

10. SALAMANDER TRIANGLE CONSERVATION UNIT

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10.1 General Description of Conservation Unit

The 42-acre Salamander Triangle Conservation Unit is located adjacent to the southern boundary of the Cypress and Wet Pine Flats Conservation Unit (Figures 2-1 and 10-1). This unit has been identified as potential flatwoods salamander (*Ambystoma cingulatum*) habitat. Data sheets reporting the results of the GIS ERATools™ analyses for the Salamander Triangle Conservation Unit are included at the end of this section.

The current land cover (NFWMD (1995) is almost all silviculture, with some scrub shrub wetlands, with a very small area identified as mixed forested wetlands. The National Wetlands Inventory (NWI, 1982-87) classifies approximately 98% of the land cover as uplands and 2% as wetlands dominated by palustrine forested wetlands (Figure 4-2).

Historically, the uplands component of this area was North Florida Pine Flatwoods, and the wetlands component was dominated by Cypress and Hardwood Swamps and Shrub Bogs (NRCS 1989) (Figure 4-1). Historical land cover may indicate restoration potential. Pine plantation has replaced all of the North Florida Pine Flatwoods community. However, when placed under conservation status, a large percentage of these lands 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 this natural community.

10.2 Regional Significance

The Salamander Triangle Conservation Unit encompasses a relatively small area surrounding a potential flatwoods salamander (*Ambystoma cingulatum*) breeding pond and good quality potential uplands habitat. This conservation unit abuts the south end of the Cypress and Wet Pine Flats Conservation Unit. Limiting construction in this area and protecting and restoring components of both the upland and wetland systems in this unit will serve to protect the potential high quality flatwoods salamander habitat (Figure 2-1).

Almost all (88%) of the Salamander Triangle Conservation Unit uplands and wetlands have been identified by FWC as priority habitat for 1-3 wetland-dependent species. Recreational Trails overlap

the 2- and 5-mile buffers, and one managed land, Camp Helen State Park, overlaps the 5-mile buffer (FNAI 2000, 2001; FDEP 2003). Additional regionally significant ecological features, such as seagrass beds, are discussed in the following subsections.

10.3 Biodiversity

Historically, the Salamander Triangle Conservation Unit was pine flatwoods and cypress, mixed forested, and shrub wetlands. The cypress and forested wetlands remain primarily unaffected by silviculture or other land uses. The part of 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 the 1-mile buffer include Pine Flatwoods; within the 3-mile buffer, they include Pine Flatwoods, Scrub, and Sandhills.

A large percentage (88%) of this conservation unit and 80% of the landscape within the 1-mile buffer around the unit is identified as priority habitats for key focal wetland-dependent species (Kautz et al. 1994). Of particular interest is that almost all of the uplands within this unit have been identified as important habitat for 1-3 wetland-dependent species (Kautz et al. 1994; Cox et al. 2000). Sea turtle nesting beaches occur within the 3-mile buffer around this unit.

Threatened and Endangered Species

There were no previously recorded occurrences of federally or state-listed threatened or endangered species within the Salamander Triangle Conservation Unit¹, and there is no U.S. Fish and Wildlife Service-designated critical habitat. During 2003 field surveys, WilsonMiller identified a potential high quality breeding pond and surrounding upland habitat for the flatwoods salamander (*Ambystoma cingulatum*) within this conservation unit. The flatwoods salamander is federally listed as threatened and state-listed as a species of special concern. Sampling to attempt to verify the presence of flatwood salamander larvae and adults may be conducted in the future.

WilsonMiller also observed two state-listed plant species within this unit: wiregrass gentian (*Gentiana pennelliana*) and Chapman's crownbeard (*Verbesina chapmanii*). One federally listed animal species, the red-cockaded woodpecker (*Picoides borealis*) was observed within the 1-mile buffer; WilsonMiller obtained records of several inactive red-cockaded woodpecker trees in the southeastern portion of the Cypress and Wet Pine Flats Conservation Unit (Moyers 2003). The red-cockaded woodpecker is federally listed as endangered and state-listed as threatened. One state-listed plant species was observed within the 1-mile buffer, and four state-listed plant species were observed within the 3-mile buffer. The ERATools™ reports at the end of this section provide additional information.

An FWC-designated strategic habitat conservation areas (SHCAs) for the snowy plover (*Charadrius alexandrinus*) and the Gulf salt marsh snake (*Nerodia clarkii clarkii*) overlap the 3-mile buffer around this unit.

The proposed conservation plan for the Salamander Triangle unit should improve the quality of potentially suitable habitat for listed species, notably the flatwoods salamander, 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-

¹ 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.

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.

10.4 Water Quality

The Salamander Triangle Conservation Unit is primarily within the Phillips Inlet (Lake Powell) drainage basin (79%, 33 acres), but also has some area within the West Laird Drain basin (21%, 9 acres). Land within the Phillips Inlet (Lake Powell) drainage basin contributes surface waters directly to Lake Powell; surface waters within the West Laird Drain basin eventually flow to West Bay.

The environmental issues surrounding Lake Powell, designated an OFW and a Class III – Recreational Use water body, focus primarily on maintaining water quality and quantity. Currently, the water quality trends for Lake Powell are listed as good and fully meeting the water quality standards set forth by the state in the 2000 Water Quality Assessment: 305(b) Report (FDEP 2000). The 1998 305(b) report (FDEP 1998) lists the water quality trend to be good. The 1996 305(b) report lists the water body, but does not give a status on the water quality standards or trends (FDEP 1996). Lake Powell is not listed on the 1998 303(d) Impaired Waters list.

Currently, West Laird Drain is listed but was not assigned a status on the water quality standards and trend in the 2000 Florida Water Quality Assessment: 305(b) reports (FDEP 2000). The 1998 305(b) report did not list the basin (FDEP 1998), and the 1996 305(b) report lists the water body but does not provide a status on the water quality standards and trends (FDEP 1996). West Laird Drain is not listed on the 1998 303(d) Impaired Waters list.

About 5% of the Salamander Triangle unit contributes to maintaining blackwater inflow to West Bay; all of the contribution comes from Rutlege Sand soils, a primary hydric depressional soil. There are no known immediate point-source water quality threats to the system in the boundary. Silviculture accounts for non-point source water quality threats. No stormwater from any developed areas flow into surface water bodies within this unit.

Less than 8% of the land cover is in natural communities; about 86% is in pine plantation. The estimated percentage of wetlands within the Cypress and Wet Pine Flats Conservation Unit ranges from 8% to 2% (NFWFMD 1995 and NWI, respectively, in FDEP 2003), to 34% (15 acres) using the method for estimating Corps' jurisdiction.

10.5 Essential Fish Habitat and Living Marine Resources

The Salamander Triangle Conservation Unit is primarily within the Phillips Inlet (Lake Powell) drainage basin, but also has some area within the West Laird Drain basin. Surface water from this unit flows to Lake Powell or to West Bay. Both West Bay and Lake Powell support extensive saltwater and freshwater marshes and seagrass beds that provide Essential Fish Habitat (EFH). In addition, small areas of two FNAI-identified coastal priority areas overlap the 2-mile buffer around this unit, and seagrass beds occur within the 5-mile buffer (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.

