ATTACHMENT A

UMAM Worksheets - Suwannee County

March 2020

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-52A (W-SRF-045)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
	Tiger Bay Swamp	

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

The area is a floodplain wetland of a tributary of Tiger Bay. The wetland system is located in a rural area of Columbia County, Florida

Assessment area description

A floodplain wetland of a tributary of Tiger Bay. The system has a small perennial stream running through the center that drained to the north.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	5-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-52A (W-SRF-045)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Stephen R. Florey	11/5/2018

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

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	6	5	The AA is located in a rural area of Columbia County Florida and is the drainage tributary of Tiger Bay. The AA is a small segment of a larger forested wetland system with a stream drainage system cutting through the center. Support for surrounding wildlife is optimal for most but not all species. Downstream habitats receive significant benefits from this system as there are no major blockages.
.500(6)(b)Water Environment (n/a for uplands)	6	6	The assessment area is the drainage tributary of Tiger Bay and displays several hydrological indicaators. Through out the dry season, the stream and wetland have a moderate flow to the north and water quality appeared to be moderate. Many other hydrological indicators support obligate wetland vegetation. Due to lack of development surrounding the AA there is low chance of pollution from run off.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	7	3	The assessment area is a floodplain wetland of a tributary of Tiger Bay. Trees appeared to be between 15 and 20 years of age and in good condition. Lack of development in surrounding areas allows for good regeneration and recruitment. Topographic features although present are less than optimal. No exotic invasive species were observed.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.63	0.46

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = 0.17 x 0.089 = 0.015

Delta = [with-current]
-0.17

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-52B (W-SRF-045)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
	Tiger Bay Swamp	

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

The area is a floodplain wetland of a tributary of Tiger Bay. The wetland system is located in a rural area of Columbia County, Florida

Assessment area description

A floodplain wetland of a tributary of Tiger Bay. The system has a small perennial stream running through the center that drained to the north.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	5-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-52B (W-SRF-045)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Stephen R. Florey	11/5/2018

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

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	6	5	The AA is located in a rural area of Columbia County Florida and is the drainage tributary of Tiger Bay. The AA is a small segment of a larger forested wetland system with a stream drainage system cutting through the center. Support for surrounding wildlife is optimal for most but not all species. Downstream habitats receive significant benefits from this system as there are no major blockages.
.500(6)(b)Water Environment (n/a for uplands)	6	6	The assessment area is the drainage tributary of Tiger Bay and displays several hydrological indicaators. Through out the dry season, the stream and wetland have a moderate flow to the north and water quality appeared to be moderate. Many other hydrological indicators support obligate wetland vegetation. Due to lack of development surrounding the AA there is low chance of pollution from run off.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	7	3	The assessment area is a floodplain wetland of a tributary of Tiger Bay. Trees appeared to be between 15 and 20 years of age and in good condition. Lack of development in surrounding areas allows for good regeneration and recruitment. Topographic features although present are less than optimal. No exotic invasive species were observed.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.63	0.46

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = 0.17 x 0.171 = 0.029

Delta = [with-current]
-0.17

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-057_2 (W-SRF-055)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

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

The AA is an isolated wetland in a rural portion of Lake City. It is hydrologically connected to a larger wetland system to the west as well as the tributary to the east (Tiger Bay W-ECT-052)

Assessment area description

The AA is a forested wetland with a ponded portion on the eastern half. The AA is bordered on both sides by various small waterbodies. To the far east there is a transmission sub station with a retention pond buffer. To the south beyond the upland forested section is active croplands.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	6-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-057_2 (W-SRF-055)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
impact	Stephen R. Florey	11/6/2018

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	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: 6	with: 5	The assessment area provides moderate access to wildlife from the west, while the north and south have a small upland forested buffer they lead to active croplands. To the east of the AA there is a transmission sub station and retention pondblocking any wildlife access from the east. AA provides moderate benefits to downstream habitats as it is hydrologically connected to a series of wetlands and waterbodies beyond the survey area.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 5	with: 5	The AA displays several distinct hydrologic features such as inundation, saturation, and a high water table. The AA is hydrologically connected to a series of small water bodies as well as a larger wetland system both to the west and to the east. Flows appear appropriate to support obligate wetland species. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from nearby crop fields is a potential source of untreated runoff inputs to the system.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 6	with: 3	The assessment area is a forested wetland system that is surrounded by croplands. Tree age and size distribution appears near normal. Topographic features are present although less than optimal. Plant condition appears generally good and there are no exotic invasive species present.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.44

