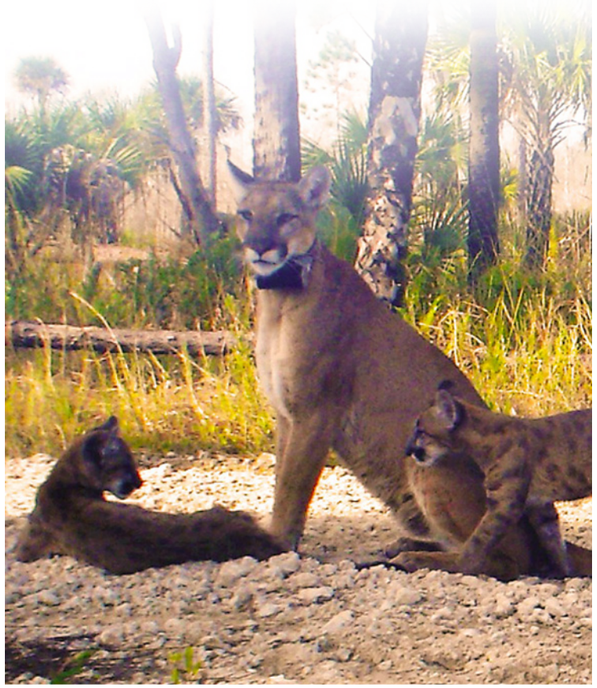
PROTECTING FLORIDA PANTHER HABITAT

In a report called a Biological Opinion, the U.S. Fish and Wildlife Service quantified the long-term beneficial effects of the Picayune Strand Restoration Project for the Florida panther. The Corps provided funding for a panther-prey study that documented the use of Picayune Strand by the Florida panther and its primary prey — white-tailed deer and feral hogs. The study included placing infrared remote cameras at regular intervals across the site. Biologists will use the data collected over two years as reference when post-restoration data is collected, and provides a scientific benchmark for future monitoring and evaluation.



PROJECT PURPOSE & BENEFITS:

- Improve aquifer recharge to protect water supply and prevent saltwater intrusion
- Restore and enhance habitat for fish and wildlife resources, including threatened and endangered species
- Maintain existing level of flood protection for Northern Golden Gate Estates and adjacent private properties
- Reduce drainage of the adjacent Fakahatchee Strand State Preserve
- Reduce or eliminate over-drainage of adjacent sensitive ecosystems
- Reduce freshwater releases (point discharges) to improve the health and productivity of downstream estuaries
- Preserve upland habitat
- Control invasive exotic plants
- Improve water quality of stormwater runoff
- Provide resource-based recreational opportunities
- Provide comprehensive habitat conservation for the greater Everglades ecosystem, including the Florida Panther National Wildlife Refuge, Fakahatchee Strand State Preserve, 10,000 Islands National Wildlife Refuge, Collier Seminole State Park, and the Belle Meade Conservation and Recreation Lands

FOR MORE INFORMATION

LACY SHAW
USACE Project Manager
P.O. Box 4970
Jacksonville, FL 32232-0019
lacy.e.shaw@usace.army.mil
904-232-1550
www.saj.usace.army.mil

JANET STARNES
SFWMD Project Manager
P.O. Box 24680
West Palm Beach, FL 33416-4680
jstarne@sfwmd.gov
239-338-2929
www.sfwmd.gov

PICAYUNE STRAND | Restoration Project

FACTS & INFORMATION

MARCH 2015

PROJECT OVERVIEW

A bold journey is underway to restore America's Everglades. Led by the U.S. Army Corps of Engineers and the South Florida Water Management District, this landmark effort is based on the Comprehensive Everglades Restoration Plan, commonly called CERP. CERP provides a framework for restoring, preserving and protecting the south Florida ecosystem, which surrounds the Everglades, while providing for other water-related needs of the region. CERP calls for a series of over 60 ecological and water system improvements that will be made over the next three decades. The Picayune Strand Restoration Project was the first Comprehensive Everglades Restoration Plan (CERP) project to begin construction. The project area includes 55,000 acres of native Florida wetlands and uplands located between Alligator Alley (Interstate 75) and the Tamiami Trail (U.S. 41) in the southwestern corner of the state.

RESTORATION PROGRESS

To expedite restoration, the local sponsor for the project, the South Florida Water Management District (SFWMD) moved ahead with an effort to plug the northern seven miles of the Prairie Canal, remove about 65 miles of roadways adjacent to the canal, and clear exotic plant species from the canal banks. This work was completed in the fall of 2007. Restoration benefits are already being seen with the reemergence of foraging wading birds and native flora that have been absent in the area for decades. The full implementation of the Merritt Pump Station ccntract will result in 30% of the hydrologic and 38% of the biological benefits of the Picayune Strand Restoration Project.

