

ATTACHMENT A

UMAM Worksheets - Leon County

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-231 (W-SRF 143)	
FLUCCs code 617		Further classification (optional) Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	
Assessment Area Size		Basin/Watershed Name/Number St. Marks River / 50990000		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 wetland is part of a larger system to the south that drains into Limestone Creek. To the north the FGT corridor abuts Tram Road dissecting any possible connection to wetlands or uplands to the north of the AA.					
Assessment area description The AA is a large PFO wetland system that drains south to Limestone Creek. The AA is primarily hardwood with moderate canopy cover and a dense understory. The Wetland continues beyond the survey area to the south.					
Significant nearby features None			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not Unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			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) MAMMALS: opossum, raccoon, gray & flying squirrels, otter, gray fox, white-tailed deer, bobcat, black bear; BIRDS: downy, hairy & pileated woodpeckers, wood duck, turkey, chickadee, titmouse, Carolina wren, cardinal, ruby-throated hummingbird, yellow-throated & prothonotary warblers, hermit thrush, yellow-billed cuckoo, barred owl, limpkin, yellow-crowned night heron, wood stork, swallow-tailed and Mississippi kites, red-shouldered hawk; REPTILES: green anole, chicken & box turtles, five-lined skink, ring-neck snake, gray rat snake, eastern king snake, water moccasin, alligator; AMPHIBIANS: cricket frog, marbled, mole, three-lined, slimy and southern dusky salamanders.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, foraging, roosting, seasonal), tricolored heron (SSC, foraging, roosting, nesting, seasonal), snowy egret (SSC, roosting, nesting, seasonal), little blue heron (SSC, roosting, nesting, seasonal).		
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: T.Callahan, R. Mcloughlin ECT Inc.			Assessment date(s): 5/24/2019		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-231 (W-SRF 143)
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/24/2019

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	The AA is bordered to the North by the FGT corridor and Tram road. These two features substantially limit wildlife access from the north. To the south of the AA is more remote with a continuing network of wetlands draining into Limestone Creek. The AA offers optimal support for some but not all wildlife species. Downstream habitats derive significant benefits from the AA as the old growth center is well protected from the surrounding fringe environments. This dense shrub fringe allows significant wetland functions to continue south beyond the AA.	
	w/o pres or current 5	with 5
.500(6)(b)Water Environment (n/a for uplands)	Significant hydrological indicators present (Saturation, muck, moss trim lines, and water stained leaves). Flows appear slightly lower than expected, however sufficient indicators support a healthy interior. Evidence of community zonation is appropriate for most strata. Utilization of species with specific hydrological requirements is less than expected.	
	w/o pres or current 5	with 5
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Plant species appropriate across all stratum with a canopy dominated by Persea and Nyssa, saplings and shrubs dominated by Quercus and Ilex and herbs primarily Osmundastrum and Juncus on the perimeter. Regeneration recruitment and plant condition appear near normal in the south of the AA and diminish in quality as it nears the FGT corridor. Land management practices of maintaining the corridor likely affect the northern edge of the wetland. Conversion to herbaceous will remove structural habitat, but promote understory species.	
	w/o pres or current 6	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.53	with 0.43

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.10 x 0.412 = 0.041

Delta = [with-current]
-0.1

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

For mitigation assessment areas
RFG = delta/(t-factor x risk) = #DIV/0!

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

Site/Project Name NRFC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-233 (W-SRF-141)	
FLUCCs code 617		Further classification (optional) Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	
Assessment Area Size		Basin/Watershed Name/Number St. Marks River / 50990000		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 wetland is part of a larger system to the south that drains into the St. Marks River. To the north the FGT corridor abuts Tram Road dissecting any possible connection to wetlands or uplands to the north of the AA.					
Assessment area description The AA is a large PFO wetland system that drains south to the St. Marks River. The interior of the depression is well preserved with large old growth cypress trees. The AA is bordered to the north by the FGT corridor. The Wetland continues beyond the survey area to the south.					
Significant nearby features St. Marks River, Limestone Creek			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not Unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			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) MAMMALS: opossum, raccoon, gray & flying squirrels, otter, gray fox, white-tailed deer, bobcat, black bear; BIRDS: downy, hairy & pileated woodpeckers, wood duck, turkey, chickadee, titmouse, Carolina wren, cardinal, ruby-throated hummingbird, yellow-throated & prothonotary warblers, hermit thrush, yellow-billed cuckoo, barred owl, limpkin, yellow-crowned night heron, wood stork, swallow-tailed and Mississippi kites, red-shouldered hawk; REPTILES: green anole, chicken & box turtles, five-lined skink, ring-neck snake, gray rat snake, eastern king snake, water moccasin, alligator; AMPHIBIANS: cricket frog, marbled, mole, three-lined, slimy and southern dusky salamanders.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, foraging, roosting, seasonal), tricolored heron (SSC, foraging, roosting, nesting, seasonal), snowy egret (SSC, roosting, nesting, seasonal), little blue heron (SSC, roosting, nesting, seasonal).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): Deer tracks, evidence of crayfish, anoles, several bird species.					
Additional relevant factors: None					
Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.			Assessment date(s): 5/17/2019		