Delta = [with-current]
-0.13

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

For impact assessment areas
FL = 0.13 x 0.010 = 0.001

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-057_3 (W-SRF-055)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

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

The AA is an isolated wetland in a rural portion of Lake City. It is hydrologically connected to a larger wetland system to the west as well as the tributary to the east (Tiger Bay W-ECT-052)

Assessment area description

The AA is a forested wetland with a ponded portion on the eastern half. The AA is bordered on both sides by various small waterbodies. To the far east there is a transmission sub station with a retention pond buffer. To the south beyond the upland forested section is active croplands.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	6-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-057_3 (W-SRF-055)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
impact	Stephen R. Florey	11/6/2018

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	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: 6	with: 5
The assessment area provides moderate access to wildlife from the west, while the north and south have a small upland forested buffer they lead to active croplands. To the east of the AA there is a transmission sub station and retention pondblocking any wildlife access from the east. AA provides moderate benefits to downstream habitats as it is hydrologically connected to a series of wetlands and waterbodies beyond the survey area.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 5	with: 5
The AA displays several distinct hydrologic features such as inundation, saturation, and a high water table. The AA is hydrologically connected to a series of small water bodies as well as a larger wetland system both to the west and to the east. Flows appear appropriate to support obligate wetland species. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from nearby crop fields is a potential source of untreated runoff inputs to the system.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 6	with: 3
The assessment area is a forested wetland system that is surrounded by croplands. Tree age and size distribution appears near normal. Topographic features are present although less than optimal. Plant condition appears generally good and there are no exotic invasive species present.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.44

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = 0.13 x 0.086 = 0.011

Delta = [with-current]
-0.13

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-060_1 (W-SRF-058)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

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

The AA is an isolated wetland in a rural portion of Lake City. It is hydrologically connected to a larger wetland system to the south as well as the tributary to the east (Tiger Bay W-ECT-052)

Assessment area description

The assessment area is a mature forested wetland system. The wetland system continues north and south beyond the AA. It is hydrologically connected via several streams and drainages to surrounding features. The wetland system is surrounded by undeveloped herbaceous uplands.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	6-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-060_1 (W-SRF-058)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Stephen R. Florey	11/6/2018

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	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: 6	with: 5
Th assessment area is located in a rural area of Columbia County, Florida. It is part of a large forested wetland system that offers optimal support for most wildlife but not all species. The surrounding uplands are undeveloped herbaceous uplands which allow for easy access to land use and significant benefits to downstream habitats		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 6	with: 6
The AA displays several distinct hydrologic features such as inundation, saturation, and a high water table. The AA is hydrologically connected to a series of small water bodies as well as a larger wetland system both to the south and eventually west to the Tiger Bay floodplain. Flows appear appropriate to support obligate wetland species. No indication of water quality degradation based on the suite of specie present.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 7	with: 3
The assessment area is a forested wetland system that is surrounded by undeveloped herbaceous uplands. Tree age and size distribution appears near normal. Topographic features are present although less than optimal. Plant condition appears generally good and there are no exotic invasive species present.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.63	0.46

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = 0.17x0.069 = 0.012

Delta = [with-current]
-0.17

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-067A (W-MJS-008)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This Forested Wetland is part of a larger NWI system that continues both north and south of the survey area. The survey area encompasses an existing transmission line ROW resulting in an altered hydrologic flow dissecting east to west.

Assessment area description

This wetland is characterized as forested hardwood swamp surrounded to the north and south by a larger NWI system. The elevated utility corridor may have affected natural drainage patterns. The Interstate to the south of the survey area may also have an impact on flow and wildlife access.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer Tracks

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	6-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-067A (W-MJS-008)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/6/2018

