August – October 2014 Quarterly Kissimmee Basin Environmental and Restoration Features



Phase I restoration area floodplain.



Phase I restoration area river channel above bankfull conditions.



Lower Phase I restoration area river channel.



Phase I restoration area river channel at bankfull conditions.



Phase I restoration area river channel at bankfull conditions.



Water flowing off the Phase I restoration area floodplain into the MacArthur ditch during high flows.

September 5, 2014

Phase I restoration area floodplain where the MacArthur floodplain flows into the MacArthur ditch. This particular area is showing erosion from recent high flows event.

C. S. A. M. Station and the Martine



MacArthur floodplain outfall into the MacArthur ditch.



Phase I restoration area MacArthur river channel showing sandy banks as a result of recent high flows



An environmental scientist documents changes in the landscape of the Phase I restoration area river channel as the result of seasonal high velocities of water cutting through the floodplain.

September 10, 2014

Two snail kites were observed in the Phase I restoration area in upper Pool C. This year marks the first time snail kites were observed in the Phase I restoration area by KRREP scientists. Two other snail kites were observed farther downstream in previous weeks.



Phase I restoration area river channel.



Kissimmee Prairie State Park floodplain just north of the Phase IVB restoration backfill area. During high-flow events, a backwater effect inundates the floodplain in this non-backfilled area.



A snail kite forages in the Avon Park Air Force Range floodplain in the Phase IVB restoration area. During this flight, 30 snail kites were observed in the area in and around the fence line.



At the north end of the Phase I restoration area looking south at over-bankfull conditions.



Phase I restoration area looking south at over-bankfull conditions.



Phase I restoration area floodplain under stormy skies.



Phase I restoration area floodplain.



Phase I restoration area floodplain near Starvation Slough where water has reached into the oaks.



Kissimmee Prairie floodplain just north of the Phase IVB restoration area.



Snail kite in the Kissimmee Prairie floodplain just north of the Phase IVB restoration area.



A snail kite balances on a persimmon branch in the Kissimmee Prairie floodplain just north of the Phase IVB restoration area.



A male snail kite scans the wetlands below for apple snails in the Kissimmee Prairie floodplain just north of the Phase IVB restoration area.



A snail kite scoops up and feeds on an apple snail in the Kissimmee Prairie floodplain just north of the Phase IVB restoration



A large flock of wading birds, mainly snowy and great egrets, forage in a drying wetland in the MacArthur Impoundment floodplain of the Phase I restoration area.



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Looking north into the Phase I restoration area – Micco Run and Oak Creek junction.



A large flock of wading birds take flight from a drying wetland in the MacArthur Impoundment floodplain of the Phase I restoration area.



Snail kites in the Phase IV restoration area on the Avon Park Air Force Range.



Snail kites in the Phase IV restoration area on the Avon Park Air Force Range.



October 14, 2014

A snail kite flies over the Phase IV restoration area in the Avon Park Air Force Range floodplain.



A snail kite searching for apple snails in the Phase IV restoration area.



Phase I restoration area looking north up Montsdeoca Run.



Phase I restoration area looking south at abandoned channels in the Montsdeoca Floodplain.



October 16, 2014



Shallow airboat trails in MacArthur floodplain of the Phase I restoration area demonstrate the recession into the dry season.



Herons, ibis, egrets and teal forage together in large flocks throughout the Phase I restoration area floodplain.



Signs of erosion are evident along the banks of the Phase I restoration area where discharges near 7,000 cfs stripped the vegetation from the banks and cut away at the sandy shoreline on this outer bend river channel.



Spoonbills, ibis, herons and egrets work through drying pools across the Phase I restoration area floodplain in search of fish and invertebrates that have been trapped by the receding water levels.



The beginning formation of a meander cutoff in Micco Run in the Kissimmee River. The cutoff formed sometime in the two weeks prior to the photo date and may ultimately form an oxbow lake. A cross-section survey transect was set up to capture monthly changes in the cutoff channel.



The meander cutoff has almost doubled in width in a month and a half since the previous slide as flows begin to increase into the wet season.

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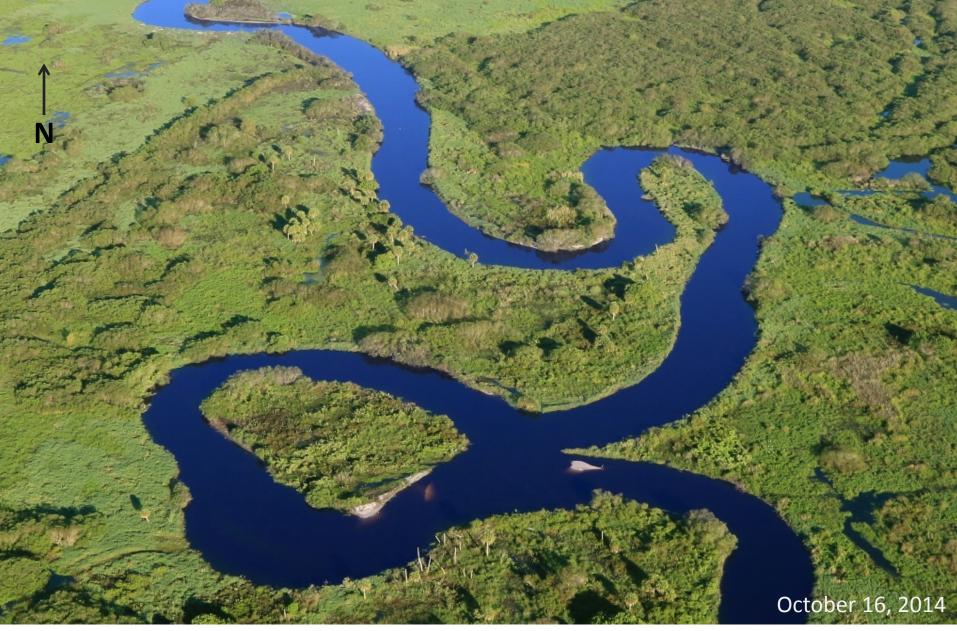


The same shot one month later in July shows that the meander cutoff continues to become more defined.



