

**PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)**

Site/Project Name OUC- Lake Agnes Substation to Osceola Substation		Application Number		Assessment Area Name or Number Wetlands 77A, 177A	
FLUCCs code 641 - Freshwater Marshes		Further classification (optional)		Impact or Mitigation Site? Impact	
				Assessment Area Size 4.48	
Basin/Watershed Name/Number		Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland 77A is located near the Lake Agnes Substation, Interstate 4, connected to Lake Mattie and Lake Juliana. Wetland 177A is connected to forested wetlands associated with Davenport Creek Swamp.					
Assessment area description Wetland 77A supports a variety of native herbaceous wetland species, including maidencane (<i>Panicum hemitomon</i>), rushes (<i>Juncus effusus</i>, <i>J. megacephalus</i>), Virginia chain fern (<i>Woodwardia virginica</i>), bushy bluestem (<i>Andropogon glomeratus</i>), dogfennel (<i>Eupatorium capillifolium</i>), and the exotic species Peruvian primrose willow (<i>Ludwigia peruviana</i>). Wetland 177A contains a shrub layer dominated by willow (<i>Salix caroliniana</i>) and buttonbush (<i>Cephalanthus occidentalis</i>), with a variety of herbaceous groundcover species such as pickerelweed (<i>Pontederia cordata</i>), smartweed (<i>Polygonum</i> sp.), Virginia chain fern, maidencane, dogfennel, and rushes.					
Significant nearby features I-4, residential areas, transmission line ROW		Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique			
Functions Wildlife habitat, natural water treatment and storage		Mitigation for previous permit/other historic use N/A			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, deer, and feral hogs		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Occasional use by wading birds such as white ibis (SSC), wood stork (E), and little blue heron (SSC).			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): Black vulture, eastern meadowlark, osprey, northern mockingbird and evidence of coyote were observed during the site visit.					
Additional relevant factors:					
Assessment conducted by: S. Rizzo, M. Arrants		Assessment date(s): 12/2007 and 5/2011			

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name OUC Lake Agnes Substation - Osceola Substation	Application Number	Assessment Area Name or Number Wetlands 77A, 177A
Impact or Mitigation Impact	Assessment conducted by: M. Arrants, S. Rizzo	Assessment date: 12/2007 and 5/2011

Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current with 7 0	Location and landscape support variable is slightly decreased due to land clearing and transmission lines. Please see the following page for the individual parameter scores.
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current with 8 0	The water environment reflects relatively undisturbed conditions, somewhat reduced due to cleared transmission ROW. Please see the following page for the individual parameter scores.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 8 0	Wetlands are dominated by native species, minimal colonization by nuisance/exotic species. Please see the following page for the individual parameter scores.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.77	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = (0.77 x 0.18) = 0.14

Delta = [with-current]
-0.77

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

	Location Landscape Support	10	7	4	0	PARAMETER SCORE
a	Quality of habitats outside area for wildlife	fulfill optimal life history requirements of wildlife	fulfill most but not all requirements	habitat availability outside area fair but excludes some wildlife	no habitats available outside site to support wildlife	7
b	Invasive exotics and other exotics	Not present	some invasive exotics in plant community	many invasive exotics and other exotics in community	plant community consists mainly of invasive exotics	7
c	Wildlife access to and from assessment area and other areas	unobstructed	partially limited	substantially limited	access completely blocked	6
d	Areas downstream of assessment area	beneficial and unobstructed	benefits partially limited by either distance or obstructions	benefits substantially limited by either distance or obstructions	no benefits to downstream areas	7
e	Effects of land use outside of area on wildlife	no ill effects	minimal impacts	substantial impacts	severe impacts	6
f	Hydrologically connected areas downstream of area	not limited by hydrological flow restrictions	partially limited	substantially limited	no benefits to downstream areas	7
g	Dependency of downstream areas on assessment area	Downstream areas critically dependant and would suffer from alterations to hydrology	Downstream areas significantly dependent on assessment area	minimal benefits from assessment area	little or no benefit to downstream areas	7
h	For upland areas, location in relation to benefit and protection of wetland	upland provides optimal protection	upland provides some protection	upland provides little protection	upland provides no protection of wetland	N/A