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 water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	7	6	The assessment area is part of a larger forested wetland system that is hydrologically connected to other large wetland habitats by a perennial stream. The system provides moderate benefits for most wildlife species. Discharges from this wetland are not limited by flow impediments, and likely provide moderate benefits to downstream habitats. Wildlife access is partially limited to the south by Interstate 10, but is not limited to/from the N/E/W. No invasive flora were observed. Conversion from forested to herbaceous will not significantly alter the LL support.
.500(6)(b)Water Environment (n/a for uplands)	6	6	Distinct hydrologic indicators present (presence of surface water, high water table, stained leaves, water marks, muck presence). Natural flow patterns are somewhat altered due to a single bridge under Interstate 10 which has resulted in channelized flow south of the assessment area. Flows appear appropriate to support obligate wetland species and the development of mucky soils. No indication of water quality degradation based on the suite of specie present. No adverse changes in the water environment are expected with the conversion to herbaceous
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	7	3	Area is dominated by canopy (Nyssa) and sub-canopy species (Persea) with a dense herbaceous stratum--age and size distribution is near normal for a mixed hardwood swamp. No invasive flora present. Topographic features are near optimal with the presence of vertical heterogeneity supporting a diversity of species throughout. Conversion to herbaceous will remove structural habitat, but promote existing understory species.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.67	0.5

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.17x0.066= 0.011

Delta = [with-current]
-0.17

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-067B (W-MJS-008)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This Forested Wetland is part of a larger NWI system that continues both north and south of the survey area. The survey area encompasses an existing transmission line ROW resulting in an altered hydrologic flow dissecting east to west.

Assessment area description

This wetland is characterized as forested hardwood swamp surrounded to the north and south by a larger NWI system. The elevated utility corridor may have affected natural drainage patterns. The Interstate to the south of the survey area may also have an impact on flow and wildlife access.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer Tracks

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	6-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-067B (W-MJS-008)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/6/2018

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 water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	7	6	The assessment area is part of a larger forested wetland system that is hydrologically connected to other large wetland habitats by a perennial stream. The system provides moderate benefits for most wildlife species. Discharges from this wetland are not limited by flow impediments, and likely provide moderate benefits to downstream habitats. Wildlife access is partially limited to the south by Interstate 10, but is not limited to/from the N/E/W. No invasive flora were observed. Conversion from forested to herbaceous will not significantly alter the LL support.
.500(6)(b)Water Environment (n/a for uplands)	6	6	Distinct hydrologic indicators present (presence of surface water, high water table, stained leaves, water marks, muck presence). Natural flow patterns are somewhat altered due to a single bridge under Interstate 10 which has resulted in channelized flow south of the assessment area. Flows appear appropriate to support obligate wetland species and the development of mucky soils. No indication of water quality degradation based on the suite of specie present. No adverse changes in the water environment are expected with the conversion to herbaceous
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	7	3	Area is dominated by canopy (Nyssa) and sub-canopy species (Persea) with a dense herbaceous stratum--age and size distribution is near normal for a mixed hardwood swamp. No invasive flora present. Topographic features are near optimal with the presence of vertical heterogeneity supporting a diversity of species throughout. Conversion to herbaceous will remove structural habitat, but promote existing understory species.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.67	0.5

Delta = [with-current]
-0.17

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

For impact assessment areas
FL = delta x acres = 0.17x1.616= 0.273

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-068 (W-MJS-009)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This Forested Wetland is an isolated wetland that appears to be hydrologically connected to a larger wetland system to the east. The survey area partially encompasses an existing transmission line ROW resulting in an altered hydrologic flow.

Assessment area description

This wetland is characterized as an isolated forested hardwood swamp surrounded to the north and south by a forested upland hardwoods. The Interstate to the south of the survey area may also have an impact on flow and wildlife access.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer Tracks

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	7-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-068 (W-MJS-009)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/7/2018

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 water functions	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 press or current: 5	with: 4
The assessment area is an isolated forested system that appears to be hydrologically connected to a larger system to the east. The wetland is bordered to the north by pasture land and to the south by interstate 10. These constrictions result in providing only minimal access for most wildlife species. No invasive flora were observed. Conversion from forested to herbaceous will not significantly alter the LL support.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 5	with: 5
Natural flow patterns are somewhat altered due to Interstate 10 which inhibits a direct flow south of the assessment area. Flows appear appropriate to support obligate wetland species. Some indication of water quality degradation based on the suite of specie present, possibly due to surrounding fields and interstate run off. No adverse changes in the water environment are expected with the conversion to herbaceous		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 3
Area is dominated by canopy (Quercus) with a moderate sub-canopy species and a sparse herbaceous stratum--age and size distribution is near normal for a mixed hardwood swamp. No invasive flora present. Topographic features are near optimal with the presence of vertical heterogeneity supporting a diversity of species throughout. Conversion to herbaceous will remove structural habitat, but promote existing understory species.		

