

City of Sanibel
Natural Resources Department

Memorandum

September 22, 2011

TO: Rob Loflin, Natural Resources Director

FROM: Holly Downing, Environmental Specialist

RE: \$25,000 USFWS Grant for Restoration of the Sanibel Bayous Package Plant Site

The Sanibel Bayous Preserve restoration project is designed to restore the site of the former Sanibel Bayous sewer package plant on the shoreline of Clam Bayou to re-establish wildlife habitat and improve coastal water quality. Staff is continuing to apply for grants to secure the remaining matching funds (estimated \$25k) needed to complete this project (total project cost: \$50k), finalizing the site design, and working to obtain the required permits.

In 2007, routine water quality testing by the State Health Department resulted in repeated beach closures at Bowman's Beach, Sanibel's largest beach park. Further testing identified the plant as a significant source of sewage pollution to the surrounding coastal waters. In March 2008, the City of Sanibel purchased the privately owned package plant, at a total cost of over \$326,000, as part of the City's ongoing efforts to protect water quality and local beach conditions. Residents formerly served by the sewer plant are now connected to the City's central sewage treatment system. Once the purchase was complete, the City decommissioned the plant, removing all structures and filling the 2 treatment ponds.

The restoration of the site will include several components designed to enhance wildlife habitat, increase habitat diversity, and improve coastal water quality. To reestablish historic wetland grades, fill used to cap the sewer ponds will be removed and the area re-vegetated using a combination of natural recruitment and plantings. The site will be planted with mangroves and other native wetland species including sea-oxeye daisy (*Borrichia frutescens*), smooth cordgrass (*Spartina bakeri*), leather fern (*Acrostichum danaeifolium*), coastal water hyssop (*Bacopa monnieri*), and needle rush (*Juncus roemerianus*). The tentative site plan also includes deeper swales/ponds to provide forage for wading birds and refugia for freshwater fishes and a small area of upland ridge habitat.

At approximately 3-acres, the restoration site itself is relatively small; however, the restored site will provide habitat continuity with adjacent conservation lands at Bowman's Beach Park, Silver Key, and the J.N. "Ding" Darling NWR. It will also provide water quality benefits for nearby Clam Bayou. The adjacent 3.5 acre City-owned easement to the west provides a direct connection to ~1200 feet of

shoreline along Clam Bayou. In February 2006, with funding from NOAA's Community Restoration Program, the Partners for Fish and Wildlife Program and others, the City of Sanibel restored Clam Bayou's tidal connection to the Gulf of Mexico. Since then, the City of Sanibel and the Sanibel-Captiva Conservation Foundation have partnered in a number of grant-funded efforts to facilitate the recovery of and directly restore mangrove, oyster, and seagrass habitats within the 450-acre system. The restoration of the former sewer plant site will compliment these efforts.