PROJECT FEATURES

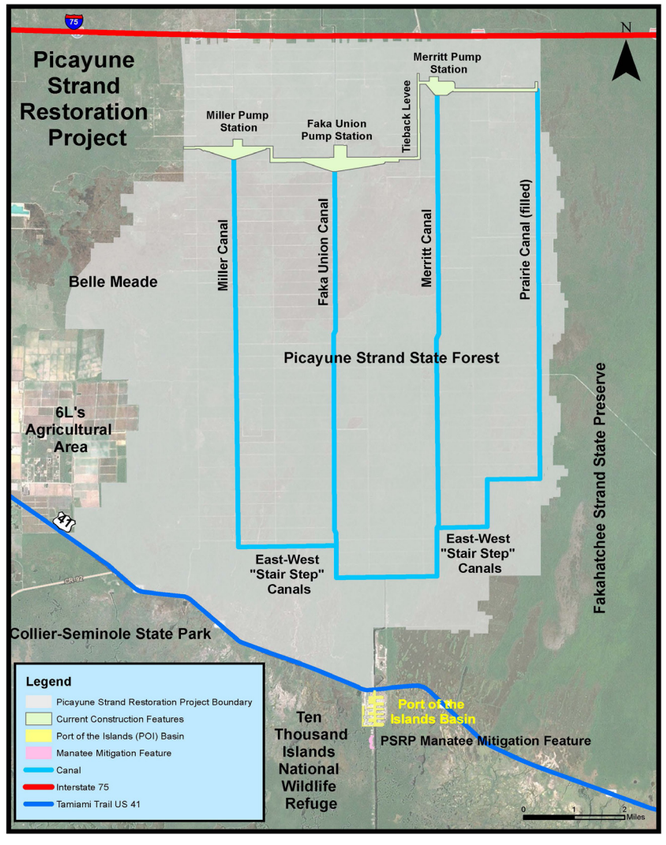
- Constructing three pump stations: Merritt, Faka Union and Miller
- Constructing three spreader basins
- Plugging 48 miles of canals (with more than 100 plugs to block the flow)
- Removing and degrading 260 miles of crumbling roads
- Managing non-native vegetation
- Features to maintain current levels of flood protection
- Features to mitigate effects of manatee refugium at the Port of the Islands Marina

FEDERAL CONSTRUCTION

The U.S. Army Corps of Engineers has awarded three major construction contracts for the Picayune Strand Restoration Project.

STATE OF FLORIDA CONSTRUCTION

Construction projects being performed by the South Florida Water Management District include Prairie Canal, Port of the Islands Protection Features and Manatee Mitigation Features.



MERRITT CANAL PUMP STATION

AWARDED
October 2009

FEATURES
- Build 810-cubic feet per second (cfs) pump station, spreader canal and tie-back levee
- Plug 13.5 miles of canals to block flow
- Remove and degrade 95 miles of roads and tram roads

CONSTRUCTION START
Winter 2009

CONSTRUCTION COMPLETION
Fall 2014

CONTRACTOR
Harry Pepper and Assoc., Jacksonville, Fla.

FAKA UNION PUMP STATION

AWARDED
November 2010

FEATURES
- Build a 2,650-cfs pump station, spreader canal and tie-back levee
- Plug 12 miles of canal to block flow
- Remove 100 miles of roads

CONSTRUCTION START
Winter 2011

CONSTRUCTION COMPLETION
Summer 2015

CONTRACTOR
Harry Pepper and Assoc., Jacksonville, Fla.

MILLER PUMP STATION

AWARDED
September 2013

FEATURES
- Build a 1.250-cfs pump station, spreader canal and tie-back levee
- Plug 13 miles of canal to block flow
- Remove and degrade 65 miles of roads

CONSTRUCTION START
Winter 2013

CONSTRUCTION COMPLETION
Fall 2017

CONTRACTOR
Archer Western, LLC, Tampa, Fla.

RECLAIMING LOST WETLANDS

RESTORATION

Restoring the Picayune Strand involves plugging 48 miles of canals that were originally dug to provide flood protection for a sprawling residential area that was never built and removing roads that impede sheet flow. Building and operating pump stations will allow natural resource and water managers to direct fresh water to drained wetlands as well as to maintain current levels of flood protection on adjacent land. Removing 260 miles of crumbling roads and management of non-native vegetation will further enhance restoration efforts.

These features will restore historic sheet flow that will bring back the native ecosystem by increasing the groundwater levels. Besides restoring freshwater wetlands, the Picayune Strand Restoration Project will improve estuarine water quality and reduce unnatural freshwater inflows.

In 2007, the SFWMD completed plugging the Prairie Canal, which has successfully reduced drainage of the adjacent Fakahatchee Strand State Preserve, and also completed road removal between the Prairie and Merritt canals.

The project's Record of Decision for the Integrated Environmental Impact Statement was signed by the Assistant Secretary of the Army for Civil Works in April 2007, and Congress authorized the Picayune Strand Restoration Project in the 2007 Water Resources Development Act (WRDA).

Congressional appropriations in 2009 provided the Corps with funds to start the federally-funded construction project. The first construction contract was awarded in October 2009 to construct the Merritt Pump Station. The contract includes construction of the pump station, spreader basin and tie-back levee, the removal and degrading of 95 miles of trams and roads, and the plugging of the Merritt Canal. About $40 million in funds from the American Recovery and Reinvestment Act (ARRA) accelerated the construction schedule and helped create much-needed jobs.

Following the success of the Merritt Pump Station contract, the Faka Union Pump Station contract was awarded in November 2010 and will be the largest pump station in Picayune Strand. The construction contract includes construction of the pump station, spreader basin and tie-back levee, the removal and degrading of nearly 100 miles of trams and roads.

The Corps awarded the construction contract for the third and final pump station, Miller Pump Station, in September 2013. The contract includes the construction of the pump station, a tie-back levee system, a spreader basin and road removal and canal plugging.

RESCUING AN ENDANGERED ECOSYSTEM

THE JOURNEY TO RESTORE AMERICA'S EVERGLADES

Together the federal government and state of Florida are transforming this area into an ecological gem, where the endangered Florida panther and other native plants and animals may once again thrive. Plugging the canals and removing the roads will enable overland water flow that will benefit the coastal estuaries and surrounding parks and wildlife preserves, and will recharge the aquifer.