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres: 0.5	with: 0.4

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.1 x 1.336 = 0.133

Delta = [with-current]
-0.1

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-069 (W-MJS-010)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This Forested Wetland is an isolated wetland that does not appear to be hydrologically connected to any surrounding systems. The Survey area abuts the ROW for Interstate 10 which likely impacts the natural hydrologic processes.

Assessment area description

This wetland is characterized as an isolated forested hardwood swamp surrounded to the north by active croplands and to the south by Interstate 10. The Interstate to the south of the survey area may impact flow and wildlife access.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer Tracks

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	7-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-069 (W-MJS-010)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/7/2018

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	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 press or current: 4	with: 3
The assessment area is an isolated forested system that does not appear to be hydrologically connected to any surrounding systems. The wetland is bordered to the north by active crop land and to the south by interstate 10. These constrictions result in providing only minimal access for most wildlife species. No invasive flora were observed. Conversion from forested to herbaceous will not significantly alter the LL support.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 4	with: 4
Distinct hydrologic indicators present (presence of surface water, high water table, stained leaves, water marks). Natural flows patterns are significantly altered due to active fields to the North and Interstate 10 to the south. Hydrology appears appropriate to support obligate wetland species. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from the roadside ditch is a likely source of untreated runoff inputs to the system. No adverse changes in the water environment are expected with the conversion to herbaceous		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 6	with: 3
Area is dominated by canopy (Liquidambar, Salix) with a sparse sub-canopy species and a dense obligate dominated herbaceous stratum--age and size distribution is near normal for a mixed hardwood swamp. No invasive flora present. Topographic features are moderate with the presence of vertical heterogeneity supporting a diversity of species throughout. Conversion to herbaceous will remove structural habitat, but promote existing understory species.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.47	0.33

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.14x0.763 = 0.107

Delta = [with-current]
-0.14

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-071 (W-MJS-012)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This forested wetland is a linear system of hydrologically connected wetland features surrounding a stream flowing southeast.

Assessment area description

This wetland is characterized as a forested hardwood swamp that presumably continues beyond the survey area. A buffer of upland hardwoods separate the wetland feature from active crop fields to the north. To the south the survey area abuts the ROW for interstate 10.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer Tracks, Aquatic Fauna

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	8-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-071 (W-MJS-012)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/8/2018

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	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 press or current: 6 with: 5	The assessment area is a linear forested wetland system that is partially mapped as NWI. The wetland is bordered to the north by a mix of dense upland pine forest and mixed hardwood wetlands. This provides a buffer from the active crop lands that would be beneficial to wildlife utilization. With the exception of the Interstate ROW to the south the assessment area is both accessible and hydrologically connected. Conversion from forested to herbaceous will not significantly alter the LL support.
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 6 with: 6	Distinct hydrologic indicators present (presence of surface water, high water table, stained leaves, water marks). Natural flows patterns are somewhat altered due to the Interstate ROW to the south, however a strong hydrological connection remains with the surrounding network of wetlands and streams the east of the assessment area. Hydrology appears appropriate to support obligate wetland species. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from the roadside ditch is a possible source of untreated runoff inputs to the system. No adverse changes in the water environment are expected with the conversion to herbaceous
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 6 with: 3	Area is dominated by canopy (Liquidambar, Acer, Pinus) with a dense sub-canopy (Lyonia, Morella) and a sparse herbaceous stratum--age and size distribution is near normal for a mixed hardwood swamp. No invasive flora present. Topographic features are moderate with the presence of vertical heterogeneity supporting a diversity of species throughout. Conversion to herbaceous will remove structural habitat, but promote existing understory species.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	0.6
with	0.47

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.13x3.471 = 0.451

Delta = [with-current]
-0.13

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-073_1 (W-MJS-014)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This forested wetland is a small part of an isolated system that leads north beyond the survey area. The entirety of the NWI wetland does not appear to be hydrologically connected to any surrounding features.