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

Site/Project Name NRFC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-233 (W-SRF-141)
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/17/2019

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	The AA is bordered to the North by the FGT corridor and Tram road. These two features substantially limit wildlife access from the north. To the south of the AA is more remote with a continuing network of wetlands draining into the St. Marks river. The AA offers adequate support for some but not all wildlife species. Downstream habitats derive significant benefits from the AA as the old growth center is well protected from the surrounding fringe environments. This fringe allows significant wetland functions to continue south beyond the AA.		
	w/o pres or current 6	with 6	
.500(6)(b)Water Environment (n/a for uplands)	Significant hydrological indicators present (Standing water, saturation, muck, moss trim lines, evidence of crayfish). Flows appear slightly lower than expected, however sufficient indicators support a healthy interior. Evidence of community zonation is appropriate for most strata. Evidence of utalization by aquatic dependant species such as crayfish.		
	w/o pres or current 6	with 6	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Plant species appropriate across all startum with a canopy dominated by Taxodium, Nyssa, Acer, saplings and shrubs dominated by Cyrilla and Clethra and herbs primarily Woodwardia and Carex. Regeneration recruitment and plant condition appear near normal in the south of the AA and diminish in quality as it nears the FGT corridor. Land management practices of maintaining the corridor likely affect the northern edge of the wetland. Conversion to herbaceous will remove structural habitat, but promote understory species.		
	w/o pres or current 6	with 3	

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.6	with 0.5

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.1 x 0.106 = 0.011

Delta = [with-current]
-0.1

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

For mitigation assessment areas
RFG = delta/(t-factor x risk) = #DIV/0!

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-235_3	
FLUCCs code 617		Further classification (optional) Mixed Hardwood Wetland		Impact or Mitigation Site? Impact	Assessment Area Size
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 hydrologically connected to a series of forested wetlands and marshes by a perennial stream. The assessment area is bordered to the east and west by upland mixed mix and hardwood forests, to the north by Tram Road to the south by 617					
Assessment area description The assessment area is characterized as a forested hardwood swamp with pockets of scrub shrub concentrated around the perimeter. Herbaceous stratum is sparse.					
Significant nearby features None			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) MAMMALS: opossum, raccoon, gray & flying squirrels, otter, gray fox, white-tailed deer, bobcat, black bear; BIRDS: downy, hairy & pileated woodpeckers, wood duck, turkey, chickadee, titmouse, Carolina wren, cardinal, ruby-throated hummingbird, yellow-throated & prothonotary warblers, hermit thrush, yellow-billed cuckoo, barred owl, limpkin, yellow-crowned night heron, wood stork, swallow-tailed and Mississippi kites, red-shouldered hawk; REPTILES: green anole, chicken & box turtles, five-lined skink, ring-neck snake, gray rat snake, eastern king snake, water moccasin, alligator; AMPHIBIANS: cricket frog, marbled, mole, three-lined, slimy and southern dusky salamanders.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, foraging, roosting, seasonal), tricolored heron (SSC, foraging, roosting, nesting, seasonal), snowy egret (SSC, roosting, nesting, seasonal), little blue heron (SSC, roosting, nesting, seasonal).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): gambusia, deer (tracks), Black Racer sighting					
Additional relevant factors: None					
Assessment conducted by: T. Callahan, R. Mcloughlin ECT Inc.			Assessment date(s): 16-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-235_3
Impact or Mitigation Impact	Assessment conducted by: TC/ RM	Assessment date: 5/16/2019

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 pres or current 7 with 6	The assessment area 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 north by Tram Road, but is not limited to/from the S/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) w/o pres or current 6 with 6	Distinct hydrologic indicators present (presence of surface water, high water table, stained leaves, water marks, muck presence). Natural flows patterns are somewhat altered due to a single bridge under Tram Road which has resulted in channelized flow through 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, however, stormwater runoff from the roadside ditch is a potential source of untreated runoff inputs to the system. Signs of recent fire activity possibly affecting understory structure. 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 7 with 3	Area is dominated by canopy (Nyssa, Taxodium) and sub-canopy species with a sparse herbaceous stratum--age and size distribution is near normal for a mixed hardwood swamp. Structural habitat is less than optimal due to the lack of herbaceous habitat. 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 understory species.

Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres 0.67 with 0.5
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If preservation as mitigation, Preservation adjustment factor (0 - 1, 0.1 increments) = Adjusted mitigation delta =

For impact assessment areas FL=delta x acres = 0.17x0.434= 0.074

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) =

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

Site/Project Name NRFC FGT Corridor Alignment		Application Number	Assessment Area Name or Number W-ECT-N-236_2 (W-TRC-013)	
FLUCCs code 617	Further classification (optional) Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	Assessment Area Size
Basin/Watershed Name/Number St. Marks River Basin/ 50990000	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 wetland is a small isolated system that appears to have historically connected to a larger system to the north of Tram road. The AA also appears to have historically been a forested system before the installation and maintenance of the FGT corridor. Native uplands to the south appear to be undisturbed.				
Assessment area description This is a small isolated wetland that is hardwood dominated. The system becomes herbaceous when crossing the FGT corridor and has an open water marsh feature. The forested region is ill defined but with strong hydrologic features.				
Significant nearby features None		Uniqueness (considering the relative rarity in relation to the regional landscape.) Not Unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.		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) MAMMALS: opossum, raccoon, gray & flying squirrels, otter, gray fox, white-tailed deer, bobcat, black bear; BIRDS: downy, hairy & pileated woodpeckers, wood duck, turkey, chickadee, titmouse, Carolina wren, cardinal, ruby-throated hummingbird, yellow-throated & prothonotary warblers, hermit thrush, yellow-billed cuckoo, barred owl, limpkin, yellow-crowned night heron, wood stork, swallow-tailed and Mississippi kites, red-shouldered hawk; REPTILES: green anole, chicken & box turtles, five-lined skink, ring-neck snake, gray rat snake, eastern king snake, water moccasin, alligator; AMPHIBIANS: cricket frog, marbled, mole, three-lined, slimy and southern dusky salamanders.		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, foraging, roosting, seasonal), tricolored heron (SSC, foraging, roosting, nesting, seasonal), snowy egret (SSC, roosting, nesting, seasonal), little blue heron (SSC, roosting, nesting, seasonal).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): Crayfish, Small fish in open water area. Deer tracks, possible armadillo holes.				
Additional relevant factors: N/A				
Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.		Assessment date(s): 5/16/2019		

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

Site/Project Name NRFC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-236_2 (W-TRC-013)
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/16/2019

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	This isolated system is located south of Tram road. The AA also crosses the maintained FGT corridor. There are no barriers to the south however as the AA is bordered by undisturbed pine upland. The AA provides moderate support for most wildlife, however due to its proximity to Tram road it is somewhat limited by barriers. Benefits to downstream habitat has also been altered due to tram road. Overall the system is generally remote with uninhibited access to the south.	
	w/o pres or current 6	with 6
.500(6)(b) Water Environment (n/a for uplands)	Distinct hydrologic indicators present (Inundation, saturation, high water table, stained leaves, water marks, muck presence). As an isolated system this AA has been dissected from its northern portion across tram road. The water has pooled as an emergent marsh within the FGT corridor. Although the water levels and flow appear optimal to support the system the distribution is inconsistent and the vegetation does not always appear appropriate for some strata. Drainage from Tram road could cause a potential source of contamination.	
	w/o pres or current 6	with 7
.500(6)(c) Community structure 1. Vegetation and/or 2. Benthic Community	The AA is both forested and herbaceous in equal portions. The forested portion is hardwood dominated primarily Nyssa with representative Taxodium species. The understory is moderate to sparse as the canopy is quite dense. When the AA crosses the FGT corridor it become an emergent marsh with several inundated areas abutting the roadside ditch. No exotic species were observed. Plant condition is good and age and size distribution although altered appears normal for its current state. Conversion to herbaceous will remove structural habitat, but promote understory species on the one have and will not alter the other half at all.	
	w/o pres or current 5	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.57	with 0.54