LOCATION/LANDSCAPE SCORE

7

	Water Environment	10	7	4	0	PARAMETER SCORE
a	Water levels and flow	appropriate water levels considering season, tidal cycle, and weather	water level slightly higher or lower than appropriate	water levels and flow are moderately higher or lower than appropriate	water levels or flow exhibit an extreme degree of deviation	8
b	Water level indicators in relation to type of system being evaluated	distinct water level indicators	indicators not as distinct, but still consistent with expected	indicators not distinct, and not consistent with expected	indicators not present or are greatly inconsistent with expected	7
c	Soil moisture for system type	appropriate soil type and moisture	soil oxidation or subsidence is minimal, soils drier than expected	soil moisture has deviated from appropriate for system and season	strong evidence of substantial soil desiccation, oxidation, or subsidence	8
d	Soil erosion or deposition patterns	typical, not indicative of altered flow rates	patterns indicate minor alterations in flow rates	patterns strongly atypical and indicate alterations in flow rates	patterns greatly atypical indicating alterations in flow rates	7
e	Evidence of fire history	typical for frequency and severity	indicative that frequency or severity may be greater than expected	indicative of much greater frequency and severity	great deviation from typical	6
f	Vegetation or benthic community zonation of all strata	appropriate for the type of system being evaluated	zonation in some strata inappropriate for system type	zonation in most strata inappropriate for system type	all strata inappropriate for system type	8
g	Signs of hydrologic stress on vegetation	no signs of stress on vegetation	slightly greater mortality of vegetation, signs of stress	strong evidence of greater than normal mortality	vegetation has strong evidence of much greater than normal mortality	7
h	Evidence of use by animals with specific hydrological requirements	expected for site hydrology	less than expected evidence of animals	greatly reduced evidence of animals with specific requirements	lacking those species with specific requirements	7
i	Composition of wetland plants with respect to tolerance	plant community not characterized by species tolerant to quality degradation	some of community consists of tolerant species	most of community composed of tolerant species	community predominantly consists of tolerant species	8
j	Direct observation of standing water with respect to discoloration, turbidity, or oil sheen	no indicators of water quality degradation	slight indication of water quality degradation	moderate water quality degradation such as discoloration, turbidity, or oil sheen	significant water quality degradation	8
k	Existing water quality data indicates conditions supporting ecological value	water quality indicates optimal conditions for community type	slight deviation from what is normal	moderate deviation from the normal	severe deviation from the normal	7
l	Water depth, wave energy, currents, and light penetration	optimal for community type	generally sufficient for type of community	not well suited for the type of community	inappropriate for community type	N/A

WATER ENVIRONMENT SCORE

8

	Vegetation Community Structure	10	7	4	0	PARAMETER SCORE
a	Plant cover - desirable species in canopy, shrub, or ground stratum	all or nearly all plant cover is appropriate	majority of plant cover is appropriate	majority of plant cover is inappropriate	no appropriate or desirable species	8
b	Presence of invasive exotics or other exotics	no invasives present	minimal invasives present	majority of plant cover is invasive exotic or exotic	high presence of cover by invasives	7
c	Evidence of regeneration or recruitment	strong evidence of regeneration and or recruitment	near normal evidence of regeneration or recruitment	minimal evidence of regeneration or recruitment	no evidence of regeneration or recruitment	8
d	Age and size distribution	typical of the system	slightly atypical age and size distribution	atypical distribution and indicative of permanent deviation	high percentage of dead or dying vegetation	8
e	Density and quality of coarse woody debris, snags, den and cavities	optimal structural habitat for system type	adequate structural habitat for system type	either not present or greater than normal because of poor plant community health	either not present or greater than normal because of dead or dying plant community	7
f	Plant condition- evidence of chlorotic or spindly growth or insect damage	good plant condition no evidence of abnormalities	generally good plant condition with little evidence stress	generally poor plant condition with evidence of stress	very poor plant condition	8
g	Land management practices for long-term viability of plant community	optimal	generally appropriate, but there may be some fire suppression or water control	partial removal or alteration of natural structures or introduction of artificial features	removal or alteration of natural structure intro of ditches or furrows	7
h	Topographic features, such as refugia ponds, creek channels, flats or hummocks	all present and normal for area being assessed	slightly less than optimal for area being assessed	reduction in extent substantial	lack of features being assessed	7
i	Submerged aquatic plant communities are present, any evidence of siltation or algal growth	no evidence of siltation or algal growth	minor degree of siltation or algal growth	moderate degree of siltation or algal growth	high degree of siltation or algal growth	N/A
j	If upland mitigation area, life history support for fish and wildlife	plant community provides optimal level of habitat	plant community provides adequate level of habitat	plant community provides moderate level of habitat	little or no habitat	N/A

