

## 13. SOUTHWEST WEST BAY CONSERVATION UNIT

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### 13.1 General Description of Conservation Unit

The 962-acre Southwest West Bay Conservation Unit is located southwest of West Bay and connects natural communities west of State Road (SR) 79 with those east of the highway, including West Bay. This unit buffers and filters surface waters flowing into West Bay (Figures 2-1 and 13-1). This unit has been identified as a primary wildlife habitat area, with the potential for supporting both uplands and wetlands important to wildlife diversity in the Florida panhandle, and important to protecting essential fish habitat (EFH) and living marine resources in West Bay. Data sheets reporting the results of the GIS ERATools™ analyses for the Southwest West Bay Conservation Unit are included at the end of this section.

The current land cover (NFWFMD 1995) is dominated by silviculture (coniferous plantations; 70%) and mixed forested wetlands, and supports some saltwater marsh and shrub wetlands. The National Wetlands Inventory (NWI, 1982-87) classifies approximately 21% of the land cover as uplands and 79% as wetlands dominated by palustrine scrub shrub swamps with some estuarine systems (Figure 4-2).

Historically, the uplands component of this area was dominated by North Florida Pine Flatwoods, and the wetlands component of this area was dominated by Hardwood Swamps, Cypress, and Shrub Bogs, with some saltwater marsh (NRCS 1989) (Figure 4-1). Historical land cover may indicate restoration potential. Pine plantations have replaced most of the north Florida pine flatwoods communities and most of the scrub shrub wetlands. However, the current pine plantations not only support the state's forestry resource, but when placed under conservation status, the pine flatwoods potentially can be restored to the FNAI-identified priority/under-represented natural community of Pine Flatwoods. Tables 2-1 and 2-2 present wildlife and listed species generally associated with the current and historical natural communities.

### 13.2 Regional Significance

The Southwest West Bay Conservation Unit occupies the far eastern end of the conservation network and connects wetlands and other natural communities west of SR 79 with those east of SR 79 and to

West Bay. This unit protects tidal flats and estuarine communities, which support EFH. Limiting construction in this area and protecting and restoring components of both the upland and wetland systems will maintain ecological integrity within the region (Figure 2-1).

Almost all (86%) of the Southwest West Bay Conservation Unit uplands and wetlands have been identified by FWC as priority habitat for 1-3 wetland-dependent species. Recreational trails and scenic roads occur within this unit and within the 2- and 5-mile buffers around this unit (FDEP 2003). Additional features of regional ecological significance that occur within the 2- or 5-mile buffers, such as seagrass beds and listed species observations, are discussed in the following subsections.

### 13.3 Biodiversity

Historically, the Southwest West Bay Conservation Unit was dominated by North Florida Pine Flatwoods, and the wetlands were dominated by shrub bogs and hardwood and cypress swamps (NRCS 1989) (Figure 4-1). Currently, the cypress and forested wetlands are primarily unaffected by silviculture or other land uses. The landscape currently in silviculture retains the physical characteristics for restoring it to its historical natural state. In addition, pine flatwoods have been identified by FNAI as a priority/under-represented natural community. Priority natural and endemic communities identified within a 1-mile buffer include Scrub and Pine Flatwoods (FNAI 2001).

Eighty-five percent (85%) of this conservation unit and 62% of the landscape within the 1-mile buffer around the unit are identified as priority habitats for key focal wetland-dependent species (Kautz et al. 1994). Of interest is that all of the uplands within the unit have been identified as important habitat for 1-3 wetland-dependent species.

This conservation unit provides for wildlife habitat conservation and the preservation of wildlife corridors. The Southwest West Bay unit is a necessary part of the chain linking the natural systems in the west with those in the east, particularly West Bay, and will facilitate movement of species through the Project area. Because of the identification of a substantial portion of this unit's area as priority habitat for wetland-dependent species, the existing saltwater marshes, the unit's direct surface water connection with West Bay, and this unit's location relative to the other conservation units, the protection and restoration of this conservation unit will contribute to the state's conservation strategy for both upland and wetland focal species (Kautz et al. 1994; Cox et al. 2000).