Assessment area description

This wetland is characterized as a forested hardwood swamp that continues north beyond the survey area. The larger NWI wetland is an isolated system that is surrounded to the north, east and west by active crop land. To the south the survey area abuts the ROW for interstate 10.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	8-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-073_1 (W-MJS-014)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/8/2018

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

	w/o press or current	with	
.500(6)(a) Location and Landscape Support	5	4	The assessment area is part of a larger wetland mapped as NWI, to the north of the survey area. This isolated wetland feature is bordered to the north, west and east by active crop land making it only moderately accessible to wildlife. The feature is bordered to the south by a small forested upland buffer before reaching the Interstate ROW. The assessment area is not hydrologically connect to surrounding areas and therefor does not provide benefit for downstream habitats. Conversion from forested to herbaceous will not significantly alter the LL support.
.500(6)(b)Water Environment (n/a for uplands)	5	5	Distinct hydrologic indicators present (high water table, stained leaves, muck presence). There does not appear to be any hydrological connection to surrounding areas, however hydrology appears appropriate to support obligate wetland species. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from the roadside ditch is a possible source of untreated runoff inputs to the system. No adverse changes in the water environment are expected with the conversion to herbaceous
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	6	3	Area is dominated by canopy (Nyssa, Acer) with no sub-canopy or herbaceous stratum--with minimal evidence of regeneration and recruitment. No invasive flora present. Conversion to herbaceous will remove structural habitat, but promote existing understory species.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.53	0.4

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.13x0.070= 0.009

Delta = [with-current]
-0.13

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-074A (W-MJS-015)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This forested wetland is part of a much larger NWI wetland system. A large water body to the north of the assessment area drains through the wetland under a bridged interstate and continues south into Suwannee Lake.

Assessment area description

This wetland is characterized as a forested hardwood swamp that continues from the north, under the interstate south to Suwannee lake. The wetland flow is channelized under Interstate 10 , diverting the natural flow south.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Suwannee Lake	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, Snake sighting, Opossum holes, Aquatic wildlife

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	8-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-074A (W-MJS-015)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/8/2018

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 water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o press or current	with	
.500(6)(a) Location and Landscape Support	7	6	The assessment area is part of a larger wetland mapped as NWI, to the north and south of the survey area. This large wetland system encompasses a stream and maintains strong hydrologic connection up and downstream despite channelization under the interstate. The assessment area is a small portion of a larger system that provide moderate to optimal wildlife utilization. This stream wetland network connects to large waterbodies to the north and south of the interstate. The wetland system is surrounded by upland forests and the only main impediment is the bridged interstate. Conversion from forested to herbaceous will minimally alter the LL support.
.500(6)(b)Water Environment (n/a for uplands)	7	7	Distinct hydrologic indicators present (surface water, high water table, stained leaves, aquatic fauna). There is a strong hydrological connection throughout the entire system to the surrounding water bodies. The system drains south from a network of streams, wetlands and water bodies, ultimately draining into Suwannee Lake. Strong hydrology supports obligate wetland species both flora and fauna. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from the roadside ditch is a possible source of untreated runoff inputs to the system. No adverse changes in the water environment are expected with the conversion to herbaceous
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	7	3	Area is dominated by canopy (Nyssa, Carpinus, Quercus) with minimal sub-canopy species and a moderate obligate herbaceous stratum--moderate level of recruitment and regeneration evident. Age and size distribution is typical of a relatively undisturbed wetland. No invasive flora present. Conversion to herbaceous will remove structural habitat, but promote existing understory species.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.7	0.53

Delta = [with-current]
-0.17

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

For impact assessment areas
FL = delta x acres = 0.17x0.205 = 0.035

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-074B (W-MJS-015)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617	Mixed Wetland Hardwoods	Impact	

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

This forested wetland is part of a much larger NWI wetland system. A large water body to the north of the assessment area drains through the wetland under a bridged interstate and continues south into Suwannee Lake.

