

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Vandavee	10/26/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-1

<b>Land Use / Size in Acres</b>	
643	0.2
513	0.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Close proximity to mine entrance road significantly reduces wildlife utilization. Increasing shrub cover to east will provide somewhat suitable habitat support.

N/A

Bahia intermixed with species typical of routinely disturbed areas. Periodic mowing probable with road right-of-way.

Area is along a paved road and is mostly within the right-of-way. Surrounding habitat to east provides limited support with sporadic shrubs and wetland habitat. Area in transition due to removal of cattle.

Area receives road runoff and is altered to create drainage adjacent to the road. Area drains to a large ditch with a culvert that passes under the road. Presence of bahia indicative of disturbed hydrology.

Ditches collecting runoff are well vegetated and road has numerous weir structures that funnel and control runoff. Water quality will be degraded none the less by vehicle oils and grease.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBE/CEV	10/27/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-11

<b>Land Use / Size in Acres</b>	
620	6.9
513	0.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Moderate use by wildlife anticipated. Adjacent upland habitats exist to provide support. Aquatic habitat provided by ditch. Pasture is expansive beyond with powerline corridor within 600 feet. System is connected to upstream and downstream wetlands

Pine canopy is composed mostly of young trees; a number of pines have toppled in the same direction indicating wind damage. Shrub layer native, but sparse. Canopy is sparse in areas with somewhat suppressed regeneration.

Herbaceous layer is mostly bahiagrass, but carpetgrass is present in the community. Cattle typically access area - grazing pressure moderate.

Pine savanna is adjacent to a marsh and surrounded by pine flatwoods and pine-hardwood forest. Numerous wetland and upland habitats are available to wildlife but not within IHN. Cattle and farm vehicles have access to the area. Powerline corridor runs

Pine savanna receives runoff from the pine flatwoods and from the marsh to the north. A large excavated ditch drains wetland system to the south where it enters a creek. Duration of inundation/saturation has been altered.

Most water is pre-treated through large marsh to north, vegetated flatwoods or mixed pine forests. Cattle impacts moderate.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer/Donovar	10/28/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-12

<b>Land Use / Size in Acres</b>	
620	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Numerous birds, good canopy, and shrub layers for perching birds; small mammal habitat with access to water during rain periods. Area cannot support amphibians or aquatics.

Pine canopy is composed mostly of young trees; but few seedling/sapling sized pines. Shrub layer is mostly wax myrtle with saw palmetto.

Herbaceous layer is mostly bahiagrass with dwarf crabgrass and big carpetgrass. Cattle grazing has reduced cover of desirable grasses.

Pine savannah is surrounded by pine flatwoods. Numerous wetland and upland habitats are available to wildlife. Cattle and farm vehicles have access to the area.

Pine savanna receives runoff from the pine flatwoods and contributes water to the marsh and ditch system. Ditch drains wetland system to the south where it enters a creek.

Powerline corridor runoff through flatwoods.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Vandavee	10/28/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-13

<b>Land Use / Size in Acres</b>	
620	1.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Area heavily grazed but shrubs and canopy provide cover and nesting. Numerous perching birds in area. Evidence of deer using area. Numerous habitats abutting area and in close proximity.

Pine canopy is composed mostly of young trees; a number of stumps indicate past logging. The subcanopy is dominated by large wax myrtle. Canopy open. Shrub layer native, but sparse.

Herbaceous layer is mostly Digitaria serotina, but bahiagrass and torpedo grass are present in the community. Considerable dogfennel in area and patchy populations of maidencane. Cattle grazing heavy.

Pine savanna is adjacent to a ditch and surrounded by pine flatwoods and pine-hardwood forest. Numerous wetland and upland habitats are available to wildlife. Cattle and farm vehicles have access to the area. Powerline corridor runs along part of area.

Ditch drains wetland system to the south where it enters a creek.

Runoff from power corridor road dumped into area via a ditch.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBD/CEV	10/27/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-14

<b>Land Use / Size in Acres</b>	
648 PA	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Little to no evidence of wildlife use. Native habitat limited in immediate vicinity - but sporadic shrubs and tall pasture vegetation present. Adjacent wetland and upland habitats available within approximately 200 feet.

N/A

Area has a community of pasture grasses with some sedges and small forbs.

Area is in vicinity of a marsh, improved pasture, young pine flatwoods, pine savanna, and powerline corridor. Area is near a junction of fences, gates, and roads and is often disturbed by lineman, ranchers, and cattle.

Area receives pasture runoff and contributes water to ditch that crosses through the area. Soils are highly altered; numerous criss-crossing ditch systems and a large ditch that drains the area. Area supports pasture grasses.

Fairly well maintained and grazed pasture comprise the pre-treatment habitats. Old shallow swales also direct water into the assessment area.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
CEV/DBD	10/28/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-15

<b>Land Use / Size in Acres</b>	
647 HR	3.0
648 PA	0.5
513	0.3

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Habitat good for perching birds - numerous species present using shrubs and canopy. Microtopography conducive to pooling water for amphibians. Some cover, foraging and nesting available.

Regenerating saw palmettos and wax myrtles with a few pines, elms, and maples. Area no longer maintained by rancher. Native plants returning.

Bahiagrass no longer maintained and native grasses and forbs returning to area. Microtopography supports small populations of softrush, maidencane. Alligatorweed and torpedograss in ditch.

Powerline corridor to east but native pine flatwoods and pasture to south, west, and north.

Some hummocking around wax myrtles and water staining. Microtopographic pools have had standing water. Hydrology supports community - no stress observed - but area is ditched and appears to drain rapidly.

Pasture and power corridor road runoff.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBD/CEV	10/26/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-2

<b>Land Use / Size in Acres</b>	
643	2.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Moderate to limited habitat for birds, small mammals, and/or reptiles. Limited upland food sources. Frequent human disturbance, mine entrance road to west, utility corridor on south and east. Game trails noted within wetland, mainly small mammals.

N/A

Area is an ill-defined community of herbs with a dense cover of Andropogon. Area no longer accessed by cattle or maintained as pasture. Mikania encroaching on perimeter. Periodic or managed burns unlikely to occur. System is in recovery from long-term

Area is directly adjacent to mine entrance road with truck traffic common. A bermed pipeline corridor created a barrier to south and east. Pastureland adjacent is unmaintained and will provide increasing cover as shrubs establish and increase in density

Area is dewatered by a large ditch and much of the area is covered by grasses and forbs indicating droughty conditions much of the year. System has stabilized to the influence of roadside ditching and ditch on north side.

Unmaintained pasture-reverting to rangeland on east with some roadside drainage contributing to system via runoff from mine entrance road.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBD/CEV	10/26/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-3

<b>Land Use / Size in Acres</b>	
641	7.3
513	0.3

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Limited adjacent uplands to provide habitat support. Roadway and utility corridor exist as barriers. Some small mammal trails, wading birds noted at assessment area center. Sandhill cranes noted foraging in uplands.

N/A

Area was probably a zoned pickerelweed marsh in past. Historic cattle use has severely trampled and grazed areas of the marsh though with grazing pressure removed, cover is increasing. Relict populations of St. John's-wort and sand cordgrass present. A

Area is surrounded by pasture grasses, paved road, and a partial fringe of Serenoa, Myrica, and Ilex glabra.

Area receives pasture runoff directly and via three ditches that empty into the marsh. A large ditch drains the marsh; this ditch carries water under Wingate Creek mine road. Soils were moist at time of visit, but there is insufficient water to support

Sod is being cut from the northern unmaintained pasture - this will decrease water quality within assessment area. Otherwise old pasture is no longer being grazed and surface water runoff quality would be good. Berm of the utility corridor is vegetated

## Species Observed/General Comments:



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
CEV/DBD	10/28/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-4

<b>Land Use / Size in Acres</b>	
641	3.1
513	0.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Area isolated by paved road, pipeline corridor, and pasture. An upland cut ditch connects area during high rainfall but area cannot support most animals through life cycle. Area has attracted meadowlarks and snipe. Little to no cover for wildlife.

N/A

Area is a Juncus marsh that has been drastically altered for drainage and flow control. Cattle have overgrazed the area leaving the Juncus. Much of the remaining vegetation is a mix of low growing species.

Area is surrounded by open improved pasture and crossed by bermed road bed. Area is near paved road and a pipeline corridor. Area heavily impacted by cattle.

Area was ditched to carry runoff into marsh. A series of ditches and berms on the east side baffle the runoff before it enters a ditch that carries the water eastward. Marsh is drastically dewatered and apparently suffers from wide fluctuations in water

Pasture runoff, cattle frequently congregate and graze in marsh.

**Species Observed/General Comments:**

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBD/CEV	10/28/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-7

<b>Land Use / Size in Acres</b>	
648 PA	3.8
641	16.3
649	0.5
513	0.4
534 WT	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Limited adjacent food sources provided by sporadic remnant habitats. Connection to upslope and downstream wetlands provide support. Wide expanse of pasture deters wildlife access for many species.

N/A

Area is a native emergent marsh that has lost its zonation. Ditching into and out of marsh has caused fluctuations in water levels and reduction in flood duration. The emergent plants are in broken colonies and cattle trampling and grazing have severely

Marsh is surrounded by wet prairie, shrub swamps, and wet pasture. Marsh is situated in a large open expanse of pasture. Numerous farm access trails are close to marsh and/or cross the area.

Marsh receives runoff from pasture with remnant agricultural swales. One large ditch drains the area and continues to adversely affect the hydroperiod. Marsh appears to suffer from wide fluctuations of water level. A small cattle pond contributes to dew

Runoff from moderately grazed pasture, with minimal maintenance. Furrows from past agriculture are well vegetated, shallow, and provide pasture-like pretreatment.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBD/CEV	10/27/2009
<b>Revision Date:</b>	2/2/2010

<b>Assessment Area</b>
22-8

<b>Land Use / Size in Acres</b>	
648 PA	2.4
641	14.9
647 WM	1.2
513	0.2
512	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Moderate evidence of wildlife use. Wading bird potential high, with sandhill nesting habitat present but no observed wading bird use and limit to absent aquatics. Upland and wetland food sources readily available with no barriers to wildlife movement pr

N/A

Marsh is zoned; sand cordgrass and transitional species are at upper elevations, maidencane and pickerelweed dominate the center. Ditching has reduced the deeper water and zonation is not as distinct as it should be. Mostly native community with diverse

Marsh is surrounded by hydric pine savanna, and in close proximity to shrub and brush areas, pine-hardwood forest, and pine flatwoods. Several farm trails cross the marsh. Numerous resources are available to wildlife, but cattle and feral hogs are pres

Marsh has two ditches that empty into it from other marshes and one that drains area to the south. Marsh has retained much of its zonation, but lowering of water levels have allowed an increase in the wide transitional zone, encroachment by bahia at the

Water quality treatment is through adjacent wetland systems and pasturelands that are reverting to shrub and brushland. Cattle grazing is moderate to high.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBD/CEV	10/27/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
22-9

<b>Land Use / Size in Acres</b>	
641	11.5
513	0.1
647 WM	1.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Minimal evidence of wildlife utilization - no wading birds or amphibians or fish (except in ditch). Possible suitable nest area for sandhill cranes. Moderate upland and wetland support habitats exist to south, expansive pasture to west provides little s

N/A

Area is a maidencane marsh with remnant populations of pickerelweed. Hypericum fasciculatum indicates area was once a more strongly zoned marsh. The marsh edge is trampled and grazed and torpedo grass is spreading in this area. Diversity is relatively m

Marsh is surrounded by wet prairie grasses, palmetto shrub border, pine/oak woodland, and in close proximity to mixed rangeland, dry prairie, and open improved pasture. Area is part of a system of marshes and forested wetlands and the majority of the sur

A ditch carrying farm access road and pasture runoff empties into the west side of the marsh and a ditch on the east side drains the marsh to a larger marsh. The ditches cause considerable fluctuations in levels and hydroperiods. Remnant plant communiti

Significant runoff (from west) is through pastureland and roadside ditching. Remainder of runoff is through a fallow pasture now reverting to shrub and brushland. Cattle pressure moderately low.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
CEV/DBD	10/29/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
23-2

<b>Land Use / Size in Acres</b>	
641	66.5
648PA	6.1
513	2.9

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Maidencane marsh with areas of pickerelweed offer foraging, nesting, and cover; numerous birds and game trails but large pasture, pipeline, and roads.