VEGETATION SCORE

8

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name OUC- Lake Agnes Substation to Osceola Substation		Application Number		Assessment Area Name or Number Wetland 176A	
FLUCCs code 511 - Ditch		Further classification (optional)		Impact or Mitigation Site? Impact	
				Assessment Area Size 0.57	
Basin/Watershed Name/Number		Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland 176A is located near Interstate 4 and connects to forested wetlands associated with Davenport Creek Swamp, a tributary of Reedy Creek.					
Assessment area description Wetland 176A is a ditch connecting forested wetlands under I-4, vegetated with a variety of herbaceous wetland species including bushy bluestem (<i>Andropogon glomeratus</i>), soft rush (<i>Juncus effusus</i>), Virginia chain fern (<i>Woodwardia virginica</i>), dogfennel (<i>Eupatorium capillifolium</i>), and cattail (<i>Typha latifolia</i>), as well as the shrub species buttonbush (<i>Cephalanthus occidentalis</i>) and willow (<i>Salix caroliniana</i>).					
Significant nearby features I-4,transmission line ROW		Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique			
Functions Wildlife habitat, natural water treatment and storage		Mitigation for previous permit/other historic use N/A			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading birds, deer, and feral hogs		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Occasional use by wading birds such as white ibis (SSC), wood stork (E), and little blue heron (SSC).			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): Black vulture, eastern meadowlark, osprey, northern mockingbird.					
Additional relevant factors: 					
Assessment conducted by: S. Rizzo, M. Arrants		Assessment date(s): 12/2007 and 5/2011			

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name OUC Lake Agnes Substation - Osceola Substation	Application Number	Assessment Area Name or Number Wetland 176A
Impact or Mitigation Impact	Assessment conducted by: M. Arrants, S. Rizzo	Assessment date: May-11

Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Optimal (10) Condition is optimal and fully supports wetland/surface water functions	Moderate(7) Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal (4) Minimal level of support of wetland/surface water functions	Not Present (0) Condition is insufficient to provide wetland/surface water functions
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.500(6)(a) Location and Landscape Support w/o pres or current 7 with 0	Location and landscape support variable is slightly decreased due to adjacent Interstate 4, land clearing, and transmission lines. Please see the following page for the individual parameter scores.
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current 6 with 0	The water environment reflects relatively undisturbed conditions, somewhat reduced due to ditching, Interstate 4, and cleared transmission ROW. Please see the following page for the individual parameter scores.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 7 with 0	Wetland 76A is dominated by native species, with minimal colonization by nuisance/exotic species. Please see the following page for the individual parameter scores.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.67	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = (0.67 x 0.02) = 0.1

Delta = [with-current]
-0.67

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Uniform Mitigation Assessment Method - Individual Parameter Scores

SITE: OUC- Agnes - Osceola

WETLAND ID: 176A
Ditches (FLUCFCS 511)OVERALL UMAM SCORE
0.67

	Location Landscape Support	10	7	4	0	PARAMETER SCORE
a	Quality of habitats outside area for wildlife	fulfill optimal life history requirements o wildlife	fulfill most but not all requirement	habitat availability outside area fair but excludes some wildlife	no habitats available outside site to support wildlife	6
b	Invasive exotics and other exotics	Not present	some invasive exotics in plant communit	many invasive exotics and other exotics in community	plant community consists mainly of invasiv exotics	7
c	Wildlife access to and from assessment area and other areas	unobstructed	partially limited	substantially limited	access completely blocked	6
d	Areas downstream of assessment area	beneficial and unobstructed	benefits partially limited by either distance or obstructions	benefits substantially limited by either distance or obstructions	no benefits to downstream areas	7
e	Effects of land use outside of area on wildlife	no ill effects	minimal impact	substantial impacts	severe impacts	6
f	Hydrologically connected areas downstream of area	not limited by hydrological flow restriction	partially limited	substantially limited	no benefits to downstream areas	8
g	Dependency of downstream areas on assessment area	Downstream areas critically dependant and would suffer from alterations to hydrology	Downstream areas significantly dependent on assessment area	minimal benefits from assessment are	little or no benefit to downstream areas	6
h	For upland areas, location in relation to benefit and protection of wetland	upland provides optimal protection	upland provides some protection	upland provides little protection	upland provides no protection of wetland	N/A

