University of Florida Conservation Area Land Management Plan

Swine Unit Woods

Introduction

Swine Unit Woods is a 7.7-acre Conservation Area adjacent to IFAS's Swine Unit, south of Archer Road and east of SW 23rd Terrace. This formerly pine dominated system was heavily impacted by pine beetle infestation in 2003, resulting is the loss of much of the pine canopy. As a result of this loss of canopy, invasive non-native plants have taken over much of the site.

The property was changed to Conservation in the Campus Master Plan 2000-2010 from its previous classification as Passive Recreation. According to that edition of Master Plan, the area was recommended for preservation due to its large size, proximity to Bivens Arm and potential for wildlife habitat. It also noted that restoration of this area would require the removal and maintenance of nuisance vegetative species.

Natural Areas Inventory

Water Resources

According to watershed analysis work completed by Causseaux and Ellington, Swine Unit conservation area is in a depression basin. Water leaving the Conservation Area exits via an intermittent drainage canal that in turn drains into a sinkhole pond adjacent to SW 23rd Terrace (Bee-Pollen Unit / Solar Park Pond). If water levels rise sufficiently within the sink /pond, it appears that water will then route to Bivens Arm Lake through another canal (although this appears to happen very infrequently).

A forested wetland covers most of the Conservation Area. This wetland area was not identified in the Master Plan 2000 - 2010 and thus was not included as Conservation. However, the Conservation Study Committee added this wetland into the conservation boundary in the spring of 2005.

Intermittent stream / canal adjacent to the Swine Unit.

Natural Communities

Swine Unit Woods was characterized as a low pine flatwoods of slash and longleaf pine in the 2000-2010 Master Plan when it was placed in Conservation, since then the pines have been logged due to pine beetle infestation. The overstory is dominated by slash and longleaf pine with a fairly dense understory of wax myrtle, saw palmetto, gallberry and wire grass.

Plant Species

Plant species typically found in pine flatwoods include longleaf pine, slash pine, wire grass, swa palmetto, gallbery, St. john-wort, dwarf huckleberry, fetterbush, dwarf wax myrtle, stagger bush, blueberry, gopher apple, tar flower, bog buttons, blackroot, false foxglove, white-topped aster, yellow-eyed grass, and cutthroat grass

Invasive – Non-Native Plant Species

University personnel have documented the following list on site: air potato, cogon grass, chinaberry, golden raintree, and wild taro.

Animal Species

Typical animals of Mesic Flatwoods, but not identified on site, include: oak toad, little grass frog, narrowmouth toad, black racer, red rat snake, southeastern kestrel, brown-headed nuthatch, pine warbler, Bachman's sparrow, cotton rat, cotton mouse, raccoon, gray fox, bobcat, and white-tailed deer.

Invasive Plants in the understory

Soils Inventory

Mesic Flatwoods occur on relatively flat, moderately to poorly drained terrain. The soils typically consist of 1-3 feet of acidic sands generally overlying an organic hardpan or clayey subsoil. The hardpan substantially reduces the percolation of water below and above its surface. During the rainy seasons, water frequently stands on the hardpan's surface and briefly inundates much of the flatwoods; while during the drier seasons, ground water is unobtainable for many plants whose roots

fail to penetrate the hardpan. Thus, many plants are under the stress of water saturation during the wet seasons and under the stress of dehydration during the dry seasons (FNAI 1990).

The following soil information for on-site soils was gathered from the Soil Survey of Alachua County (1985).

Wauchula Sand
Wauchula Sand is a poorly drained soil commonly associated with flatwoods. Slopes are nearly smooth and range from 0 to 2%. This soil is in small and large, irregularly shaped or meandering areas that range from 20 to 800 acres. Typically, the surface layer is sand about 8 inches thick. The upper 5 inches is black and the lower 3 inches is dark gray

Urban Land Wauchula Complex
This complex of Wauchula Sand in an urban context consists of poorly drained, nearly level soils and urban land. Slopes range from 0 to 2 percent. Typically, the surface layer of Wauchula soils is black to dark gray sand about 8 inches thick. In the Wauchula soils, the water table is within 10 inches of the surface for about 1 to 3 months during most years. Natural fertility and organic matter contents are low. Permeability of the sandy surface and subsurface layers is rapid.

Cultural and Passive Recreational Resources
Currently, Swine Unit Woods does not have any public access or associated amenities and due to its small size and distance from the main campus probably does warrant these types of efforts in the near future. There are no known archeological or historic sites within the Park.

Future Improvements

Due to relatively remote location Swine Unit Woods serves primarily as a small Nature Preserve area with limited public access. This area also serves as a buffer between the University's research facilities and neighboring properties. The primary management activities that need to be addressed are dealing with the invasive non-native plant species and restoration planting of native trees, due to the removal of pine beetle affected trees. Additionally, boundary markers need to be placed in order to alert area residence to the exact boundaries of the Conservation Area.