N/A

Marsh is ditched and has lost its zonation and much of its emergent community. Good diversity of small creeping forbs. Diversity is moderate. Torpedoglass has considerable cover in some areas.

Area is surrounded by open improved pasture and a pipeline corridor near two paved highways. Wildlife using the area must compete with the cattle, but rancher no longer maintains area and native cover is regenerating.

Area receives pasture and road runoff but much of inflow is diverted from area. A large ditch through the area effectively dewateres the marsh. Emergent obligates are mostly confined to a few low spots and the ditch.

Pasture and runoff from pipeline corridor and roads.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
CEV/DBD	10/29/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
23-3

<b>Land Use / Size in Acres</b>	
643	33.8
641	3.0
620	2.4
513	1.3

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Area has enough variation in herbaceous cover to attract numerous animals. Pooled water has snakes, fish, and amphibians. Good habitat for wading birds. Nearby pines provide roosting. Old spoil and ditching make area unsuitable for life cycle of aquat

N/A -- Minor component of tree cover within assessment area.

Area is mostly covered with native grasses, tall forbs, and soft rush. This community has recruited into the area after rancher ceased maintenance. Shallow sofrush marshes exist in depressions within the area. Area is used as pasture, but cattle herd

Area is a large wet prairie with mostly short carpetgrass and soft rush. Area is surrounded by open unmaintained pasture and adjacent to a large marsh. Embedded within the area are several small sofrush marshes and a small hydric pine savanna. There i

Area receives runoff and possibly seepage but two deep ditches drain the area. Hydrology supports grasses, sedges, and sofrush. The soils are uneven because of old furrows which indicate area was used for row cropping. Plant community appears healthy.

Pasture runoff.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
CEV & DBD	10/8/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
23-5

<b>Land Use / Size in Acres</b>	
643	27.7
513	1.6
534 WT	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Bobcat tracks, raccoon tracks, wading bird tracks. Area has recruited taller herbaceous cover which encourages wildlife usage along ditch. See Form 3-1 for list; ditch only provides migration during high rainfall events.

N/A

Cover is comprised of a mix of native grasses, sedges, and forbs that have recruited into previous pasture. Vehicle and cattle trails exist but area is no longer maintained by the rancher and diversity has increased. Torpedograss and alligatorweed have

Area is surrounded by open improved pasture, but connects to a large marsh and other open wetlands via a ditch system. Area and surroundings have infrequent disturbance from cattle and ranching activities. The ditch offers some migration and increased c

Area receives pasture runoff that flows into the large ditch. Area may inundate during heavy rainfall especially since ditch drains a large marsh and road runoff.

Pasture and road runoff - some of it flowing through a ditched marsh.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
CEV/DBD	10/29/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
23-8

<b>Land Use / Size in Acres</b>	
648 PA	1.6
513	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Marginal wildlife usage; area is open and offers few resources for animals.

N/A

Area is mostly bahia grass, sedges, and small forbs. This community is similar to surrounding pasture. Diversity is low.

Area is a wet pasture with mostly short bahia grass. Area is surrounded by open improved pasture and is 400' away from a large marsh. Cattle usage of the area discourages most wildlife.

Area receives pasture runoff but a ditch drains the area. Hydrology supports a marginal community of grasses and sedges. Uneven soils indicate cattle trampling during seasonal wetness.

Pasture runoff.

## Species Observed/General Comments:



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/4/2009
<b>Revision Date:</b>	2/2/2010

<b>Assessment Area</b>
24-10

<b>Land Use / Size in Acres</b>	
620	11.5
630	33.2
647	0.3
513	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant upland food sources. Minimal anthropomorphic impacts. Abundant cover/habitat for wildlife within wetland and in adjacent uplands. Area is within close proximity to roadway

Area is a pine savannah with herbaceous understory. Area has a relatively young regenerating slash pine canopy. Shrub and herbaceous layers are native.

Shrub and herbaceous layers are native. Areas of sour Paspalum indicate cover damage probably from overgrazing and trampling by cattle.

Area is in close proximity to palmetto prairie, shrub and brushland, and a freshwater marsh. Wildlife have considerable resources. The area is within ±1,600 feet of a paved highway.

Area receives runoff and seepage from palmetto prairie and rangeland. A historic ditch was constructed within assessment area, but habitat has apparently adjusted to lower amounts of water. No soil subsidence. Plants healthy, no stress. Moderate effects

Pre-treatment is provided by shrub/brush. Rangeland. Hog rooting at perimeter will degrade surface water run-off.

## Species Observed/General Comments:

Carolina wren, raccoon (tracks).

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/2/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
24-2

<b>Land Use / Size in Acres</b>	
630	3.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Extensive hog utilization has greatly reduced groundcover and may be a deterrent for some anticipated wildlife. System abuts West Fork of the Horse Creek floodplain and IHN. Xeric community upslope. Limited human disturbance.

Community native, but diversity low. Many of the trees and shrubs are stressed, displaying oozing trunks, lifted bark, sparse leaf cover. Severe hog rooting has disturbed the shrub layer.

Community native, but diversity low. Heavily grazed, trampled, and hog rooted in past. Nuisance species lacking.

Area is surrounded by riverine swamp system and mixed hardwood pine forest. Area is used as rangeland and farm access roads are present.

Area receives runoff (sheet flow) from upslope hardwood-pine forest. Long slope -- seeps during rainy season, some erosion. Many of the shrubs and trees are on hummocks due to erosion. Community tolerant of extended dryness, but some of the trees now s

Buffer is 100% upland and wetland forest.

## Species Observed/General Comments:

Feral hog rooting. Rabbit. Armadillo ("digs"). Ground skink observed. Cricket frog observed. Carolina wren observed.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/2/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
24-3

<b>Land Use / Size in Acres</b>	
617 HH	48.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Large amounts of amphibians and forage fish present in stream channel. Good diversity of wildlife, directly and indirectly observed utilizing the system. Abundant upland cover and food sources lie immediately adjacent to the system. Adjacent mining will

No invasive exotic shrubs or trees present. Both tree and shrub layers providing good habitat support. Snags and woody debris amounts slightly greater than normal due to abnormal hydrologic conditions the past 3-7 years, combined with minimal disease an

Extensive hog rooting has caused moderate disturbance to ground cover. Less than 10% invasive exotics present (i.e. Urena lobata, Imperata cylindrica).

Buffer >300 feet and less than 10% nuisance/exotics. Portions of buffer connected to offsite wetland systems. Phosphate mining in proximity.

Extensive hog rooting has disturbed, but not altered, the natural hydrology. Plants in generally good health. Very minimal upland species present, and more an effect from hog rooting creating little tufts of elevated soil and topography to which these s

Buffer is 100% upland and wetland forests, with limited cattle impacts but extensive hog disturbance.

## Species Observed/General Comments:

Leopard frog, eastern gray squirrel, hairy woodpecker, red-bellied woodpecker, tufted titmouse (call), Carolina wren, pine warblers, bluegill, glass minnow, green tree frog, American crow, pileated woodpecker.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/4/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
24-6

<b>Land Use / Size in Acres</b>	
620	5.0
647 HR	0.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Use by small to medium sized mammals (i.e. armadillo). Adjacent buffer >300 feet which provides excellent support (i.e. cover, forage) for many wildlife species. Extensive hog rooting and presence deters some wildlife utilization.

Soils uneven, plants in area tend to form tussocks. Diversity moderate, but typical for community. A few cattle paths and vehicle ruts present. Recruitment and regeneration are normal. Area is undergoing natural successional transition into hydric pine

Area was dominated by Eriocaulon and Rhexia during a wet summer and by Andropogon during a dry summer. Soils uneven, plants in area tend to form tussocks. Diversity moderate but typical for community. A few cattle paths and vehicle ruts present. Extens

Area is adjacent to mixed hardwood swamp and surrounded by a shrub-grass mosaic communities. Area has a few vehicles ruts and cattle paths. Upland and wetland habitats are in the general vicinity and offer numerous forage and cover resources for wildlif

Area receives runoff and seepage from upslope palmetto prairie and xeric oak community. Area contributes water to swamp system. Hydrology supports native wetland prairie habitat. Road interrupts sheet flow into area, but change of hydroperiod / level h

Buffer consists of forested wetland and palmetto prairie.

## Species Observed/General Comments:

Ground dove, white-tail deer (droppings), armadillo, Carolina wren, rufous-sided towhee, blue jay, ground skink.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/3/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
24-7

<b>Land Use / Size in Acres</b>	
617	10.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Surrounding lands provide excellent support (i.e. cover, forage) for many wildlife species. Very minimal disturbances by humans.

Swamp with bays, hollies, and oaks but upland oaks and pines have recruited into parts of swamp. Area has diverse native shrub and canopy communities. Feral hogs have severely damaged portions of swamp and left other areas relatively undisturbed.

Area has diverse native herbaceous community. Feral hogs have severely damaged portions of swamp and left other areas relatively undisturbed.

Area adjacent to riverine swamp system but mostly surrounded by wet prairie, pine oak woodlands and is in close proximity to palmetto prairie. A farm access road runs around the perimeter of the area but impact and access is minimal and cattle have acces

Mucky interior but upland oaks and pines (*Quercus virginiana* and *Pinus elliottii*) are recruiting into system. The farm access road diverts considerable runoff from entering the swamp. Spoil and mechanically disturbed soils are present near west end of

Buffer consists of other shrub/brush and forested uplands and wetlands. Hog rooting will contribute to turbidity during rain runoff.

## Species Observed/General Comments:

Pileated woodpecker, pine warbler.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/4/2009
<b>Revision Date:</b>	2/3/2010

<b>Assessment Area</b>
24-8

<b>Land Use / Size in Acres</b>	
647 WM	2.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Surrounding uplands and wetlands provide excellent support (i.e. cover, forage/food source) for most wildlife species.

Area is dominated by wax myrtles that have encroached into what was probably a wet prairie. Lack of fire has allowed community to recruit shrub cover. Diversity low and dominated by few species.

Lack of fire has allowed herbaceous community to transition to a shrub swamp. Diversity moderate and dominated by few species.

Area surrounded by saw palmetto prairie and adjacent to slash pine swamp. Cattle grazing is currently absent but potential remains. Few human disturbances; >1,000 feet to paved road. Old fenceline across south end. Fire suppression has allowed area t

Area receives runoff from palmetto prairie drains to south into pine swamp. Hydrology supports grass community, but area was probably wetter in past. Area was historically altered via shallow swale. Trail at fenceline interrupts surface flow.

Water quality pre-treated via palmetto prairie.

## Species Observed/General Comments:

Catbird, Carolina wren, rufous-sided towhee, palm warbler.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/4/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
24-9

<b>Land Use / Size in Acres</b>	
647 WM	2.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Active cattle ranching and Duette Road deter some wildlife species from utilizing the system. Adequate available upland food sources in surrounding area. There are frequent anthropomorphic disturbances to the system.

Area is a very disturbed wax myrtle swamp with heavy cover dog fennel.

Area is a very disturbed wax myrtle swamp with heavy cover dog fennel. Cattle congregate in the area and feral hogs have damaged some of the herbaceous cover.

Area is adjacent to a hydric pine forest, shrub and brushland, and Duette Road. Area is used as rangeland. Area is frequently disturbed by cattle and feral hogs.

Runoff from upslope shrub and brushland. No alterations to hydrology noted but hydrology is insufficient to exclude bahia grass and dog fennel.

Duette Road run-off contributes little to system. Disturbance by cattle and hog will decrease water quality of run-off into assessment area.

## Species Observed/General Comments:

Catbird, Carolina wren, rufous-sided towhee.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/10/2009
<b>Revision Date:</b>	2/2/2010

<b>Assessment Area</b>
25-1

<b>Land Use / Size in Acres</b>	
647 WM	4.2
641	34.4
617HH	1.0
630	1.7
617	9.6
513	3.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Cattle actively utilize portions of the system. A large portion of the system has been hydrologically altered via ditching. Abundant upland food sources adjacent. Reptiles, amphibians, and small/medium-sized mammals.

30% forested. Strata are mostly appropriate. No invasive exotics present in this layer. Most plants generally healthy, but some portions have more than appropriate treefall and debris.

Hydrologic alterations have disrupted groundcover structure in some areas causing shifts in community locations. Undesirable vegetation (dogfennel) present in deeper part of marsh and shrubland.