Assessment area description

This wetland is characterized as a forested hardwood swamp that continues from the north, under the interstate south to Suwannee lake. The wetland flow is channelized under Interstate 10 , diverting the natural flow south.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Suwannee Lake	Not Unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, Snake sighting, Opossum holes, Aquatic wildlife

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Michael Savage / David Flake ECT Inc.	8-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase 1		W-ECT-074B (W-MJS-015)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Michael Savage / David Flake ECT Inc.	11/8/2018

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 water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o press or current	with	
.500(6)(a) Location and Landscape Support	7	6	The assessment area is part of a larger wetland mapped as NWI, to the north and south of the survey area. This large wetland system encompasses a stream and maintains strong hydrologic connection up and downstream despite channelization under the interstate. The assessment area is a small portion of a larger system that provide moderate to optimal wildlife utilization. This stream wetland network connects to large waterbodies to the north and south of the interstate. The wetland system is surrounded by upland forests and the only main impediment is the bridged interstate. Conversion from forested to herbaceous will minimally alter the LL support.
.500(6)(b)Water Environment (n/a for uplands)	7	7	Distinct hydrologic indicators present (surface water, high water table, stained leaves, aquatic fauna). There is a strong hydrological connection throughout the entire system to the surrounding water bodies. The system drains south from a network of streams, wetlands and water bodies, ultimately draining into Suwannee Lake. Strong hydrology supports obligate wetland species both flora and fauna. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from the roadside ditch is a possible source of untreated runoff inputs to the system. No adverse changes in the water environment are expected with the conversion to herbaceous
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	7	3	Area is dominated by canopy (Nyssa, Carpinus, Quercus) with minimal sub-canopy species and a moderate obligate herbaceous stratum--moderate level of recruitment and regeneration evident. Age and size distribution is typical of a relatively undisturbed wetland. No invasive flora present. Conversion to herbaceous will remove structural habitat, but promote existing understory species.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.7	0.53

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.17x0.186 = 0.032

Delta = [with-current]
-0.17

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-076 (W-SRF-071)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

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

The AA is a depressional wetland located on the north side of Interstate Highway 10 that receives stormwater run off from the adjacent truck stop and the highway and interchange.

Assessment area description

The assessment area is depressional isolated wetland that is bordered to the northwest by a busy truck stop gas station and to the south by interstate 10. The area is fragmented and susceptible to effects from nearby developments.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	7-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-076 (W-SRF-071)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Stephen R. Florey	11/7/2018

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	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: 4	with: 3
The AA I sbordered to the northwest by a major truck stop and to the south by Interstate-10. The wetland is fragmented and subject to high traffic areas. Minimal support is provided for wildlife from outside habitats. The main access point is the forested western edge of the wetland. There are minimal to no benefits to downstream habitats.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 4	with: 4
The AA displays many hydrologic indicators sufficient to support obligate wetland vegetation. Some indication of water quality degradation based on the suite of specie present, stormwater runoff from the roadside ditch and gas station parking lot is a likely source of untreated runoff inputs to the system. Conversion to herbaceous will likely alter the flow and functionality of the wetland however it will not significantly diminish its value.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 3
The AA is a isolated wetland that receives run-off from the interstate to the south and the truck stop to the west. Vegetation in the ponded areas appears to be impacted from the reduced water quality. Diminished plant conditional and some exotic species present. Age and size distribution appear normal. Topographical features are present but slightly less than optimal.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.43	0.33

Delta = [with-current]
-0.1

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

For impact assessment areas
FL = delta x acres = 0.1 x 1.144= 0.114

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

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-079 (W-SRF-073)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

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

The AA is a depressional wetland located between the Active crop lands to the north and the Interstate-10 to the south. It is assumed that AA recieves stormwater run off from both the highway and the croplands.

Assessment area description

The AA is a small isolated depressional wetland. There are some inundated areas within this forested system. The AA is bordered on both east and west ends by forested uplands.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	9-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-079 (W-SRF-073)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Stephen R. Florey	11/9/2018

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

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	3	2	The AA is a small isolated forested wetland. The AA provides minimal to no support for wildlife by outside habitats. There are several definitive barriers such as the Interstate and expansive crop lands. The wetland also receives stormwater run-off from Interstate-10 directly through a 24in concrete culvert. The AA does not provide any benefit to downstream habitats.
.500(6)(b)Water Environment (n/a for uplands)	3	3	Although the AA had no water in it at the time of the site inspection, there were several strong hydrology indicators such as saturation, high water table and water stained leaves. Soil saturation and flow are sufficent to support obligate wetland vegetation, however plant composition reflects contamination from direct Interstate stormwater runn off.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	4	3	The AA is an isolated wetland that receives run-off from the interstate to the south. Plant condition appears generally poor and there is minimal evidence of regeneration and recruitment. Some topographical features are present however they are less than optimal. Minimal evidence of exotic invasive were observed.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.33	0.26

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.07x0.163 = 0.011

Delta = [with-current]
-0.07

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	-0.333333

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-081 (W-SRF-075)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

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

The AA is a depressional wetland located between the Active crop lands to the north and the Interstate-10 to the south. It is assumed that AA receives stormwater run off from both the highway and the croplands.

