Site 1 Impoundment on the Fran Reich Preserve: Restoring the Health of the Arthur R. Marshall Loxahatchee NWR

Audubon OF FLORIDA

Breaking ground on the Site 1 Impoundment Project is another milestone in Everglades restoration that will improve the health of the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Loxahatchee NWR). The Fran Reich Preserve, on which the project will be built, was once targeted for dumping Palm Beach County's garbage. Protests, led by community activist Fran Reich, ensured that the 1,800 acre site on the southeastern corner of the Loxahatchee NWR did not meet that fate. This legacy of conservation will endure as this Comprehensive Everglades Restoration Plan (CERP) project breaks ground on this historic site.

Audubon and the Water Preserve Areas

Audubon's Everglades Ecosystem Restoration Campaign advocated for the creation of the Site 1 project in its 1997 report: "Water Preserve Areas and Adjacent Lands: Critical Components of Everglades Restoration." The report stressed the need for a wetland buffer or conservation zone along the eastern edge of the Everglades in Palm Beach, Broward and Miami-Dade Counties in order to maintain the diversity of wildlife habitat, restore more natural freshwater flows, improve water quality and provide ecological buffers between developed and natural areas. The Site 1 Impoundment project is the first of the numerous Water Preserve Area proposals to be implemented.

Benefits to the Arthur R. Marshall Loxahatchee National Wildlife Refuge

The Loxahatchee NWR is a distinctive ecological gem located directly between developed areas of Palm Beach County, Broward County and the Everglades Agricultural Area. In addition to being a National Wildlife Refuge, the Loxahatchee NWR is also one of the Water Conservation Areas, which were originally created to store water in the wet season so that it could be released in the dry season to urban and agricultural users. This unique location and dual function often results in stress on the water resource needs of the Loxahatchee NWR.

Fran Reich Preserve:
Location of the Site 1 Impoundment project
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The Site 1 Impoundment Project will capture and store local runoff during wet periods and then use that water to supplement water deliveries to the Hillsboro Canal during dry periods, thus reducing demands for releases from Lake Okeechobee and the Loxahatchee NWR.

Constructing and operating the storage facility will facilitate the maintenance of more natural, desirable, and consistent water levels within the Loxahatchee NWR. The impoundment will also reduce groundwater seepage, which currently draws water away from the Loxahatchee NWR and compounds water shortages.

Maintaining more natural hydroperiods and hydropatterns is a system-wide goal of Everglades restoration. The Site 1 Impoundment Project will enable the Loxahatchee NWR to retain more rainfall and inflows from upstream, thus enhancing habitat function and quality. In addition, native plant community health and animal species abundance and diversity will improve. Downstream estuaries will also benefit as a result of reducing peak freshwater flows from local stormwater runoff and pulsed releases from Lake Okeechobee.

The Site 1 Impoundment project is the second project to complete all steps outlined in CERP and move to the construction phase. It would not have been possible for the project to remain on this schedule without funds from the American Recovery and Reinvestment Act. Audubon urges Everglades advocates and decisionmakers to use this as an example of the need to recognize and utilize new opportunities which are essential to continuing the Everglades restoration momentum.

Great egrets © Charles Lee.

Project Details

- The main project feature is a 1,660 acre above-ground reservoir that will provide groundwater recharge, reduce seepage from adjacent natural areas, and prevent saltwater intrusion.
- Other features include inflow pump stations, culverts, and a seepage control canal.
- Phase 1 construction is scheduled to take place from October 2010 through October 2012, and Phase 2 construction from September 2011 through March 2014.

The Arthur R. Marshall Loxahatchee Wildlife Refuge
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