Marsh is surrounded by a myrtle swamp, maple-sawgrass swamp, and pine-hardwood swamp. Bay swamps, pine savannas, and a mixed hardwood swamp are in close proximity to the area. Upland of the area are improved pasture, live oak hammock, and xeric oak. Ma

Marsh has numerous large ditches that drain the area. Remnant populations of sawgrass, Hypericum, and pickerelweed indicate that area was once a zoned marsh; altering the hydrology has changed the community structures, deeper water plants are confined to

Runoff and seepage enters area through hardwood swamp, hydric hammock, and pine savanna.

## Species Observed/General Comments:



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer/Zions	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-10

<b>Land Use / Size in Acres</b>	
647	16.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Area has a mosaic of dense shrubs and open grassy areas. Considerable wildlife resources available in immediate vicinity.

Gallberry and wax myrtle dominated shrub swamp which is very dense in areas. Diverse shrub community. Tree community is sparse. Area needs to burn to create more habitat.

Has several open grass-dominated patches creating a mosaic habitat. Area has a native community and feral hogs have damaged much of the groundcover.

Area is situated between shrub and brushland, rangeland, mixed hardwood, pine, hardwood-pine swamps, and freshwater marsh. Upland and wetland habitats offer forage, cover, and nesting opportunities for wildlife.

Area contributes water to mixed hardwood swamp. Area has some erosion and old rutting from equipment and cattle impacts. Area grades down to hydric pine mixed hardwood-pine, and mixed hardwood swamps and to a freshwater marsh. Area has no artificial dr

Area receives runoff from upslope rangeland.

## Species Observed/General Comments:

Raccoon (tracks), white-tail deer (tracks).

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/5/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-11

<b>Land Use / Size in Acres</b>	
630	7.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Adjacent upland and wetland forage, cover and denning/nesting opportunities. Area dense due to lack of fire.

Canopy is composed of relatively young, scattered pines and small hardwoods. Shrub cover is thick and overgrown in places. Area needs burning.

Herbaceous cover is native and composed mostly of grasses. Feral hogs and cattle have impacted herbaceous layer reducing cover.

Mixed hardwood-pine swamp is surrounded by shrub swamp, mixed hardwood swamp, and marsh. The general vicinity has several wetland and upland habitats available for wildlife. Cattle have access to the area, but apparently do not frequently enter the swam

Area receives runoff from a wax myrtle shrub swamp and contributes to a freshwater marsh. Two topographic highs vegetated with xeric oak habitats apparently drive the hydrology in the area. Area has mechanically disturbed soils; rutting causes faster ru

Area receives runoff from marsh and shrub swamp.

## Species Observed/General Comments:

Rabbit scat, Gray catbird, Carolina wren, and Warblers.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/5/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-12

<b>Land Use / Size in Acres</b>	
641	7.3
513	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

McLeod Road deters use and partially limits access for some wildlife. System provides good support (i.e. forage, cover) for anticipated wildlife. Minimal human disturbances. Very good adjacent upland food sources.

N/A

Center of the marsh is mostly maidencane and pickerelweed mix. Shrubs are scattered in the marsh and the center has a stand of shrubs and small trees. Marsh was apparently a zoned emergent marsh with a perimeter of St. John's-wort and sand cordgrass. Di

Area is surrounded by upland mixed hardwoods and mixed pine and oak swamp. Numerous upland and wetland habitats are present in the greater landscape. Marsh is the southern end of the large system of wetlands and terminates at a road. Most of surroundin

Marsh has been impacted by a road. Water passes under road and enters a ditch off-property. Various odd ditches are present in the marsh. Marsh has lost its zonation indicating wide fluctuations of the water level.

Marsh receives flow from a complex of wetlands upstream. Water originates as seepage and runoff from rangeland.

## Species Observed/General Comments:

Small animal trails, rabbit scat, deer, coyote (scat).

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/10/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-2

<b>Land Use / Size in Acres</b>	
617	23.4
617	8.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant, adjacent upland food sources. System provides good cover and forage for many species. Hog presence may deter some species from utilizing the area.

Area is a mixed hardwood swamp dominated by laurel oak with elm, red maple, and sweetbay as subdominants. Shrub cover is dominated by wax myrtle, but is somewhat diverse.

Native, but often sparse cover of ferns and wetland grasses.

Area is surrounded by native, but previously disturbed, cleared and logged habitats. It is part of a large system of wetlands and is situated between a marsh, a bay swamp, a mixed hardwood-pine swamp, and a pine savanna. There are numerous wetland habitats.

Area is part of an extensively ditched wetland system. Hydrology of the area is probably driven by three topographic high areas covered by xeric oak habitats. Ditching drains system to the southwest along what was probably the natural drainage, but area

Surrounded by forested habitats. Water comes from runoff through pine flatwoods and seepage driven by topographic highs.

## Species Observed/General Comments:

Cardinals, gray catbird, warblers, eastern gray squirrel, blue-gray gnatcatcher.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-3

<b>Land Use / Size in Acres</b>	
647	0.9
617HH	9.8
647WM	2.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Adjacent upland and wetland food sources available. Numerous habitats provide cover and nesting/denning opportunities for most wildlife and offers some pooling for amphibians but no reliable water for aquatics.

Area is a hydric hammock dominated by laurel oaks. Shrub cover is dominated by wax myrtle, but is diverse and evident of fire suppression as it is dense and overgrown.

Herbaceous layer is sparse and dominated by Virginia chainferns and wetland grasses.

Area is surrounded by native, but previously cleared and logged habitats. It is part of a large system of wetlands and is situated between a marsh, a bay swamp, a mixed hardwood swamp, and a pine hardwood forest. There are numerous wetland habitats avai

Area is part of an extensively ditched wetland system. Hydrology of the area is probably driven by topographic high areas covered by xeric oak habitats. Ditching drains system to the southwest along what was a natural drainage, but area appears to be mu

Area receives runoff and seepage from hardwood-pine and shrub covered slopes.

## Species Observed/General Comments:

Cardinals, gray catbird, pine warblers, armadillo, Carolina wren.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/10/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-5

<b>Land Use / Size in Acres</b>	
647 WM	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Even though there is use by coyote and leopard frogs, the system has been heavily impacted and is still frequency disturbed by cattle ranching activities. The system provides very little support for most wildlife species due to diminutive size and locati

Wax myrtles and maidencane dominate area. Area is disturbed by cattle that use the area to cross the large ditch. Low diversity. Myrtles provide little habitat support.

Maidencane dominates area. Area is continually disturbed by cattle that use the area to cross the large ditch. Moderately low diversity of herbaceous species.

Area is a strip of shrub swamp adjacent to Duette Road and surrounded by wooded pasture and has shrubby upland buffer then open rangeland. Numerous cattle paths through area indicate frequent disturbance by cattle.

Runoff from upslope shrub rangeland and pasture. Area contributes water to large ditch via an old road berm with associated ditches/swales. System completely affected by stormwater runoff and ditching. Hydrologic indicators are present and distinct.

Buffer = 40% road, 50% rangeland, and 10% ditches.

## Species Observed/General Comments:

Coyote (scat), leopard frog (at culvert), ring-neck snake.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-7

<b>Land Use / Size in Acres</b>	
630	6.3

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant upland and wetland food sources adjacent. Use by small/medium mammals. Minimal human disturbance. Buffer provides excellent support.

Plant community is native and diversity is moderate. Vegetation density evident of fire suppression. Pine is dominant canopy species. Trees are healthy. Vegetation is providing habitat support.

Plant community is native, but diversity is moderately low. Hog rooting has disturbed groundcover in some areas.

Area is surrounded by wax myrtle shrub swamp and mixed hardwood pine swamp. General area was cleared in the past and has regenerated with native wetland communities. Numerous wetland and upland resources in the vicinity. Cattle have access to the area,

Area is a seepage community; a topographic high is located approximately 500 feet west of the area. Area contributes water to downslope swamps, marshes, and the head of the Myakka. Cattle and old impacts from past clearing divert surface flow but area h

Area receives seepage and surface runoff from native/near native forests and rangeland.

## Species Observed/General Comments:

System is a component of a larger overall system which is the headwaters for the Myakka River.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-8

<b>Land Use / Size in Acres</b>	
617	2.0
617	9.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

There are numerous adjacent upland and wetland food sources available. The system and surrounding areas provide good cover, forage. Some areas are dense and overgrown and may preclude usage by large mammals.

Swamps are dominated by sweetbay and tupelo with red maple, dahoon, and laurel oaks as minor constituents. Shrub cover is appropriate and diverse and dominated by wax myrtle and Lyonia. Shrub canopy is overgrown and dense and indicates fire suppression.

Herbaceous groundcover is appropriate but nearly lacking in areas due to excessive detritious and overgrown shrub cover.

Bay swamp is part of a complex system of wetland and surrounded by mixed hardwood-pine swamp, mixed hardwood swamp and is in close proximity to a marsh, shrub swamp and hydric pine savanna. Numerous upland and wetland habitats are available to wildlife.

Area receives runoff and seepage through a complex system of wetlands. Hydrology of area is probably driven by two topographic highs near the area. Water flows down a gentle gradient through the system. A road and ditches in a marsh impact the southern

Area receives runoff from other wetlands originating in rangeland and seepage driven by topographic highs.

## Species Observed/General Comments:

Carolina wrens, eastern cottontail rabbit (scat).



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/5/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
25-9

<b>Land Use / Size in Acres</b>	
641	6.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Adjacent upland food sources are plentiful. The system provides excellent support for wildlife (i.e. cover, forage). Buffer contains excellent cover/habitat.

N/A

Area is emergent freshwater marsh with mostly native plant community. Feral hogs and cattle have slightly impacted the edge, especially where shrubs overhang marsh edge.

Emergent freshwater marsh is surrounded by a wax myrtle fringe, a mixed hardwood swamp, hardwood-pine swamp, and wax myrtle shrub swamp. Marsh is part of a large complex of mostly forested wetlands.

Area receives runoff and seepage apparently driven by two topographic highs with xeric plant communities. Area is part of a complex of wetlands that drain southward. No altering of drainage is near marsh, but the south end of the system has a culvert an

Area receives runoff from native/near native wetlands and rangeland. Seepage into area is driven by topographic highs.

## Species Observed/General Comments:

Great egret (2), murder of crows

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-1

<b>Land Use / Size in Acres</b>	
641	29.3
611	0.4
513	0.7
534 WT	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Size of assessment area and small copse of trees in center provide habitat for wildlife. Limited upland food sources. Connected to down and upstream wetlands. Surrounded by expansive pastureland detracts from use by moderately sized mammals.

N/A -- Small sweetbay island in center of marsh.

Marsh is dominated by maidencane with scattered pickerelweed. Marsh was probably zoned in the past; fluctuating water levels, grazing, and agricultural activities have impacted the community reducing the diversity and eliminating natural structure. Torpe

Marsh is surrounded by open improved pasture and wet prairie. Furrowing indicates that parts of the surrounding land were used for row cropping in past. Previously impacted wet prairie habitat and a small pine savanna is located on the north side of the

Marsh has lost zonation probably due to ditching. Marsh receives runoff from pasture, marsh grass area, and ditching. Altered channel carries water away from the marsh. Water levels appear to fluctuate within the area, but hydrology is sufficient to su

Pasture, wet prairie with numerous upland and wetland cut ditches. Pasture grazing within and adjacent heavy (-0.5).

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-10

<b>Land Use / Size in Acres</b>	
630	0.5
617	1.4
641	1.1
647 HR	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

High use by numerous small bird species. Rabbit scat. Suitable upland habitats within vicinity to provide support. Minimal human disturbance. Use by typical suite of small to medium sized mammals, wading birds, and reptiles limited to seasonal high water

Area has a great number of tree snags and dead fall. The canopy is sporadic and marsh species comprise most of the understory. Regeneration of trees depressed by altered hydrological condition and area is becoming marsh-like in character. Shrub layer is

Highly fluctuating water levels, due to increased drainage from upslope wetlands, has created stress on the system and species assemblages are mixed and clear zonation is absent. Cattle frequently graze in the area and this is impeding the establishment

Area is generally surrounded by native habitats; all are re-establishing following historic impacts from timbering, ditching, and clearing for grazing. Overgrown nature exists due to fire suppression. Large expansive pasture area to east. Numerous upla

Increased runoff from large marsh system located within pasture has adversely altered the frequency and duration of the hydroperiod. Zonation and typical community structure for system is lacking. Vegetative stress noted, many trees in decline or dead.

