

Rookery Bay Reserve *Finding Solutions*



Disrupted Tidal Flow on Shell Island

When Shell Island road was built in the 1960's the dredge-and-fill construction method disrupted the natural tidal exchange between Henderson Creek and the mangrove forest. The unimproved road

leading into the Reserve from Collier Boulevard about 2.5 miles south of US 41 cuts through valuable mangrove swamp, degrading surrounding habitat and depriving plant communities of

necessary nutrients. In addition, the volume and timing of freshwater flow from rainfall was altered, changing water levels and salinity.



Project Leaders

*Gary Lytton
Cheryl Metzger
Randy McCormick
Sue Leitholf
Jeffrey A. Carter*

The Solution

In a precedent-setting cooperative partnership, Rookery Bay Reserve has teamed with Collier County and the U.S Fish and Wildlife Service to restore the natural integrity of this wetland environment on Shell Island Road. To complete the hydrologic restoration project, the Reserve secured grant funds from the U.S. Fish and Wildlife Service

National Coastal Wetlands Conservation Program. Contractors under the supervision of Collier County have been hired to install thirteen culverts under the road and fill in the existing roadside ditch to restore tidal exchange and freshwater flow. The project has been carefully reviewed and permitted by the U.S. Army Corps of Engineers and the

South Florida Water Management District. Contractors are trimming roadside mangroves in order to complete the restoration work; all of this work is under careful monitoring by Rookery Bay staff and is proceeding within the scope of the planned restoration.

Funding

U.S. Fish and Wildlife Service National Coastal Wetlands Conservation Program

Project Dates

April 2009 through June 2009

PERMITS

- South Florida Water Mgt. District Permit Number 11- 02993-P
- US ACOE Permit Number SAJ-2009-411 (NWP-WDD)



Rookery Bay, located in southwest Florida, is recognized as one of the few remaining pristine, mangrove-forested estuaries in the U.S. As part of the National Estuarine Research Reserve System, it serves as an outdoor classroom and laboratory for students and scientists. For more information, visit www.rookerybay.org.