Assessment area description

The AA is a small isolated depressional wetland. There are some inundated areas within this forested system. The AA is bordered on all sides by crop land and the Interstate. The System is very isolated from any other feature.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
None	Not unique

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	9-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-081 (W-SRF-075)
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Stephen R. Florey	11/9/2018

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	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: 3 — with: 2	The AA is a small isolated forested wetland. The AA provides minimal to no support for wildlife by outside habitats. There are several definitive barriers such as the Interstate and expansive crop lands. The wetland also receives stormwater run-off from crop fields and the Interstate-10 directly. The AA does not provide any benefit to downstream habitats.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 3 — with: 3	Although the AA had no water in it at the time of the site inspection, there were several strong hydrology indicators such as saturation, high water table and water stained leaves. Soil saturation and flow are sufficient to support obligate wetland vegetation, however plant composition reflects contamination from direct Interstate stormwater run off.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 4 — with: 3	The AA is an isolated wetland that receives run-off from the interstate to the south. Plant condition appears generally poor and there is minimal evidence of regeneration and recruitment. Some topographical features are present however they are less than optimal. Minimal evidence of exotic invasive were observed.	

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	0.33
with	026

If preservation as mitigation,	
Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas
FL = delta x acres = 0.07x0.355 = 0.025

Delta = [with-current]
-0.07

If mitigation	
Time lag (t-factor) (see tables) =	1
Risk factor (1 - 3, 0.25 increments) =	1

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	-0.333333

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-088 (W-SRF-100)

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
630	Wetland Forested Mixed	Impact	

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

The Assessment area is part of the Suwannee River flood plain. It receives flood waters from the Suwannee River flowing south through the AA to the bay. The natural flow is somewhat diverted due to the interstate.

Assessment area description

The assessment area is part of the Suwannee River flood plain. It is a preserved and protected old growth forested wetland. The understory is sparse due to a lush dense canopy.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Suwannee River	Suwannee River floodplain.

Functions	Mitigation for previous permit/other historic use
BIOLOGICAL: Amphibian breeding; wading bird feeding; sandhill crane feeding; and reptile (snake) feeding.. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.	NA

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Salamanders, newts, toads, frogs, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, white tailed deer, and raccoon.	Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), alligator (FT, foraging, breeding, long-term), tricolored heron (T, foraging, long-term), and little blue heron (T, foraging, long-term).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Deer tracks, turkey tracks, racoon tracks, cardinals, woodpeckers, and crows.

Additional relevant factors:

None

Assessment conducted by:	Assessment date(s):
Stephen R. Florey	14-Nov-18

Form 62-345.900(1), F.A.C. [effective date 02-04-2004]

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

Site/Project Name	Application Number	Assessment Area Name or Number
NFRC Phase I		W-ECT-088
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	Stephen R. Florey	11/15/2018

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

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	4	3	The assessment area is located within the floodplain of the Suwannee River. Interstate I-10 is immediately south. Assessment area is located within two river state forest. Wildlife access is limited to the south by the interstate but is not limited in other directions. Conversion from forested to herbaceous will not significantly alter the LL support.
.500(6)(b)Water Environment (n/a for uplands)	6	6	Distinct hydrologic indicators present. Natural flows are somewhat altered due to the presence of the interstate. No indication of water quality degradation based on the suite of specie present, however, stormwater runoff from the interstate is a potential source of untreated runoff inputs to the system. No adverse changes in the water environment are expected with the conversion to herbaceous
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	7	3	Area is dominated by canopy and sub-canopy species with a sparse herbaceous stratum--age and size distribution is near normal for a floodplain wetland. Structural habitat is slightly less than normal. No invasive species present. Conversion to herbaceous will remove structural habitat, but promote understory species.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.4

If preservation as mitigation,
Preservation adjustment factor (0 - 1, 0.1 increments) =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.17x1.391 = 0.236

Delta = [with-current]
-0.17

If mitigation
Time lag (t-factor) (see tables) =
Risk factor (1 - 3, 0.25 increments) =

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

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