Much of the water entering the system is via a ditch from a large marsh to the north. All other surface waters are pretreated in relatively native upland landscapes.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/10/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-11

<b>Land Use / Size in Acres</b>	
643	0.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Expansive pasture to east will detract. Overgrown nature of palmetto prairie a negative. Generally good upland and wetland habitats in vicinity to provide support.

N/A

Area is covered with a limited diversity of wetland species. Cattle have trampled some areas and created paths through area, but recent impacts are relatively light. Numerous pine saplings have encroached into the assessment area and other shrub cover i

Numerous upland and wetland habitats are in the general area and many resources are available to wildlife but wide expanse of pasture to east will limit wildlife.

Community is a mix of upland and wetland species. Elevated roadway alters surface water runoff carrying surface water run-off to canal. System may reflect seepage or groundwater influence from xeric community to north.

Overgrown palmetto prairie pre-treats surface water run-off.

**Species Observed/General Comments:**

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-12

<b>Land Use / Size in Acres</b>	
641	0.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Little use by wildlife anticipated due to periodic vegetative disturbance. Disturbance common in and near area due to proximity of cattle and vehicle crossing. Suitable upland habitats approximately 200 feet to the west.

N/A

Area is pasture-like and dominated by carpet and bahia grasses and outer perimeter with soft rush and maidencane at center. Area has low diversity. Plants are grazed, trampled, and hog rooted.

Area is surrounded by open pasture and adjacent to a ditch. Shrub and forested habitats are situated 200 ft to the west. Area is within IHN but isolated within landscape. Most of the surrounding land offers little cover or other resources.

A large ditch abuts the area; this ditch carries water from a complex wetland system in Section 25. This ditch apparently replaces a natural stream channel that is still evident south of the area. The ditch effectively dewater the area.

Area receives surface water from improved pasture.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-13

<b>Land Use / Size in Acres</b>	
611	14.3
617 HH	1.6
617	3.6
649	0.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Large complex system with abundant upland habitats and food sources to support anticipated wildlife. Buffer is greater than 300 feet, southern half of assessment area is within IHN. Canal severs natural aquatic movement.

Area is a bay and mixed hardwood swamp dominated by sweetbay and tupelo with laurel oak, water oak, and red maple as subdominants. Shrub layer is dominated by wax myrtle. Some tupelos and sweetbays appear somewhat stressed and appear damaged by storm win

The herbaceous layer is mostly fern cover especially swamp fern. Extended low water condition due to drought has allowed cattle and hogs to access the central portion of the assessment area and to disturb the groundcover and to increase cover by Urena lo

Assessment area is situated along an altered natural drainage. Area is surrounded by mixed hardwood-pine forest, and a mosaic of natural, though sometimes overgrown, native habitats. Numerous upland and wetland habitats are adjacent to or in close proxi

Swamp shows signs of water level decline - exposed roots, somewhat stressed trees; most of swamp is currently dry. Upstream of area, the drainage has been altered and downstream of area, a canal crosses the south end of the swamp. The alteration has enc

Native habitats surround the system with moderate cattle grazing. Some run-off from powerline corridor enters via a flow-way.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-15

<b>Land Use / Size in Acres</b>	
630	13.2
641	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Moderate use by small to medium sized mammals anticipated. Aquatic and macroinvertebrate use limited to seasonal high water conditions due to water re-route to canal. Sufficient upland food sources exist.

Canopy is composed mostly of oaks and pines with a few maples, dahoons, and tupelos. The shrub layer is composed mostly of myrtles. A number of pines have recently died and many of the trees that were in the swamp are in decline, diseased, or are dead.

Groundcover species are limited in cover - due to closed canopy and cattle pressure. Cover mainly comprised of carpet and bahia grass. Obligate species limited to remnant channel and lower elevational areas.

Area is adjacent to a mixed hardwood-pine forest and pine flatwoods. A marsh and several swamps are in the general area. Numerous habitats and resources are available for wildlife, but the area is moderately to heavily used by cattle and diversion of no

All upstream water has been diverted to a canal and area is suffering from lack of water. Old channel is mostly silted in but retains enough moisture to support small populations of obligates.

Area receives surface water run-off from adjacent upland forests that are moderately grazed.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/10/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-16

<b>Land Use / Size in Acres</b>	
617	1.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Adjacent upland and wetland habitats are abundant. Powerline corridor will deter some wildlife access. Deep water habitat with marsh-like center provides suitable habitat for amphibians and wading birds.

The hardwood swamp is dominated by laurel oaks with tupelo and red maples as subdominant. The shrub layer is sparse and dominated by wax myrtle. Cattle congregate in the area and the soils under the canopy have been trampled and are almost bare of veget

The interior is a small remnant emergent marsh dominated by pickerelweed and maidencane. Cattle congregate in the area and the soils under the canopy have been trampled and are almost bare of vegetation.

Assessment area is surrounded by hardwood-pine forest which is used as rangeland. A powerline corridor is located approximately 200 feet west of the swamp. A larger wetland system associated with an altered creek is in close proximity. Wildlife have nu

A remnant of an old stream channel empties into the north side of the swamp and exits the south side. The south channel is silted in; water does not flow.

Pre-treatment is through upland forest with moderate cattle grazing and adequate groundcover.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-17

<b>Land Use / Size in Acres</b>	
611	6.1
630	0.3

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Wildlife utilization anticipated to be high for avian and small mammals. Aquatic and macroinvertebrates could be limited by lack of adequate year-round water and possible wide fluctuation in water levels due to input from ditches. Close proximity of roa

The swamp canopy is somewhat broken with gaps which have recruited species more typical of marshes. Vine cover has increased in these areas. Natural recruitment of native overstory observed. Subcanopy cover somewhat less than optimal in some areas. Di

Under canopy, areas still have good fern and lizard's tail cover. Hummocking of ferns (and trees) is significant with numerous species in decline due to recent drought conditions. Undesirable species low - and isolated to outer perimeters where cattle u

Swamp is surrounded by wooded pasture (was citrus grove), pasture (off-property), an oak-pine forest, and a mixed hardwood swamp (off-property). Fences, a farm access road, and a paved highway are in the general area. Suitable upland habitats exist to th

Swamp was rim ditched along its east side and numerous ditches terminate into the rim ditch or the swamp. The interior of the swamp has large canopy gaps and many of the standing trees are on unusually tall hummocks suggesting subsidence.

Ditched woodland pasture is well vegetated and provides suitable pre-treatment, similar to pasture. Western surface water is via upland forest, but with vehicle trail, cattle use, and somewhat underdeveloped groundcover and subcanopy (-0.5).

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/10/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-18

<b>Land Use / Size in Acres</b>	
617 HH	2.2
643	0.3
641	0.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Suitable upland and wetlands exist in proximity to provide support. Stream within marsh partially viable and providing habitat for aquatics. Assessment area and adjacent forest lacks subcanopy strata to provide cover for wildlife movement.

Area has low diversity and the present community is tolerant of a more dry and transitional condition. Little subcanopy and groundcover exists, but is typical for closed canopy system.

Area is a Polygonum and dogfennel dominated marsh with a relict population of pickerelweed. Area has low diversity and the present community is tolerant of a dry condition and cattle grazing. Wet prairie is comprised of carpet grass and scattered maiden

Wildlife has numerous habitats available but cattle compete for the resources. Large wetland complex adjoins this system and provides support and habitat for wildlife utilizing this transitional edge. System is within the IHN. Understory is limited with

The marsh has lost most of its desirable obligates due to lowered water levels and grazing. Normal drainage for the wetland has been diverted to a large ditch that has also captured some contributing surface water runoff.

Water is pre-treated by forested uplands that have moderate to low grazing pressure. But limited groundcover in many areas.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-19

<b>Land Use / Size in Acres</b>	
630	0.9

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Overgrown nature of native uplands, proximity to improved pasture, and large canal detract from overall beneficial nature of location within native landscape.

System appears to be transitioning due to recovery from possible past impacts or from suppression of fire. Pines are all generally of one age and subcanopy species not typical for a forested system.

Diversity is low. Dog fennel cover is significant due to periodic disturbance by cattle and hog

The spoil may create a barrier for some aquatic and some terrestrial species, though a breach exists. The remainder of the surrounding habitats provide resources for many animals.

Berm associated with canal appears to create a barrier to surface water movement. Discharge occurs at a breach in the berm. Condition is considered artificial in nature.

Surface water treatment occurs through overgrown palmetto prairie with moderate cattle use.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-2

<b>Land Use / Size in Acres</b>	
620	2.6
617	1.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Use by medium and some large mammals expected. Aquatic species anticipated during high water events. Suitable upland forest and moderate quality xeric community in proximity. Palmetto prairie overgrown.

Area is a mixed hardwood swamp and hydric pine forest. Overstory and shrub are appropriate and well established in most of the assessment area with the exception of the northern end. Pines have encroached into a historic grassland and natural recruitment

Species composition and diversity is high and appropriate for the majority of the assessment area. Northern portion of 620 is a grassy area and lacks adequate cover and diversity but this is typical for system type.

Area is surrounded by pine flatwoods and overgrown palmetto prairies. Numerous upland and wetland habitats are adjacent to or in close proximity; many resources are available for wildlife. Cattle have access to area and a powerline and road are approxim

Area receives most of its water as seepage and surface water runoff from a topographic high. Flow-way exists to the west but does not appear to adversely influence this system. No evidence of vegetative stress was noted and system appears to be functioni

Area receives seepage and runoff from upland pine and overgrown palmetto prairie habitat. Moderate cattle and hog disturbance.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/10/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-20

<b>Land Use / Size in Acres</b>	
630	1.3

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Moderate use by small to medium sized mammals anticipated. Aquatic and macroinvertebrate use limited to seasonal high water conditions due to water re-route to canal. Sufficient upland food sources exist though habitat subcanopy is underdeveloped. Prox

Pine / laurel oak canopy with wax myrtle. Appears that trees have encroached into a historic marsh following hydrological alterations.

Mixed grassy herbaceous cover with few obligates. Area has low diversity. Cattle congregate in the area and vegetation is trampled and grazed. Species assemblages mixed and remnant from historic marsh.

Area is surrounded by pine flatwoods and mixed hardwood-pine forest. Area is situated along a natural drainage that has been diverted upstream. Area is close to a powerline corridor and farm access road. Cattle frequently graze and congregate in the ar

The stream channel appears to have been altered in the past, with normal flow now diverted upstream into a large ditch. Swamp receives a small amount of water via the old channel and some runoff, but this is insufficient to maintain a desirable swamp com

Surface water pre-treatment is through moderately grazed upland forests with areas of sporadic groundcover and exposed soils.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/9/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-4

<b>Land Use / Size in Acres</b>	
648 PA	1.0
641	0.8
620	0.4
513	0.3
534 WT	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Close proximity to roadway and limited upland habitat deter use by wildlife. Pond and channel provide aquatic habitat and foraging areas. Overgrown nature to pasture provides for some cover to wildlife.

N/A -- Scattered pines on south side of ditch provide very limited forested functions.

Cattle have grazed out much of the maidencane and trampled most of the plant community. Diversity of the area is low. Hog rooting is present. Dog fennel dense throughout due to recent drought conditions.

Area is adjacent to a large ditch with an embedded cattle pond, a paved highway, pine savanna, wooded pasture, and open pasture. Area has limited resources and the presence of the road and open pasture jeopardize wildlife movement into and out of the are

The construction of the large ditch and the presence of the spoil have significantly altered the natural hydrology increasing impoundment in the wetlands due to spoil and increased drainage in the flow-way.

Some surface water run-off may come from the adjacent roadway, but majority is from pasture and woodland pasture. (Limited grazing +0.5; road run-off -0.5).

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/10/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-5

<b>Land Use / Size in Acres</b>	
630	1.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Moderate use by small to medium sized mammals anticipated. Aquatic and macroinvertebrate use limited to seasonal high water conditions due to water re-route to canal. Sufficient upland food sources exist.

Swamp is dominated by laurel oak and slash pine with relict populations of dahoon, and red maple. The shrub layer is negligible. Diversity of the swamp is low.

Sour Paspalum and carpetgrass have replaced most of the expected herbaceous complement. Diversity is low.