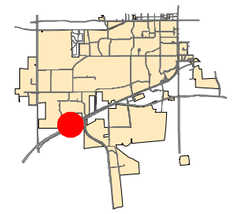
Maps on the following pages:

1. Aerial Photo
2. Water Resources
3. Natural Communities
4. Soils

NATL - East (Surge Wetland) Conservation Area

Conservation Area

Master Plan Boundary



N

0 45 90 180 270 Feet

Facilities, Planning and Construction

May 2005

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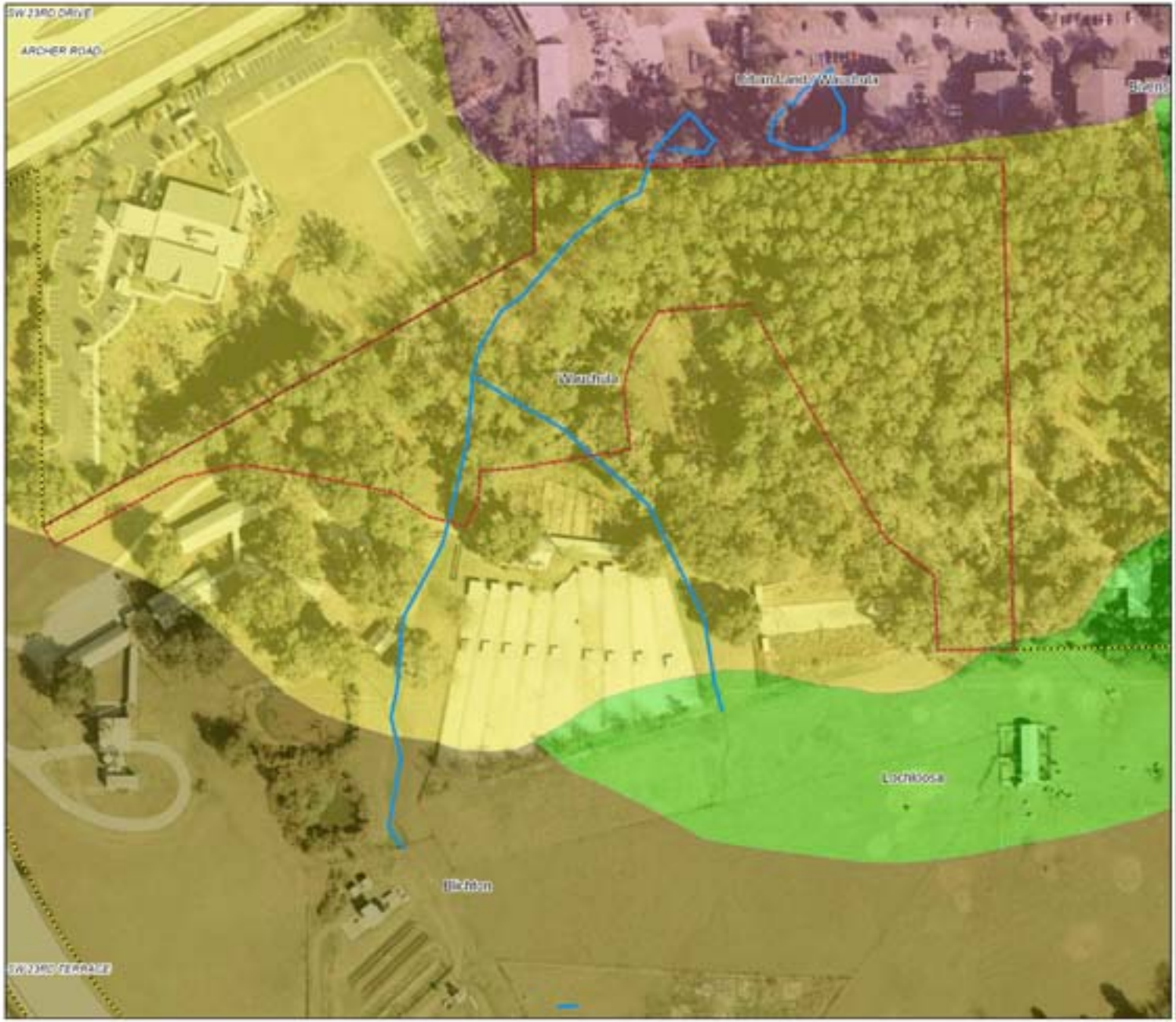

Figure 20 - 2

Soils
Swine Unit Woods
Conservation Area

- Conservation Area
- Blichton
- Lochloosa
- Urban Land / Wauchula
- Wauchula
- Creeks
- Master Plan Boundary

