

SEMINOLE STATE FOREST (Lake County)

Initial State Acquisition: *April, 1990*

Area: *27,064 Acres*

Primary Watershed(s): *Middle St. Johns River; Black Water; Wekiva*

Current Number of DEP *FERI* Database Listings: *0 Projects*

Previous Restoration Activities -

Florida Gas completed two mitigation projects in 2003 on the Seminole State Forest (SSF) to mitigate wetland and sensitive land impacts created by pipeline construction elsewhere on the Forest. The first involved the removal of approximately 1000 feet of a 12-foot-wide logging **tram** spur and three 60-inch culverts that disrupted natural flow within the **Blackwater Creek** floodplain. The objective of the project was to restore sheet flow to the floodplain by providing clear conveyance of the waterbody itself. Tram construction ditches were backfilled with tram material (**see Figure 1**). In places, small sections of the tram were left intact to preserve the integrity of the floodplain vegetation growing on the slopes of the structure. Additionally, cypress trees were planted in open areas along the old tram to



SSF Figure 1: Section of Tram Removed Across Blackwater Creek as Part of a **Florida Gas Mitigation Project** in 2003.

enhance the natural plant community.

The second project, the **Palm Springs Project**, involved the removal of an impoundment of approximately 75 x 30 feet, and a damaged culvert. The objective was to restore the 60-foot-wide spring run and eliminate an artificial pool that had been developed prior to public ownership. The unnaturally steep slopes created by the impoundment adjacent to the spring were stabilized with water bars and mulch and seeded with native grasses. After a couple of setbacks during which erosion and an infestation of exotic species (hairy indigo) needed to be addressed, the project site has now become stable. The 5-year project monitoring phase will conclude in 2008.



SSF Figure 2: Improved culverted crossing over Sulphur Run on Palatka Road on the Seminole Tract.

Major storm events in 2002 and 2003 caused severe erosion and degradation of service roads on SSF, particularly on Sand and Palatka Roads. Conveyance on Palatka Road at the Sulphur Run crossing was enhanced by increasing culvert length and diameter and stabilizing the road shoulders with geo-fabric and large rock (**see Figure 2**).

Other road improvements since 2003 have directly and indirectly enhanced wetland function in parts of the forest where erosion and sedimentation had affected wetland habitat, water quality, and drainage. Most recently, improvements involved knocking

down road berms to allow natural drainage and re-establishing native vegetation on East Spur Road in the southeastern part of the forest. In 2007, work was done to protect access points on the Blackwater Creek to protect water quality and restore natural creek bank vegetation. Improvement efforts included the installation of *Geo-Web* and *Geo-Textile* and applying size #57 rock to the canoe launch area and surfacing the road approaches with limestone.

Current/Planned/Proposed Restoration Activities –

Several sites on the SSF have been identified as potential enhancement/improvement project sites since 2005. One area in the southeastern portion of the forest, west of Sand Road near the Florida Scenic Trail, involves an 8.0 acre wet flatwoods and floodplain edge that has filled with sediment discharge from old firelines. Enhancement will entail rehabilitating and perhaps plugging the older firelines to re-establish natural sheetflow across the landscape, subsequently minimizing soil erosion and sedimentation on the site. Other sites have been identified along East Spur Road (**see next section; Figure 3**) and the access road to the old Tram, southwest of Blackwater Creek.

Wetland Restoration Needs Assessment –

Preliminary assessment work was conducted on the Seminole State Forest in September, 2007. A total of **126** site points were established and roughly 60 % of the roads, trails, and firelines on the Shockley, Cassia, and Seminole Tracts were evaluated. The following observations made during the assessment are among the assessment findings. Additional information about the assessment is available upon request from the Division of Forestry.

1. Only limited wetland restoration opportunity exists on the two Shockley parcels since much of the land is upland and mesic flatwoods.
2. The East Spur Road divides wetlands in at least two areas and impedes the natural drainage of the systems. Installation of low-water crossings or culverts would enhance natural drainage
3. Although most firelines installed during the *Lee* and *Red Oak* Fires of 2007 have been adequately re-habilitated, several sections of firebreaks should be stabilized and low-water crossings could be installed to enhance wetland plant communities and drainage within wetland areas.
4. The existence of an old berm adjacent to a section of the Equestrian Trail between Atula Road and Sulphur Run impedes surface drainage from the uplands to the run.



SSF Figure 3: Interrupted sheetflow on East Spur Road. Berm removal and installation of a hardened low-water crossing would enhance site hydrology and improve water quality.