Mixed hardwood-pine swamp is surrounded by oak-pine woods; area was once part of a natural drainage. A farm access trail cuts across the south end of the area, and cattle have access to the swamp and throughout the general area. Numerous habitats are pr

A large canal with associated spoil cuts across the north end of the swamp effectively severing historic drainage through the area. A cut-through to the canal diverts the remainder of the drainage to areas downstream.

Cattle commonly access the area with soil surface disturbances common and ground cover vegetation limited to provide run-off pretreatment.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-6

<b>Land Use / Size in Acres</b>	
643	0.3
620	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Limited aquatic habitat - but typical for type of wetland. Overgrown nature of uplands may impede movement of some wildlife. Abundant food sources exist in adjacent upland and wetland habitats.

N/A

Diversity is limited. No nuisance/exotics noted with area. Cattle impacts moderate with grazing and trampling. Pines encroaching - density could begin to alter composition of ground cover.

Numerous diverse habitats; many cover forage and nesting opportunities. Habitat is fairly overgrown due to fire suppression. May limit some wildlife utilization.

Area receives runoff from upslope palmetto prairie and pine flatwoods. There are probably seepage slopes present in area. No obvious alterations except cattle impacts that tend to increase surface water runoff to the area.

Surface water is pretreated through overgrown palmetto prairie with moderate grazing pressure. Cleared/open field exists but is well vegetated.

**Species Observed/General Comments:**



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-7

<b>Land Use / Size in Acres</b>	
643	0.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Limited aquatic habitat - but typical for type of wetland. Overgrown nature of uplands may impede movement of some wildlife. Abundant food sources exist in adjacent upland and wetland habitats.

N/A

Diversity is limited. No nuisance/exotics noted with area. Cattle impacts moderate with grazing and trampling. Pines encroaching - density could begin to alter composition of ground cover.

Numerous diverse habitats; many cover forage and nesting opportunities. Habitat is fairly overgrown due to fire suppression. May limit some wildlife utilization.

Area receives runoff from upslope palmetto prairie and pine flatwoods. There are probably seepage slopes present in area. No obvious alterations except cattle impacts that tend to increase surface water runoff to the area.

Surface water is pretreated through overgrown palmetto prairie with moderate grazing pressure. Cleared/open field exists but is well vegetated.

**Species Observed/General Comments:**

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-8

<b>Land Use / Size in Acres</b>	
643	0.1
620	0.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Limited aquatic habitat - but typical for type of wetland. Overgrown nature of uplands may impede movement of some wildlife. Abundant food sources exist in adjacent upland and wetland habitats.

Nearly pure stand of pines with limited subcanopy, but appropriate for community type. Trees of uniform size and age.

Diversity is limited. No nuisance/exotics noted with area. Cattle impacts moderate with grazing and trampling. Pines encroaching - density could begin to alter composition of ground cover.

Numerous diverse habitats; many cover forage and nesting opportunities. Habitat is fairly overgrown due to fire suppression. May limit some wildlife utilization.

Area receives runoff from upslope palmetto prairie and pine flatwoods. There are probably seepage slopes present in area. No obvious alterations except cattle impacts that tend to increase surface water runoff to the area.

Surface water is pretreated through overgrown palmetto prairie with moderate grazing pressure. Cleared/open field exists but is well vegetated.

**Species Observed/General Comments:**

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
26-9

<b>Land Use / Size in Acres</b>	
620	1.0
641	0.4
613	0.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Adequate upland and wetland habitats exist within close proximity to support most medium and some large mammals. Overgrown nature of uplands detracts some for forage and movement. Aquatic movement limited to above seasonal high water.

The gum swamp is composed of tupelo with sporadic buttonbush. Understory and subcanopy are generally undeveloped, but are fairly typical for system type.

The herbaceous layer in the gum swamp is composed mostly of plants typical of freshwater marshes and carpet and other grasses dominate the pine forest. Marsh component has little evidence of hypericum regeneration.

Mixed hardwood swamp, palmetto prairie, and flatwoods are in close proximity to the area. Numerous wetland and upland habitats are in the general area and many resources are available to wildlife. Overgrown nature due to fire suppression is a negative i

Area receives runoff and possibly seepage. Trees and herbaceous emergents are in good condition. Hydrology supports the gum swamp community, marsh, and pine savannah. No alterations noted.

Cattle trampling within areas immediately adjacent to assessment area will increase surface soil disturbance and increase manure/nitrogen input.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-10

<b>Land Use / Size in Acres</b>	
617 HH	0.5
613	0.7
620	1.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Area is situated within the vicinity of a large complex of upland and wetland systems that will provide support to this isolated system. Some uplands are marginal in nature - lacking adequate cover for wildlife. Assessment area has varied habitats and st

Area consists of three adjacent swamps; the central area apparently was an emergent marsh which has recruited tupelo inside of the ring of sand cordgrass. The pine savanna and mixed hardwood swamps have only scattered wax myrtle in the subcanopy.

The central area apparently was an emergent marsh which has recruited tupelo inside of the ring of sand cordgrass. Maidencane, softrush, pickerelweed form the herbaceous layer under the tupelo. The pine savanna and mixed hardwood swamps have mostly a gr

Swamp system is surrounded by pineland and hardwood pine forest and in close proximity to mildly improved pasture. Numerous contiguous habitats are in the general area and many resources are available for wildlife. A farm access road impacts the west si

Area receives runoff from pineland and mixed hardwood-pine forest. An old swale diverts some surface water runoff on the southeast side, a shallow and low functioning swale exits the assessment area on the south. The peripheral areas of the swamps are he

Adjacent uplands are utilized as pasture and are commonly dominated by bahia grass - providing treatment similar to pasture.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/17/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-11

<b>Land Use / Size in Acres</b>	
617 HH	1.2
647 WM	0.2
513	0.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Moderate evidence of wildlife use. Aquatics and forage fish now limited to excavated canal and possible seasonal high water events. Adequate upland food sources exist, but are limited within wetland. Human disturbance limited to power corridor and trail

Area is dominated by Laurel oaks with remnant populations of sweetbay and tupelo. Crown damaged possibly from wind. Subcanopy very limited in cover with little regeneration or expansion of cover expected.

The expected herbaceous layers are absent; grasses have replaced obligate forbs. Cattle grazing impacts will continue to adversely impact cover.

Hardwood swamp is surrounded by oak-pine forest and pine flatwoods and bisected by a canal. Numerous upland and wetland habitats are in the general area and offer forage, cover, and nesting. cattle have access throughout and a farm access road and a power

Swamp receives runoff from the surrounding woodlands, but a wide canal bisects the area and effectively dewateres it. Spoil from the ditch, cattle trampling, and erosion have further degraded the area. Remnant and non-functioning historic stream channel

Surface water run-off is pre-treated within young pine dominated areas with well developed palmetto understory. Small pasture area to north is well vegetated and under-maintained and under-grazed.

**Species Observed/General Comments:**

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-12

<b>Land Use / Size in Acres</b>	
617	0.5
641	0.6
647 WM	0.9

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Varied stratification provided by shrub and tree component increase potential wildlife use. Close proximity of mining and houses will deter use by larger species. Uplands somewhat overgrown.

Shrub layer is comprised mostly of wax myrtle with some additional species noted at the perimeter. Forest is mainly Nyssa and bay with minor additional components. Canopy is healthy - system is functioning much as a component of a marsh. Myrtles encroach

Assessment area is comprised of beneficial and desirable wetland species. Diversity is moderate and assemblages reflect drought conditions - but is normal and re-establishing as expected. Some cattle trampling and hog rooting noted.

Assessment area is a component of a larger system, with direct interaction. High quality forested system within close proximity to east. Active mining and a housing development are located approximately 1,000 feet to west and will deter some wildlife ut

Area receives runoff from the shrub and brushland with upland cut ditch possibly redirecting and intercepting some surface water input. System is functioning normally and rim ditches in southern assessment area appear to have little effect on this wetlan

Pre-treatment via undergrazing rangeland. Minor hog disturbance will have very little adverse effects.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/17/2009
<b>Revision Date:</b>	2/2/2010

<b>Assessment Area</b>
27-13

<b>Land Use / Size in Acres</b>	
641	3.2
649	0.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant high quality (though fairly overgrown in nature) upland and wetland habitats exist in close proximity to provide support. No evidence of large mammal use - but potential exists. Not within IHN and connection to adjacent wetland system is via a

N/A

Marsh has a wide zone of Hypericum that has died but re-establishing downslope with a maidencane center. Marsh is somewhat diverse and cattle and hog impacts are significant due to increase access during low water. Torpedo grass exists in significant cove

Area is surrounded by overgrown palmetto prairie with under maintained pasture to the south. Wetland systems exist in proximity with intermittent connection to large forested system to west.

Area receives runoff from the palmetto prairie. A cattle trail enters from east and directs surface waters to an open water area that could be artificial in nature, but lacks spoil. Hydrology of marsh is relatively unaltered.

Surface water is treated within overgrown palmetto prairie habitat. Cattle trails within funnel water and could increase erosional input.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-14

<b>Land Use / Size in Acres</b>	
641	4.3
513	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Close proximity of mining, housing and pasture lands are a deterrent to some wildlife. Adequate uplands and wetlands exist to the northeast to provide support. Uplands are generally very dense and overgrown and require a burn. Aquatic species have limi

N/A

Area was a zoned marsh and had retained much of its Hypericum ring but has now died as a result of the drought. Re-establishment is occurring. Marsh has been dewatered by the construction of ditches and severely grazed and trampled. Remnant populations

Shallow depressional marsh is part of an isolated system of two marshes surrounded by shrub and brushland but open to improved pasture to the south. Other wetlands are within 500 feet of the area. Brushland provides good cover but is considerably overgr

Marsh has a rim ditch along the south side and an additional ditch in the brushland; these divert water into a cattle pond. An upland cut ditch carries runoff from pasture and brushland adding to the water load. The ditch has effectively dewatered the so

Treatment is through dense rangeland with some entering via upland cut ditch (with some hog rooting and exposed soils present).

## Species Observed/General Comments:



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/17/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-15

<b>Land Use / Size in Acres</b>	
617	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant upland and wetland habitats exists as support for foraging and cover. Roadway and canal will adversely affect some wildlife utilization and movement. Human disturbance is common with jeep trail. Proximity to large wetland system a benefit.

Severed remnant of larger wetland and historic stream system. Thin canopy of wetland trees. Understory/subcanopy is dense palmetto, spoil present and borrow area near trail.

Groundcover limited within majority of assessment area due to dense palmetto cover. Majority of herbaceous habitat associated with marsh/borrow area near trail.

Assessment area is surrounded by pine flatwoods and impacted by a canal along its north side. Upland and wetland resources are in the general area; wildlife have considerable resources and canal offers a corridor for aquatics much of the year. Area is w

Assessment area is adjacent to an altered natural drainageway. The canal effectively dewateres the swamp during low water and ponds water during seasonal high water. Spoil and soil disturbance alters normal surface water flow.

Pre-treatment is through well vegetated upland forests - but roadway traverses southern portion and open, grassy, pasture-like area exists to north.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-2

<b>Land Use / Size in Acres</b>	
647 WM	0.3
630	0.9

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Channel provides support for aquatics when water is present. Moderate quality xeric community in vicinity. Moderate upland and wetland communities in vicinity provide additional support. Powerline, cattle pond, trails, and gates increase human activity.

Area has a slash pine canopy with scattered wetland tree species. The pines have a wide range of ages from seedling to large mature pines. The shrub layer is mostly wax myrtle and saw palmetto.

The herbaceous layer is diverse, but dominated by carpetgrass and bahiagrass. Grazing and trampling have lowered the herbaceous cover. Large areas of bare sand are present.

Assessment area is situated along an altered natural drainage and surrounded by narrow band of shrub land, and young upland forest. A farm access road and powerline corridor are close to the area. Cattle, ranching activities, and linemen frequently dist

Swamp is situated adjacent to an altered drainage/creek. Channel has few natural meanders remaining. Portions of the channel are wide and deep (currently holding water), other parts have had thick sand depositions. Old spoil is present and power corrid

Run-off enters from cattle pond/channel from north with low water quality - but normal conditions contain this to the channel. Some run-off enters from trail under powerline corridor - and western run-off is via under maintained pastureland.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Shuey	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-3

<b>Land Use / Size in Acres</b>	
630	0.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Close proximity to powerline corridor and vehicular traffic will deter wildlife. Limited cover provided within assessment area. Small size provides little support. Xeric community in vicinity. Interaction with adjacent excavated flow-way available.

