splash!

quick facts on...

Picayune Strand Restoration Project

Update on Progress

MARCH 2008

The South Florida Water Management District *is a regional, governmental agency that oversees the water resources in southern half of the state. It is the oldest and largest of the state's five water management districts.*

Our Mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems, and water supply.

The Picayune Strand Restoration Project, an *Acceler8* project in the Comprehensive Everglades Restoration Plan, will restore the natural flow of water across more than 85 square miles of former wetlands in western Collier County. The area was drained in the 1960s for a failed real estate development.

Road construction and canal excavations severely impacted the area, reducing aquifer storage, increasing freshwater discharges to estuaries in the Ten Thousand Islands, disrupting native plant communities and increasing the frequency of wildfires. This project will restore surface water flow to vital wetlands, ensure wetland plants and animals thrive, and improve the Ten Thousand Islands estuaries.

The South Florida Water Management works in partnership with the US Army Corps of Engineers (Corps) on the Comprehensive Everglades Restoration projects. The Corps will be performing all remaining construction on the project and is in the process of obtaining funding to begin construction on the Merritt Pump Station in the Fall of 2008.

Land Acquisition

Land for the project was acquired from 1984 to 2005 by the Florida Department of Environmental Protection with funding assistance from the U.S. Department of the Interior.

- An estimated $125 million was spent
- Almost 20,000 parcels were involved, with approximately 17,000 landowners
- Most parcels ranged from 1.4 to 10 acres

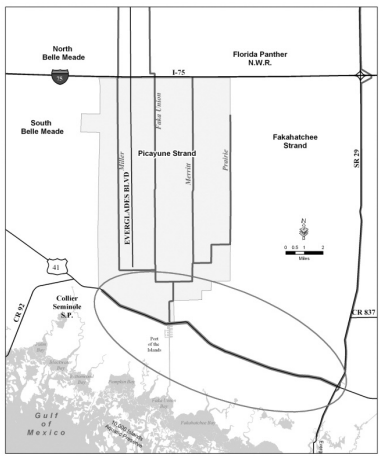
Tamiami Culverts

Tamiami Trail (US Highway 41) and its adjacent borrow ditch are perpendicular to the historic, southwesterly flow of water in the region and have acted as a flow impediment, slowing flows to the Ten Thousand Islands estuaries. New culverts remedied this and now allow sheetflow under Tamiami Trail.

- 19 culverts installed at 9 locations between Collier-Seminole State Park and SR 29
- Completed in 2005

Canal Plugging

To restore surface water flow to Picayune Strand, more than 40 miles of canals are being plugged using fill from existing roadbeds and spoil from adjacent canals. Insufficient material is on-site to completely fill all canals, so a series of "plugs" in each canal will prohibit channelized water flow, allowing surface water flow into adjacent wetlands.



Tamiami Trail Culverts Project Area

Prairie Canal plugging:

Phase I:

- Completed in mid-2004
- More than 30 plugs were installed over 2-mile section

Phase II:

- Installed in 2006 – 2007
- Plugs and adjacent fill were placed in 5 miles of canal

Soil Remediation (50% Complete)

Traces of chlordane from agricultural operations in the late 1940s were found on approximately 65 acres adjacent to the project area. To prevent any potential for contamination following rehydration of the wetlands, a soil inversion remediation process is being used. This will stop leaching of chlordane into surface waters and prevent foraging wildlife, such as wading birds, from accumulating the chemical in their systems. Approximately half of this work has been completed.

Structure Demolition (100% Complete)

As part of site clean-up for the restoration project, existing facilities, trash and structures were removed. All structures were inspected for asbestos and hazardous materials contamination, then demolished using heavy equipment. Debris from more than 160 sites was stockpiled on-site, sorted and hauled to appropriate disposal centers.

Recycling:

- Concrete rubble (1,345 tons)
- Tires from abandoned vehicles (169 tons)
- Steel from vehicles, old equipment and campers (514 tons)
- Miscellaneous debris - (7,660 cubic yards, or 384 dump truck loads)
- Asphalt from paved roads milled and used for gravel road repair (400 dump truck loads)

One of the newer residents of Picayune Strand. A litter of panther kittens was born in April 2007. The project's road removal effort was modified to minimize disturbance of the kittens during the early stage of their life.

Road Removal (25% Complete)

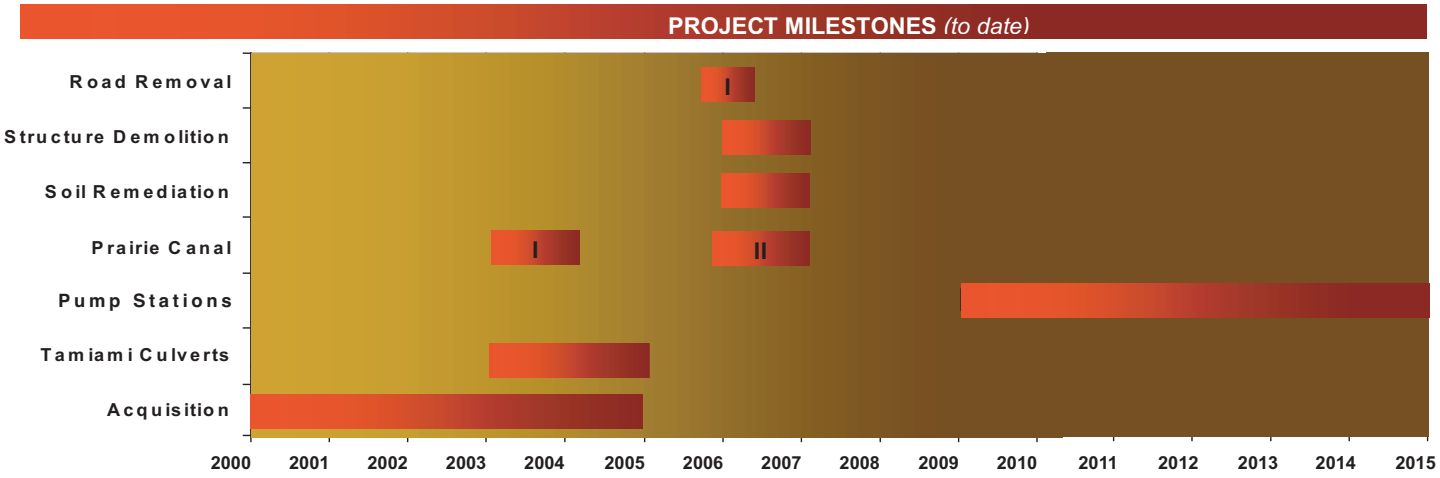
Removal and/or regrading of 260+ miles of asphalt and limerock roads is necessary to restore blocked flowways. Asphalt will be excavated, milled and recycled for use in road maintenance. Limerock road bases will be graded to fill in swales. Other spoil adjacent to roads will be used to complete filling of swales, with remaining spoil stockpiled and used to fill canals.

Phase I (99% Complete):

- All roads removed east of Merritt Canal (65 miles)
- 7 culverts installed under Stewart Boulevard

Secondary Phases:

- Approximately 200 miles of remaining roads will be removed in conjunction with canal plugging, to be removed after the pump stations are operational.



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