
tiphanie.c.jinks@usace.army.mil
904-232-1548

MICHELLE FERREE
SFWMD Project Manager
3301 Gun Club Road
West Palm Beach, FL 33406
mferree@sfwmd.gov
561-682-6453