Area has widely spaced slash pine and laurel oaks. The shrub layer is mostly wax myrtle and sparse. Some regeneration was noted in both pine and oaks.

Grazing and trampling have lowered the herbaceous cover. Large areas of bare sand are present. Vegetation comprised mainly of Axonopus and Amphicarpum and commonly grazed.

Assessment area is situated along an altered drainage and surrounded by fairly narrow band of upland forest. Pastureland, an access trail, and the powerline corridor all will increase disturbance by cattle and humans.

Low area situated adjacent to an altered drainage/creek. Run-off is collected from adjacent roadway under power lines where it pools behind spoil from the downslope excavated channel and ultimately pops-off. Cattle crossing is located at center of low a

Run-off from the fairly well traveled (loose soils and rutting) roadway beneath power corridor is routed into this assessment area.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-7

<b>Land Use / Size in Acres</b>	
617	14.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Large wetland system in close proximity to other large systems. Uplands are generally overgrown. Pasture to north (also overgrown) mining 1,000 feet to west and homesites 1,500 feet to west will deter some larger wildlife species.

Canopy is dominated by Nyssa and various bays with slash pine and Ilex cassine subdominant. Swamp is relatively diverse. Dry conditions have allowed hogs access to perimeter, which often has dense vines and shrubs due to fire suppression.

Groundcover species composition was comprised of abundant desirable and appropriate species. Palmetto at the more transitional areas is significantly dense and cover is minimal. Cattle and hog impacts are more severe in the southern portion - but effect

Swamp is surrounded or in close proximity to numerous upland and wetland habitats with abundant resources for wildlife. A farm road crosses the south end of the swamp. Overgrown and unmaintained pasture exists to the north with mining and housing area wi

Area receives runoff from upslope habitats and seepage. South edge of the area altered for vehicle crossing but adverse impacts, if any, are minimal. No alterations noted within system. Upper areas are more transitional in nature - but normal condition

-0.5 for pasture run-off from north via old and vegetated row crop swales and cattle trails that direct flow into system under heavy rainfall.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-8

<b>Land Use / Size in Acres</b>	
630	3.6
617	1.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Somewhat overgrown nature of adjacent uplands and pasture to north are detractors for some wildlife. Not within IHN, but connected to adjacent downslope wetland. Abundant cover/habitat provided.

Well developed central swamp with minor canopy damage that has benefited bay regeneration - is well within normal range. Northern perimeter has dense vines, small trees, and numerous palmetto. Young pines have recruited into historically marsh area in abs

Central system is well developed with fern hummocks and minor hog disturbance. The southern edge has a maidencane/Hypericum marsh component with scattered slash pine. Area is a diverse community of native plants with some cattle and hog disturbance conce

Swamp system is surrounded by thick overgrown palmetto prairie and wax myrtle dominated shrub and brushland. Numerous upland and wetland habitats are present in the general vicinity; wildlife have many resources. Swamp has wide slough connection for acc

Area receives runoff from the palmetto prairie and shrub and brushland directly and some pasture (under grazed and maintained) runoff. The south edge of the area appears altered and the natural outlet appears somewhat impounded; these may be secondary ef

Pre-treatment is provided via overgrown and low grazing pressure rangelands. Some hog rooting exists on north, but effects will be generally temporal.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/17/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
27-9

<b>Land Use / Size in Acres</b>	
613	3.9
630	2.0
620	1.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant upland food sources exist in adjacent habitats. Some areas are somewhat overgrown due to lack of fire. Assessment area is connected to up and downstream wetlands that provide additional support and aquatic macroinvertebrate habitats exist at cen

Much of the swamp is bay with hardwood-pine swamp along the northeast and east sides and pine savanna around the south. The interior of the system is relatively undisturbed, although Serenoa is encroaching. The area has numerous large tupelos and dahoon

Interior groundcover is relatively undisturbed with well developed fern cover. Outer perimeter community is more commonly disturbed by cattle and hog. The pine dominated area has minimal groundcover and where present typical cattle forage grasses are do

Swamp system is surrounded by numerous upland and wetland habitats that provide diverse and good quality habitat for wildlife. Habitats are somewhat overgrown with shrubs and vines due to fire suppression and may limit movement of some larger species. A

Area receives runoff from the surrounding communities and seepage along its north edge. The natural outflow appears to have been possibly altered to facilitate drainage though road crossing inhibits normal flow. Swamp system is currently dry due to lack

Surface waters are treated as the pass through well established, sometimes overgrown upland forests with some hog rooting and moderate to low cattle impacts. Young pine area to the east was most likely historically cleared for pasture.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-1

<b>Land Use / Size in Acres</b>	
613	0.9
630	3.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Somewhat limited adjacent upland food sources. Minimal human disturbance currently, but much greater in past (i.e. ditching and cattle ranching activities). Area provides some cover and forage of many wildlife species.

Area is a mixed hardwood pine swamp and tupelo swamp. Area was cleared and logged. There are signs of regeneration in wax myrtle and Pinus elliotti.

Carpet grass has replaced the expected herbaceous species complement.

The swamp is surrounded by oak-pine woods, palmetto prairie, bay swamp, and pine flatwoods, but is in very close (<50 feet) proximity to open pasture. Cattle have accessed the swamp and surrounding woods; the habitats are highly degraded and offer few re

Area receives runoff from the surrounding woods (runoff originates in pasture), and flow from a bay swamp north of the area. A swale through the area effectively dewateres the swamp. The swale empties into a large ditch at the south end of the area. Thi

Runoff originates in pasture and flows through a degraded oak woods; other water from swamp via altered channel.

## Species Observed/General Comments:

Warblers, tree swallows, Carolina wren.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-11

<b>Land Use / Size in Acres</b>	
617	3.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant adjacent upland food sources. System provides excellent cover and forage for many wildlife species. Amphibians and small mammals observed.

The swamp canopy consists of native and expected species, but there are large gaps and some deadfall. The edges of the swamp are heavily overgrown with vines, and saw palmettos are present on hummocked soils in the swamp.

The diversity of the herbaceous layer is low and mostly comprised of ferns. Groundcover is sparse.

Bay swamp is surrounded by mixed hardwood swamp (off-property), open improved pasture, mixed hardwood-pine forest, and shrub swamp. There are considerable forested wetland resources and some upland habitats, but most of the adjacent upland is improved pa

There is considerable erosion along the upper edge due to cattle and the amount of surface water entering the swamp. Microtopography uneven and not typical of a bay swamp.

Area receives water as seepage and surface runoff from pasture.

## Species Observed/General Comments:

Gray squirrel, blue-gray gnatcatcher, cardinal, Carolina wren. Eastern phoebe; cricket frog.



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-12

<b>Land Use / Size in Acres</b>	
617	1.1
647 WM	0.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

More than adequate adjacent upland food sources available. Use by amphibians and small mammals. System provides good cover and forage to many wildlife species.

Area is a mixed hardwood swamp with a diverse community of trees and shrubs. The interior of the area is intact, but cattle, feral hogs, fencing, and historic clearing have damaged the perimeter. Considerable vine cover.

Herbaceous layer has low diversity and cover.

The swamp is surrounded by hardwood-pine forest but in close proximity to open pasture. Nearby homesites have numerous continually barking dogs. Heavy vine cover reduces access to area; cattle and dogs discourage wildlife activities.

Area experiences increased runoff from the cleared pasture which apparently causes the erosion in the upper portion of the wetland. Central portion of system intact and provides sufficient habitat for various water-dependant species.

Area receives seepage and surface run-off from improved pasture.

## Species Observed/General Comments:

Eastern phoebe; Eastern gray squirrel; squirrel tree frog.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-13

<b>Land Use / Size in Acres</b>	
617	27.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Available and abundant adjacent upland food sources. Bobcat tracks observed. System provides excellent cover and forage for most anticipated species. Snags and deadfall provide denning/cavities.

Canopy and shrub cover are healthy and diverse. Trees healthy. Normal recruitment evident by many saplings.

Groundcover is diverse and dominated by various ferns and Saururus cernuus. Urena lobata is present in low amounts. Cattle damage evident, ut varies with herd numbers.

Swamp is surrounded by laurel oak hammock and connects to a tributary of the Myakka River. Numerous upland and wetland habitats form a contiguous corridor (IHN). Much of area in near-native condition.

Plants are healthy and no signs of stress evident in vegetation. Hydrologic indicators very clear and distinct.

Swamp receives run-off through forested areas, seepage, and flow from an incised creek that loses channel and sheetflows (wide and deep) through area. Probable nutrient or pollutant loading upstream from pasture and road run-off.

## Species Observed/General Comments:

Raccoon (tracks); striped skunk; barrier owl (auditory call); pileated woodpecker (auditory call); bobcat (tracks); turkey (tracks); Carolina wren

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-14

<b>Land Use / Size in Acres</b>	
617 HH	47.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant adjacent upland and wetland food sources. System provides excellent support (i.e. cover and forage) for most wildlife species. White-tail deer and turkey observed.

Canopy is dominated by laurel oaks. Moderate evidence of recruitment. Provides good habitat for wildlife. Minor amounts of *Quercus virginiana* present and a mix of both upland and wetland shrubs.

Mostly appropriate species. *Paspalum notatum* present but much of cover is carpetgrass. Hog rooting and cattle trampling have disturbed and destroyed groundcover in some areas allowing recruitment of *Smilax bona-nox*. Diverse community.

Buffer >300 feet and has both upland and wetland habitats. Buffers provide excellent support to most wildlife species and are contiguous to near-native uplands and abut wetlands that are part of the IHN.

Buttressing, algal mats, elevated lichen lines, etc. are present. Hydrology adequate to maintain system.

Area receive surface run-off through upland forest that originates at a topographic high. Possible seepage areas.

## Species Observed/General Comments:

White tail deer, turkey, pileated woodpecker (auditory call), Carolina wren, gray catbird, blue-gray gnatcatcher (flock), palm warbler, black and white warbler (pair), Eastern phoebe, downy woodpecker.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-15

<b>Land Use / Size in Acres</b>	
648 PA	0.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Wildlife most likely only utilize area as a cross-through tot the other surrounding areas as they offer more suitable cover and forage. Diminutive size of system and community structure deters wildlife usage as well.

N/A

Area is a pasture of carpetgrass with very low diversity.

Area is surrounded by open pasture and pine flatwoods. Numerous habitats and resources are available to wildlife (except aquatics) and area is infrequently disturbed by humans.  
Cattle have access to area and a feeding station is approximately 300 feet

Area is situated on a slope, but most of the runoff it should receive is diverted by a ditch.  
The plant community present is tolerant of dry periods.

Area receives run-off from pasture but much of it is diverted by a swale.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-16

<b>Land Use / Size in Acres</b>	
617 HH	0.5
613	0.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Young pine flatwoods and close proximity to larger wetland systems provide abundant foraging, cover, and nesting habitats. Expansive pasture to west is a minimal barrier. Jeep trail to north has infrequent human disturbance.

Area was logged in the past. Natural recruitment is typical at center, possibly altered at perimeter due to ditch effects or past disturbance for timbering or ditch excavation.

Outer perimeter community are has a pasture-like carpetgrass dominated community with scattered wax myrtles. Diversity is low. Interior ground cover is diverse and relatively abundant for community type. Nuisance species are absent.

Young pine flatwoods community surrounding system comprised of desirable species is greater than 300 feet wide. The connection to offsite wetlands is artificial in nature, but area is within IHN. Pasture lands to west and in vicinity to south.

Existing hydrology is adequate to maintain viable wetland but excavated ditch has altered overall frequency and duration of flooding. Transitional nature of outer zone could be reflection of altered hydrology or a remnant of past land disturbances.

Th

Surface water run-off is pre-treated in upland pine forests with adequate groundcover. The upland cut ditch is unmaintained and mostly vegetated. Hog and armadillo rooting is moderate with some turbidity probable during severe rain events.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer/Shuey	11/23/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-17

<b>Land Use / Size in Acres</b>	
643	1.9
620	15.2
630	16.5
513	0.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Dense cover of pines has encouraged use of area by warblers. Numerous resources available for birds and mammals.

Area was logged in the past and has regenerated its canopy; most of canopy is very young. The community is are diverse and native and offer numerous forage resources.

Native grasses dominate ground cover, few exotic species. Diversity is moderate.