#### Threatened and Endangered Species

There have been no known recorded occurrences within the Southwest West Bay Conservation Unit of federally or state-listed threatened or endangered species<sup>1</sup>, and there is no U.S. Fish and Wildlife Service-designated critical habitat. About 10 acres of an FWC designated SHCA for the Gulf salt marsh snake (*Nerodia clarkii clarkii*) is located along the shore of West Bay within the boundary of the Southwest West Bay unit (Cox et al. 1994).

One federally listed species, the endangered red-cockaded woodpecker (*Picoides borealis*), was observed within the 1-mile buffer (inactive cavity tree in the Cypress and Wet Pine Flats Conservation Unit; Moyers 2003) and within the 3-mile buffer by FNAI (2003). Five plant species state-listed as endangered or threatened have been observed within a 1-mile buffer, and several state-listed animal and plant species have been observed within a 3-mile buffer around the unit (see data sheets at the end of this section). Sea turtle nesting beaches overlap the 1-mile and 3-mile buffers around this unit.

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<sup>1</sup> Surveys completed by FNAI and FWC are not comprehensive or exhaustive and are opportunistically based on priorities and funding as well as access to land.

The proposed conservation plan for the Southwest West Bay unit should improve the quality of potentially suitable habitat for listed species within the unit as well as protecting and maintaining the suitability of the regional landscape for listed species (St. Joe Timberland Company 2003). Tables 2-1 and 2-2 present many of the common and federally and state-listed animal and plant species, respectively, that might benefit if this conservation unit's planted acreage were restored to its historical natural land cover of pine flatwoods, and shrub bogs, and forested wetlands.

### **13.4 Water Quality**

The Southwest West Bay Conservation Unit is located within one local drainage basin, Direct Runoff to Bay, which drains directly to West Bay (Figure 2-3). The environmental issues surrounding the Direct Runoff to Bay basin focus primarily on maintaining water quality and quantity. The water quality status for the Direct Runoff to the Bay basin has been listed as fair in the 2000 and 1998 Florida Water Quality Assessment: 305(b) reports (FDEP 2000, 1998). No status is given for this basin in the 1996 305(b) report (FDEP 1996). Currently, the water quality status for West Bay is listed as good (FDEP 2000 305(b) report). The 1998 305(b) report listed the water quality trend to be good to excellent. The 1996 305(b) report lists the basin as fully meeting water quality standards set forth by the state.

The wetland systems within this conservation unit do not connect directly with wetland systems in the other conservation units. About 50% of the Southwest West Bay unit contributes to maintaining blackwater inflow to West Bay. Most of the contribution comes from Rutlege Sand soils, a primary hydric depressional soil, and somewhat less comes from Pamlico-Dorovan Complex soils, a primary hydric muck soil. The direct flow into the West Bay system and the blackwater inflow characteristics emphasize the importance of this conservation unit within the study area.

There are no known immediate point-source water quality threats to the system in the boundary. Silvicultural activities account for non-point source water quality threats. The remainder of the land cover is in natural communities, primarily wetlands, of various quality. The estimated percentage of land use within the Southwest West Bay Conservation Unit that is wetland ranges from 30% to 79% (NFWMD 1995 and NWI, respectively, in FDEP 2003) to 79% (761 acres) using the method for estimating Corps' jurisdiction. A small amount of stormwater flows from SR 79 into this unit.

Upland areas in this unit are described in the field notes as moderate quality. When these lands become inactive from current silviculture and restored to their natural land cover, the entire unit will serve to buffer West Bay from silvicultural or development activities outside the unit.

### **13.5 Essential Fish Habitat and Living Marine Resources**

The Southwest West Bay Conservation Unit buffers and filters surface water flow into West Bay. West Bay supports extensive saltwater and freshwater marshes and seagrass beds that provide EFH. An FNAI-identified coastal priority area occurs within the unit's boundary; and seagrass beds and two FNAI-identified coastal priority areas occur within the 2-mile buffer around this unit (FMRI 2002; FNAI 2001). Conserving and restoring this conservation unit will protect and improve the abundance and health of the existing EFH and other living marine resources in West Bay.