LOCATION/LANDSCAPE SCORE
7

	Water Environment	10	7	4	0	PARAMETER SCORE
a	Water levels and flow	appropriate water levels considering season, tidal cycle, and weather	water level slightly higher or lower than appropriate	water levels and flow are moderately higher or lower than appropriate	water levels or flow exhibit an extreme degree of deviation	6
b	Water level indicators in relation to type of system being evaluatec	distinct water level indicators	indicators not as distinct, but still consistent with expected	indicators not distinct, and not consistent with expected	indicators not present or are greatly inconsistent with expected	6
c	Soil moisture for system type	appropriate soil type and moisture	soil oxidation or subsidence is minimal, soil drier than expected	soil moisture has deviated from appropriate for system and season	strong evidence of substantial soil desiccation, oxidation, or subsidence	7
d	Soil erosion or deposition patterns	typical, not indicative of altered flow rates	patterns indicate minor alterations in flow rates	patterns strongly atypical and indicate alterations in flow rates	patterns greatly atypical indicating alterations in flow rates	6
e	Evidence of fire history	typical for frequency and severity	indicative that frequency or severity may be greater than expected	indicative of much greater frequency and severity	great deviation from typical	5
f	Vegetation or benthic community zonation of all strata	appropriate for the type of system being evaluated	zonation in some strata inappropriate for system type	zonation in most strata inappropriate for system type	all strata inappropriate for system type	6
g	Signs of hydrologic stress on vegetation	no signs of stress on vegetation	slightly greater mortality of vegetation, signs of stress	strong evidence of greater than normal mortality	vegetation has strong evidence of much greater than normal mortality	6
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j	Direct observation of standing water with respect to discoloration, turbidity, or oil sheen	no indicators of water quality degradation	slight indication of water quality degradation	moderate water quality degradation such as discoloration, turbidity, or oil sheen	significant water quality degradator	6
k	Existing water quality data indicates conditions supporting ecological value	water quality indicates optimal conditions for community type	slight deviation from what is norma	moderate deviation from the normal	severe deviation from the normal	6
l	Water depth, wave energy, currents, and light penetration	optimal for community type	generally sufficient for type of communit	not well suited for the type of community	inappropriate for community type	N/A

WATER ENVIRONMENT SCORE
6

	Vegetation Community Structure	10	7	4	0	PARAMETER SCORE
a	Plant cover - desirable species in canopy, shrub, or ground stratum	all or nearly all plant cover is appropriat	majority of plant cover is appropriate	majority of plant cover is inappropriate	no appropriate or desirable species	7
b	Presence of invasive exotics or other exotics	no invasives present	minimal invasives presen	majority of plant cover is invasive exotic or exotic	high presence of cover by invasives	6
c	Evidence of regeneration or recruitment	strong evidence of regeneration and or recruitment	near normal evidence of regeneration or recruitment	minimal evidence of regeneration or recruitment	no evidence of regeneration or recruitment	7
d	Age and size distribution	typical of the system	slightly atypical age and size distribution	atypical distribution and indicative of permanent deviation	high percentage of dead or dying vegetation	6
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f	Plant condition- evidence of chlorotic or spindly growth or insect damage	good plant condition no evidence of abnormalities	generally good plant condition with little evidence stress	generally poor plant condition with evidence of stress	very poor plant condition	7
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h	Topographic features, such as refugia ponds, creek channels, flats or hummocks	all present and normal for area being assessed	slightly less than optimal for area being assessed	reduction in extent substantial	lack of features being assessed	7
i	Submerged aquatic plant communities are present, any evidence of siltation or algal growth	no evidence of siltation or algal growth	minor degree of siltation or algal growth	moderate degree of siltation or algal growth	high degree of siltation or algal growth	6
j	If upland mitigation area, life history support for fish and wildlife	plant community provides optimal level of habitat	plant community provides adequate level of habitat	plant community provides moderate level of habitat	little or no habitat	N/A

VEGETATION SCORE
7