N

0 55 110 220 330 Feet

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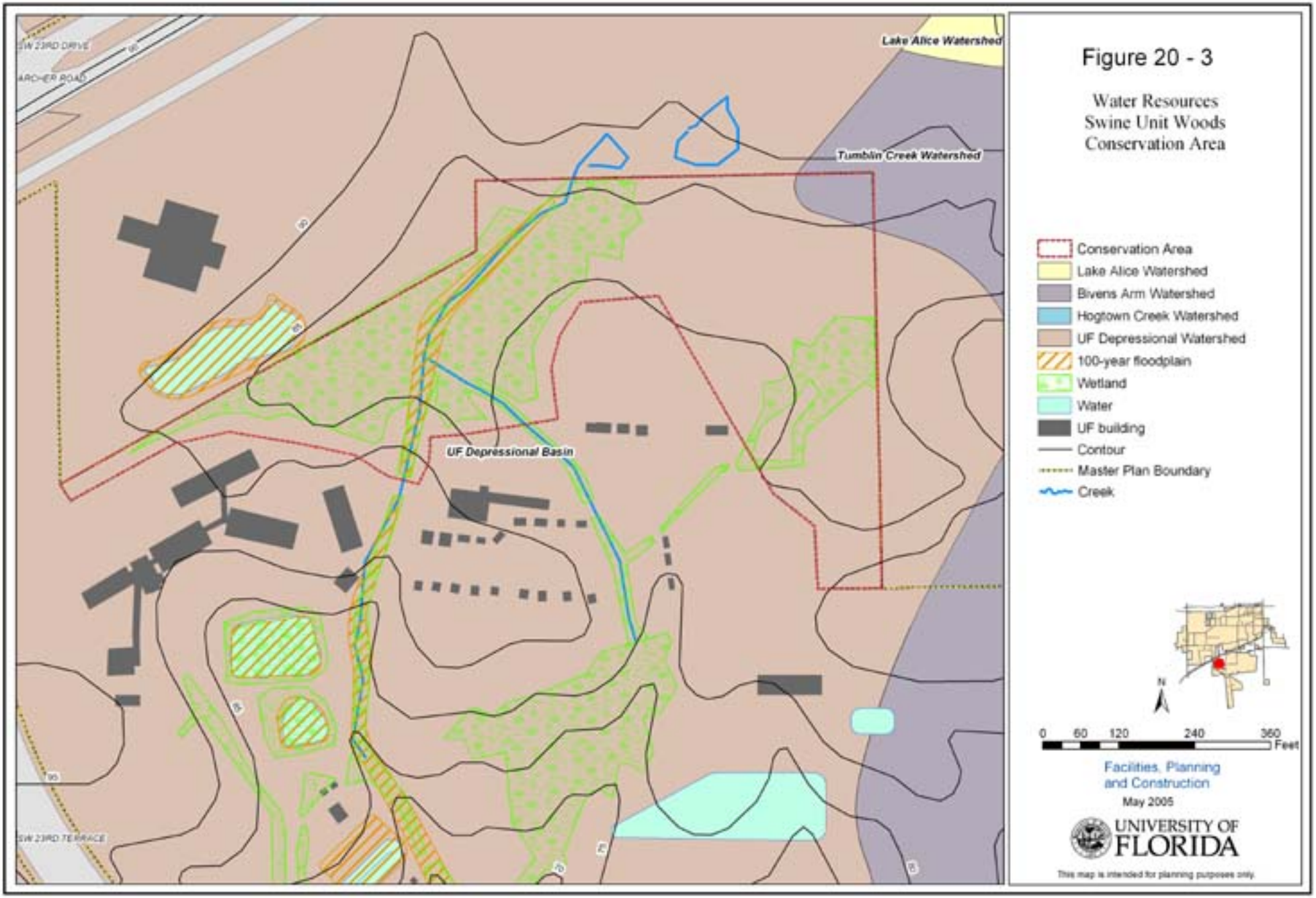
SW 23RD DRIVE
ARCHER ROAD
SW 23RD TERRACE
Lake Alice Watershed
Tumblin Creek Watershed
UF Depressional Basin
Figure 20 - 3
Water Resources
Swine Unit Woods
Conservation Area
Conservation Area
Lake Alice Watershed
Bivens Arm Watershed
Hogtown Creek Watershed
UF Depressional Watershed
100-year floodplain
Wetland
Water
UF building
Contour
Master Plan Boundary
Creek
N
0 60 120 240 360
Feet
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Figure 20 - 4

Natural Communities
Swine Unit Woods
Conservation Area

- Conservation Area
- Pasture and Grass
- Freshwater Marsh
- Upland Mixed Forest
- Mesic Flatwoods
- Water
- Bottomland Forest
- Shrub Wetland - Basin Marsh
- Emergent Acquatic - Marsh Lake
- Urban
- Utilities
- Master Plan Boundary

0 50 100 200 300 Feet

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