Area is surrounded by hardwood swamp, mixed hardwood swamp, oak-pine forest, palmetto prairie, mixed rangeland, shrub swamp, and pine flatwoods. Numerous habitats and abundant resources are available to wildlife (except aquatic). Area is used as rangeland.

Hydrology supports wetland grass community and has encouraged regeneration of slash pines.

Area receives runoff from pasture, palmetto prairie, and rangeland and seepage. Ditching upslope of area diverts some of the surface water from the pasture. Equipment ruts, cattle paths, and old swales alter flow through the area.

## Species Observed/General Comments:

Pine warblers, crows, gray squirrel.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer/Shuey	11/23/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-18

<b>Land Use / Size in Acres</b>	
647 WM	5.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Numerous perching birds and evidence of small and large mammal use. Area offers thick cover but wax myrtles well-spaced for movement.

Area was logged and cleared in the past and has regenerated as a thick wax myrtle and carpetgrass community. Numerous trees, slash pine, oaks, and maples recruiting into area. Community is mostly native, and has moderate diversity.

Area has regenerated with a mostly carpetgrass community containing areas of softrush, Woodwardia, and sedges.

Shrub swamp is surrounded by pasture, hardwood-pine forest, hydric pine savanna, and mixed hardwood-pine swamp. Other uplands and wetlands are in the general vicinity. Numerous habitats and many resources are available, but the area is near a powerline

Hydrology supports FACW community; myrtles are developing hummocks and have expanded lenticels.

Area receives runoff from a mixed hardwood-pine forest that originates in an improved pasture and seepage. Upslope ditches and jeep trail ditches divert water from the area.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer/Shuey	11/23/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-19

<b>Land Use / Size in Acres</b>	
630	1.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Good cover for perching birds and snags show woodpecker usage.

Mixed hardwood pine swamp has a slash pine, tupelo, sweetbay canopy with a wax myrtle and possumhaw shrub layer but trees are stressed and many are chlorotic. No recent regeneration. Swamp is in decline.

Bahia, carpetgrass, and sour Paspalum are recruiting onto deposited sand. The few desirable herbaceous species remaining are confined to spots of mucky soils or in the ditch along the west side.

Area is surrounded by oak-pine woods, but in close proximity to open pasture, a powerline corridor, active agriculture, and a large swamp associated with a river. Cattle have access to the area and have heavily damaged the interior of the area and surrou

Area receives runoff and seepage, but much of the water comes from a citrus grove ditch that empties into a stream channel. The wetland is suffering from a loss of the muck layer, thick depositions of white sand and erosional undercutting of root-systems

Run-off from grove via a ditch; pasture and powerline run-off. Probable nutrient and pollutant loads.

## Species Observed/General Comments:



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-2

<b>Land Use / Size in Acres</b>	
647 WM	0.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Transitional nature of assessment area will limit use by wetland dependent species to seasonal high water events. Adequate upland communities to provide support, larger wetland systems approximately 500 feet away.

Area is in transition. Wax myrtles with scattered oaks and pine.

Diversity is low.

Upland resources are numerous and offer forage, cover, and nesting for many animals. Other wetland habitats are several hundred feet from the area. Ditch provides a corridor for aquatic animals only during rainy season.  
  
Area is infrequently disturbed

Dewatering of the area has reduced frequency and duration of inundation and decreased the diversity of the community.

Area receives runoff from pine flatwoods and contributes to the adjoining ditch.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-21

<b>Land Use / Size in Acres</b>	
647 WM	0.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Powerline and grove may detract from wildlife utilization. Aquatics limited to seasonal high water periods. Adequate limited to seasonal high water periods. Adequate upland habitats exist adjacent to assessment area. Pines are young in size, but provide

Wax myrtle cover is sporadic with pine saplings and live oaks encroaching.

Carpetgrass community with small scattered wax myrtles. Area has native plants, but there is very little diversity.

Swamps, pine flatwoods, pasture, and palmetto prairie are in the general vicinity. Numerous habitats and resources are available to wildlife (except aquatics). Cattle have access to area, but usage is minor to moderate.

Area receives runoff from well vegetative, young pine flatwoods. Power corridor may be influencing some surface water run-off.

Pre-treatment is through well vegetated uplands with moderate to low grazing pressure.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-22

<b>Land Use / Size in Acres</b>	
617	48.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant adjacent upland food sources. System provides optimal support for most species. Evidence of amphibians, reptiles, and small to large-sized mammals.

Canopy and shrub cover very diverse and desirable. Provides optimal support/cover for most wildlife.

Slight disturbance to vegetation by hog rooting. Nearly all species are desirable. Minimal amounts of invasive exotics (i.e. Urena lobata).

North, west, and south sides abut native upland and wetland habitats; east side is impacted by powerline corridor with agriculture nearby.

Stain lines, elevate lichen lines, moss collars, buttressing, etc. present. Hydrology normal to maintain type of system. Upstream alterations cause some pulsing of water levels offsite.

Upstream portion of the Myakka is ditched and passes through agricultural land but area receives considerable run-off and seepage from near-native forests onsite.

## Species Observed/General Comments:

Downy woodpecker, unknown tadpoles, raccoon (tracks), white-tail deer, green anole, barred owl (auditory call), pileated woodpecker (auditory call), red-shouldered hawk, Carolina wren, blue-gray gnatcatcher, eastern gray squirrel, black & white warbler, r

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Donovan	11/17/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-23

<b>Land Use / Size in Acres</b>	
617 HH	48.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Large-sized mammals observed (white-tail deer). Abundant upland food sources. Abundant cover/habitat for wildlife within system, but it could use a burn due to fire suppression.

Native canopy and shrub layers. Diverse. Near-normal recruitment and regeneration occurring. Good habitat support provided Some disease or insect damage to laurel oak individuals.

Native herbaceous cover with few exotics, yet inappropriate species present (*Urena lobata*).

Area is connected to offsite wetlands and is surrounded by near-native upland forests and shrublands.

Area is situated on a long slope. Indicators not distinct but buttressing noted on many laurel oaks.

Area receives some seepage and sheetflows with runoff from topographic high. Water originates in pasture but flows through forested and shrub lands before entering area.

## Species Observed/General Comments:

White-tail deer, barred owl, turkey, catbird, blue-gray gnatcatcher, Eastern gray squirrel.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Donovan	11/17/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-24

<b>Land Use / Size in Acres</b>	
616	0.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Florida anole observed. No other evidence of wildlife use noted (i.e. tracks, scat), but does not mean there is a lack of wildlife utilization. Surrounding habitats provide adequate cover and forage for wildlife.

Negligible recruitment observed. Canopy species are appropriate. Somewhat excessive amounts of treefall and woody debris present.

<10% undesirable species present (i.e. Eupatorium capillifolium), but groundcover is abnormally dense for a popash swamp and has proliferated due to treefall opening up the ground floor for establishment.

Area surrounded by hydric hammock.

Hydrologic indicators (i.e. stain lines, moss collars, elevated lichen lines, etc.) are clear and distinct, but there has apparently been prolonged abnormal hydrologic conditions.

Area receives water through wetland forest.

## Species Observed/General Comments:

Florida anole.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/17/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-25

<b>Land Use / Size in Acres</b>	
616	1.1

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Many songbirds observed. Use by small to medium sized mammal (raccoon) noted (tracks)

Negligible recruitment observed. Canopy species are appropriate. Excessive amounts of treefall and woody debris present.

Excessive groundcover present for a popash swamp, and the exotic Hymenachne has a large percentage of cover.

Area embedded in a hydric hammock.

Hydrologic indicators (i.e. stain lines, moss collars, elevated lichen lines, etc.) are clear and distinct, but area apparently suffering from a prolonged abnormal hydrologic condition.

Surrounded by hydric hammock which provides run-off.

## Species Observed/General Comments:

Raccoon (tracks), armadillo (tracks), Florida anole, pine warbler, Eastern phoebe, Carolina wren, unknown woodpecker (cavities from drilling).

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-26

<b>Land Use / Size in Acres</b>	
641	1.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Use by wading birds, songbirds, crayfish, and small to medium-sized mammals observed. More than adequate adjacent upland food sources available to wildlife.

N/A

Very minimal amounts of undesirable species. Disturbance to groundcover from hog and cattle activity leaving areas with bare soils.

Area embedded in hydric hammock.

Hydrology adequate to sustain system. Hydrologic indicators are clear and distinct but abnormal conditions have caused death of Hypericum and broken zonation.

Run-off from hydric hammock.

## Species Observed/General Comments:

TRACKS OBSERVED: Raccoon, white-tail deer, small to large-sized wading birds (i.e. heron/egret), fox (with scat), crayfish remains and burrows, Carolina wren, common yellow-throat.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-27

<b>Land Use / Size in Acres</b>	
643	0.3

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Minimal evidence of wildlife use, abundant adjacent upland food source, surrounding habitats are larger and offer more suitable support for wildlife than this system.

N/A

No invasive exotics. Mainly composed of native, but transitional plant species. Cattle forage into the area periodically, disturbing plant growth.

Surrounding uplands and wetlands provide excellent support for most wildlife.

Algal matting present. Area is a very marginal wetland.

Area receives run-off from pine-hardwood forest.

## Species Observed/General Comments:

Crayfish burrow, armadillo (foraging evidence).



# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-28

<b>Land Use / Size in Acres</b>	
641	0.1
617	0.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Tadpoles and minnows observed, raccoon tracks and white-tail deer tracks observed. Adequate adjacent upland food sources available.

All species desirable/appropriate. Canopy species are providing some habitat support. Minimal evidence of recruitment and regeneration.

Most species are desirable/appropriate. Lemna sp. present. A significant portion of the groundcover has been destroyed or highly disturbed by hog and cattle activity.

Rangeland and wetland forest.

Severe soil subsidence present. Water level/hydrologic indicators present are not consistent with current conditions.

In-flow from rangeland and forested wetland.

## Species Observed/General Comments:

Raccoon (tracks), white-tail deer (tracks), unknown heron (tracks), tadpoles, minnow, ground skins, red-shouldered hawk, eastern gray squirrel, pine warbler, blue-gray gnatcatcher.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-29

<b>Land Use / Size in Acres</b>	
641	0.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Use by medium and large-sized mammals observed. Crayfish burrows and remains observed. Abundant adjacent upland food sources.

Most of the species are appropriate; native and hydrophytic, but they are not truly appropriate for an herbaceous marsh and reflect the anthropogenic alterations/impacts to the system.

Majority of groundcover is appropriate. Moderate amount of human induced alterations present. Evidence of hog and cattle disruption to soils and groundcover. Plants are arranged in peculiar discrete populations.

>300 feet average. Provides excellent support for most wildlife.

Algal matting, hummocks, elevated lichen lines, stain lines, and water stained leaves noted. Hydrology slightly impacted but not to a point to effect viability of the system.

Run-off from pine-hardwood forest and hydric hammock.

## Species Observed/General Comments:

Raccoon (scat), crayfish remains and burrows, white-tail deer.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-3

<b>Land Use / Size in Acres</b>	
617	5.9
647 WM	1.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Pasture exists to west. Otherwise immature pine flatwoods provide abundant food sources, cover, and habitat. Aquatics can move relatively freely from upstream wetlands to downstream with minor barriers due to road crossings at fenceline.

The center of the area is dominated by sweetbay and tupelo. This area has a diverse community of shrubs, but total cover is somewhat less than optimal. The wax myrtle area appears to be in transition from possible past disturbances with tree saplings es

Central wetland has well developed fern layer that has been impacted by low water levels and subsequent cattle. Outer perimeters are commonly accessed by cattle and hogs (and possibly vehicles) that adversely affect vegetative structure. No nuisance exo

The swamp is surrounded by pine flatwoods, other pineland, and a farm access trail. Open pasture, shrub, and brushland and hydric pine savanna are in close proximity to the area. A wide variety of upland and wetland habitats and resources are available

Drainage features entering and exiting the system have been somewhat disturbed and altered for vehicle crossing, fencing, and cattle trampling. Effects are limited. System is functioning normal with no adverse effects noted.

Pre-treatment is from upstream wetland that has concentrated cattle trampling at fenceline. Most drainage via forested uplands with fairly well developed subcanopy and ground layer.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-30

<b>Land Use / Size in Acres</b>	
630	0.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Some anticipated wildlife observed (i.e. ground skink, oak toad, green anole). Abundant adjacent upland food sources. System provides sufficient support for most anticipated wildlife.