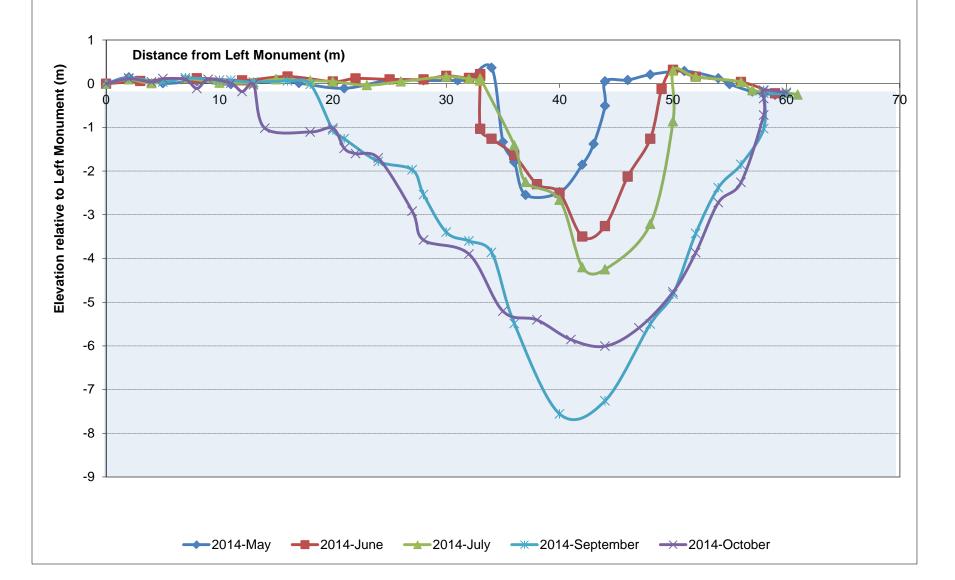
Significant scouring has continued in the Micco Bluff Run breakthrough with higher flows through July and August. Also, a sandbar has formed on the downstream point of the breakthrough.

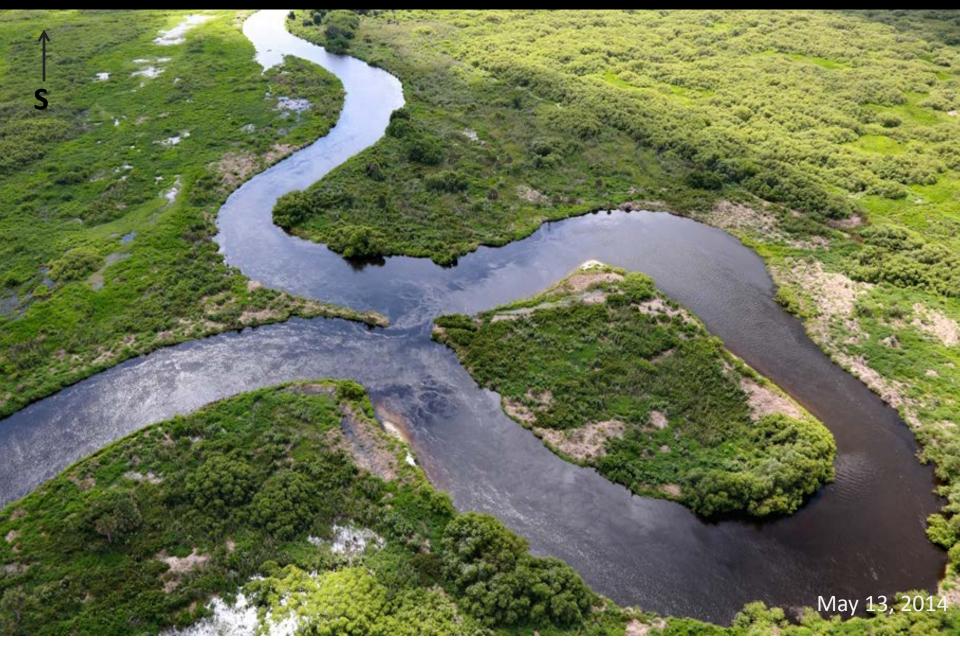




A second sandbar is beginning to form downstream of the breakthrough next to the island. This feature is new since the 7,000 cfs event.

Micco Breakthrough Cross-section



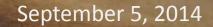


Later in May with higher flows you can see the current in the cutoff as it continuously widens.



Drastic widening has occurred in the Micco cutoff channel since May (previous slide).

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Looking downstream from inside the Micco breakthrough, a large sandbar formed just below the Micco Run oxbow cutoff.



Wading birds take flight from a drying wetland in the MacArthur Impoundment floodplain of the Phase I restoration area.