Many inappropriate strata present (*Serenoa repens*, *Quercus virginiana*). Moderate evidence of recruitment in both appropriate and inappropriate species. Providing good support for wildlife.

*Paspalum notatum* comprises large amounts of groundcover. Evidence of past maintenance activities is present. Many hydrophytic species are stressed (i.e. browning).

>300 feet average and predominantly desirable species. Surrounding areas provide excellent support for most wildlife species.

No hydrologic indicators present. Soils substantially drier than expected.

Run-off from pine-oak forest.

## Species Observed/General Comments:

Oak toad, ground skink, green anole, armadillo (foraging evidence).

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-31

<b>Land Use / Size in Acres</b>	
617	0.9

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Powerline and grove may detract from wildlife utilization. Aquatics limited to seasonal high water periods. Adequate upland habitats exist adjacent to assessment area. Pines are young in size but provide cover.

The canopy is dominated by live and laurel oaks with a few slash pines. The shrub is dominated by wax myrtle, but has a mix of upland and wetland species. Regeneration is generally lower than expected.

Expected ground cover has been replaced by low grasses and much of the soil is bare. A few pickerelweeds are confined to an oxbow. Low cover is typical for system type.

Swamps, pine flatwoods, pasture, and palmetto prairie are in the general vicinity. Numerous habitats and resources are available to wildlife (except aquatics). Cattle have access to area, but usage is minor to moderate.

Construction of the powerline corridor may have cut off some of the area from its historic flow.

Pre-treatment is through well vegetated uplands with moderate to low grazing pressure.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-32

<b>Land Use / Size in Acres</b>	
617	1.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Medium to large-sized wading bird tracks, raccoon and deer tracks observed. Adequate to abundant adjacent upland food sources.

Good support available to wildlife; some recruitment evident; excessive amounts of snags, treefall present, some signs of insect/disease damage.

Some Mikania scandens present, nearly all species desirable, groundcover presence excessive/atypical for type of system, but more indicative of natural succession to a mixed-hardwood swamp.

>300 feet with predominantly desirable species, offers good support for most wildlife.

Hydrologic indicators present, but inconsistent with current condition. Undercut elevated hummocks with exposed roots indicative of soil subsidence and/or erosional activity.

Buffer = 75% upland forested / 25% wetland forested

## Species Observed/General Comments:

TRACKS: Raccoon, white-tail deer, medium to large-sized wading birds.  
 DIRECT OBSERVATION: Eastern gray squirrel, downy woodpecker, Carolina wren, crayfish remains.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-33

<b>Land Use / Size in Acres</b>	
617	1.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant adjacent upland food sources; small to large-sized mammalian utilization observed.

Good support available to wildlife; some recruitment evident; excessive amounts of snags, treefall present, some signs of insect/disease damage.

Nearly all species desirable, moderate amount of groundcover presence which is somewhat atypical for the system, but reflective of the natural succession to a mixed-hardwood swamp

>300 feet average; predominantly desirable species, offers good support to most wildlife.

Hydrologic indicators present, but inconsistent with current condition. Undercut elevated hummocks with exposed roots indicative of soil subsidence and/or erosional activity.

Run-off from rangeland.

## Species Observed/General Comments:

Eastern cottontail rabbit (scat); white-tail deer (tracks).

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-34

<b>Land Use / Size in Acres</b>	
617	0.7

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Abundant adjacent upland food sources; small to large-sized mammalian utilization observed.

Some recruitment evident but excessive amounts of snags, treefall present, some signs of insect/disease damage.

Nearly all species desirable, moderate amount of groundcover presence which is somewhat atypical for the system, but reflective of the natural succession to a mixed-hardwood swamp

Rangeland, pine flatwoods, and hydric hammock.

Hydrologic indicators present, but inconsistent with current condition. Undercut elevated hummocks with exposed roots indicative of soil subsidence and/or erosional activity.

Rangeland run-off.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/18/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-35

<b>Land Use / Size in Acres</b>	
617	1.4

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Woodpecker nest cavity observed. Abundant adjacent upland food sources.

Some recruitment evident, but excessive amounts of snags, treefall present, some signs of insect/disease damage.

Extremely low amount of groundcover, low diversity which is somewhat atypical for the system, but reflective of the natural succession to a mixed-hardwood swamp.

>300 feet average; predominantly desirable species, offers good support to most wildlife.

Hydrologic indicators present, but inconsistent with current condition. Undercut elevated hummocks with exposed roots indicative of soil subsidence and/or erosional activity.

Buffer = 15% rangeland, 15% forested wetlands, 35% palmetto prairie, and 35% forested uplands.

## Species Observed/General Comments:

Woodpecker (nest cavity-due to size of opening probably pileated or red-headed); ground skink, catbird.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer/Shuey	11/23/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-36

<b>Land Use / Size in Acres</b>	
617 HH	9.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Numerous perching birds present. Area has mostly clear understory - shrubs in well spaced populations. Area provides good cover and resources.

Native laurel oaks with slash pines and live oaks. Old stumps indicate more pine in past. Native shrub cover, but there is damage from cattle.

Much of the ground cover is bahiagrass, but native species are regenerating in area.

Upland forest and hardwood swamp abut area, but open pasture and a bottomland swamp are in the vicinity. Farm access roads and cattle are present. Area abuts IHN.

Hydrology supports native community which is upslope of the Myakka River floodplain and contributes runoff.

Area receives runoff from unimproved pasture and shrub swamp.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
DBD	8/24/2010
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-37

<b>Land Use / Size in Acres</b>	
647 WM	0.0
647 WM	0.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Small assessment area provides little support. Adjacent lands mainly pasture, with floodplain to south. Limited cover provided in subcanopy.

Dominated by wax myrtle. Diversity in structure lacking.

Bahia grass dominates with few beneficial species present to provide diversity.

Assessment area surrounded by wax myrtle dominated area and improved pasture. Little support provided. Floodplain area to south provides significant buffer.

Response to surface water runoff from upslope pasture. Historical erosion gully from past agricultural activities.

Pasture runoff with moderate grazing pressure. Areas fully vegetated and stable.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer	11/23/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-4

<b>Land Use / Size in Acres</b>	
647 WM	1.1
613	0.2

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Warblers using shrub and canopy layers. Area has considerable cover and resources for animals.

Area is a small gum swamp surrounded by wax myrtle dominated shrub swamp. Area was logged in the past. Tupelos show little regeneration but myrtles and maples reproducing well

The ground cover is carpetgrass with bahiagrass, maidencane, spikerush, and Virginia chainfern. Area is regularly grazed and much of the cover is transitional. Torpedogras is present and spreading.

Area is mostly surrounded by pine flatwoods with oak-pine forest on the northeastern side and connected to a mixed hardwood swamp on the east. Numerous upland and wetland forested systems are in close proximity and many resources are available for wildli

Area receives runoff from the surrounding flatwoods. Areas appears to drain rapidly down to elevation of channel then slowly through soil. An old channel and deep equipment ruts divert flow and/or drain the area. Cattle trampling has caused uneven soil

Area receives runoff from pine flatwoods.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-5

<b>Land Use / Size in Acres</b>	
617	4.5

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Numerous bird species noted. General proximity to trails, powerline, and grove a deterrent. Suitable uplands available to provide support. Canal down center creates barrier for aquatics to fully utilize system.

Tree species are beneficial and desirable but assemblage is mixed with laurel oak regenerating most commonly. More downed trees were noted than expected. Shrub and vine layer more dense than appropriate in some areas.

Severe hog rooting has displaced and disturbed significant portions of the vegetation. Canopy opening have allowed Smilax, sour Paspalum, and dog fennel to become established. Strata is mixed.

Some human disturbances are likely in proximity to assessment area but overall buffer is greater than 300 feet and of good quality. System connecting has been altered, but providing corridor.

Large canal has significantly altered the frequency and duration of flooding within the assessment area. Laurel oaks are most commonly regenerating.

Canal water quality is decreased. Upland surface waters pre-treated through young pine flatwoods.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Donovan/Smith	11/19/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-6

<b>Land Use / Size in Acres</b>	
630	3.0

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Close proximity to power line corridor and grove will deter some wildlife. Infrequent flow in channel for aquatics. Good quality adjacent uplands provide suitable foraging, nesting, and roosting habitat.

Canopy is dominated by laurel oak and slash pine with a remnant population of tupelo. Cattle have damaged the shrub layer. Diversity of community is low and swamp is in transition due to water re-route.

Cattle and hogs have damaged the herbaceous layer. Common forage grasses have become established.

Area is situated along an old creek channel and surrounded by pine flatwoods, a powerline corridor, discharges into a riverine swamp. Several habitats and resources are available to wildlife. Due to diverting upstream, aquatic animals have access limi

Habitat is associated with a creek channel that was diverted upstream (~0.5 mile). Channel only carries runoff from immediate surroundings. Community is composed of many plants tolerant of drier conditions.

Powerline corridor is generally well vegetated with little evidence of erosional run-off. Scour is noted at the culvert areas, effects are generally localized. Young pine flatwoods comprise upland pre-treatment area.

## Species Observed/General Comments:

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Vandaveer/Shuey	11/23/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-7

<b>Land Use / Size in Acres</b>	
617	19.9

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Numerous birds and wildlife have resources in area. Trees, snags, and shrubs provide cover and nesting/denning opportunities. Area provides and important corridor for wildlife movement.

Diverse native canopy of oaks, pines, tupelo, maple, varied shrub cover. Good age range of trees.

Ground cover damaged by cattle has regenerated with large patches of Smilax. Feral hog rooting. Diverse herbaceous complement, but cover sparse in some areas.

Pasture along length of area, but buffered by bands of upland forest. Upstream and downstream ends connect to swamps and upland forests. Area provides an important corridor for wildlife

Creek overtops banks with some frequency; buttressing.

Area receives water via ditching, run-off, seepage. Agricultural impacts (nutrient-loading) probable, but most of flow has moved through marshes or swamps or has runoff native/near native upland habitats.

## Species Observed/General Comments:

Gray squirrel, armadillo, raccoon, deer.

# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/12/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-8

<b>Land Use / Size in Acres</b>	
611	0.8

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Adequate adjacent upland food sources. System provides good cover and forage. Amphibians observed (green tree frog).

Bay swamp has the expected canopy and shrub composition. However, moderate amounts of *Serenoa repens* are present in the system.

Herbaceous layer has low cover and diversity. *Saururus cernuus* dominates the very sparse groundcover.

Swamp is surrounded by mixed hardwood-pine forest, live oak hammock, open improved pasture, and mixed swamp associated with a river. The general area offers considerable forested wetland resources and some upland habitats, but cattle usage has degraded t

Area receives seepage and runoff from the adjacent pasture. A channel along the east side of the area contributes to dewatering. Many of the plants have exposed root systems. Cattle trampling has exacerbated the loss of soil.

Area receives seepage and surface water from pasture.

## Species Observed/General Comments:

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# Mosaic - Wingate WRAPs

<b>Reviewer Name</b>	<b>Date</b>
Zions/Vandaveer	11/11/2009
<b>Revision Date:</b>	

<b>Assessment Area</b>
34-9

<b>Land Use / Size in Acres</b>	
617	0.6

## VARIABLE SCORES

**Wildlife Utilization:**

**Wetland Overstory / Shrub:**

**Wetland Groundcover:**

**Adj Upland / Wetland Buffer:**

**Hydrologic Indicators:**

**Water Quality Input Treatment:**

**WRAP:**

## VARIABLE COMMENTS

Pasture slightly limits wildlife access and usage, along with human disturbances. Adjacent upland food sources are available.

The portion of the swamp west of the fenceline is intact with all three strata observed and mostly appropriate. The east side of the fence is highly impacted by cattle and severely dewatered; the shrub layer is negligible. Vine cover is too heavy and af

The east side of the fence is highly impacted by cattle and severely dewatered. The herbaceous layer is pasture-like with several upland and/or nuisance species.

The mixed hardwood swamp is surrounded by pasture and hardwood swamp, but is separated from the larger swamp by fencing. Continually barking dogs disrupt wildlife activities and the proximity of the homesite discourages wildlife usage. The open pasture

Eastern half of assessment area is completely altered and lacking in adequate water environment for typical wetland species. A remnant swale/cattle trail alters the water environment; area no longer holds enough water to support a desirable wetland commu

Area receives most of its water as runoff from pasture.

## Species Observed/General Comments:

Possible fox den.