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.03 x 0.279 = 0.008

Delta = [with-current]
-0.03

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

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

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

Site/Project Name NRFC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-237_2 (W-SRF-136)	
FLUCCs code 617		Further classification (optional) Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number St. Marks River / 50990000		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 system is part of a large network of wetlands the continues south beyond the Survey area. It is also hydrologically connected to the network of wetlands to the north of tram road via S-SRF-137 which is culverted under the road.					
Assessment area description This wetland is a densely forested mixed hardwood system. It has a healthy diverse canopy and a dense shrubby understory. The heart of the wetland contains some very large old growth trees with relatively undisturbed functionality.					
Significant nearby features None			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not Unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			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) MAMMALS: opossum, raccoon, gray & flying squirrels, otter, gray fox, white-tailed deer, bobcat, black bear; BIRDS: downy, hairy & pileated woodpeckers, wood duck, turkey, chickadee, titmouse, Carolina wren, cardinal, ruby-throated hummingbird, yellow-throated & prothonotary warblers, hermit thrush, yellow-billed cuckoo, barred owl, limpkin, yellow-crowned night heron, wood stork, swallow-tailed and Mississippi kites, red-shouldered hawk; REPTILES: green anole, chicken & box turtles, five-lined skink, ring-neck snake, gray rat snake, eastern king snake, water moccasin, alligator; AMPHIBIANS: cricket frog, marbled, mole, three-lined, slimy and southern dusky salamanders.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, foraging, roosting, seasonal), tricolored heron (SSC, foraging, roosting, nesting, seasonal), snowy egret (SSC, roosting, nesting, seasonal), little blue heron (SSC, roosting, nesting, seasonal).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): Deer tracks, several bird species.					
Additional relevant factors: N/A					
Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.			Assessment date(s): 5/16/2019		

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

Site/Project Name NRFC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-237_2 (W-SRF-136)
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/16/2019

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	The AA is part of a larger wetland system that is dissected by both the FGT corridor and Tram Road. The wetland encompasses a stream which cuts through the FGT corridor and is culverted under Tram road. The AA is hydrologically connected to large wetland systems both to the north and to the south. Other then the liner features this system is in a relatively remote location with few barriers to wild life. Aquatic wildlife is uninhibited and benefits to downstream habitats are significant. The traffic noise and road crossing of tram road does pose as a significant inhibitor to larger mammal species.	
	w/o pres or current 7	with 7
.500(6)(b)Water Environment (n/a for uplands)	Distinct hydrologic indicators present (Standing water, saturation, high water table, stained leaves, water marks, muck presence). Natural flows patterns are somewhat altered due to the maintained, built up FGT corridor and the cannalization under Tram road. Water levels and flow are appropriate to support healthy hydrophytic vegetation. Plant comunity composition demonstrates relatively good water quality especially further south from Tram road. The main potential contributor to water quality degradation is runoff from the roadside ditches.	
	w/o pres or current 7	with 7
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	the AA is primarily hardwood mixed forested system. The dominant species being Nyssa with some old growth Taxodium. The understory is more open especially in the heart of the wetland. The perimeter become more shrubby with species such as clethra and lyonia. No exotic invasive species were observed and regeneration and recruitment of native species is normal and natural. Topographic features are slightly less than optimal as the flow is channelized under tram road. Conversion to herbaceous will remove structural habitat, but promote understory species.	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.7	with 0.57

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.13 x 1.169 = 0.152

Delta = [with-current]
-0.13

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

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

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

Site/Project Name NRFC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-238_2 (W-SRF-136)	
FLUCCs code 617		Further classification (optional) Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number St. Marks River / 50990000		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 system is part of a large network of wetlands the continues south beyond the Survey area. It is also hydrologically connected to the network of wetlands to the north of tram road via S-SRF-137 which is culverted under the road.					
Assessment area description This wetland is a densely forested mixed hardwood system. It has a healthy diverse canopy and a dense shrubby understory. The heart of the wetland contains some very large old growth trees with relatively undisturbed functionality.					
Significant nearby features None			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not Unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			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) MAMMALS: opossum, raccoon, gray & flying squirrels, otter, gray fox, white-tailed deer, bobcat, black bear; BIRDS: downy, hairy & pileated woodpeckers, wood duck, turkey, chickadee, titmouse, Carolina wren, cardinal, ruby-throated hummingbird, yellow-throated & prothonotary warblers, hermit thrush, yellow-billed cuckoo, barred owl, limpkin, yellow-crowned night heron, wood stork, swallow-tailed and Mississippi kites, red-shouldered hawk; REPTILES: green anole, chicken & box turtles, five-lined skink, ring-neck snake, gray rat snake, eastern king snake, water moccasin, alligator; AMPHIBIANS: cricket frog, marbled, mole, three-lined, slimy and southern dusky salamanders.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, foraging, roosting, seasonal), tricolored heron (SSC, foraging, roosting, nesting, seasonal), snowy egret (SSC, roosting, nesting, seasonal), little blue heron (SSC, roosting, nesting, seasonal).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): Deer tracks, several bird species.					
Additional relevant factors: N/A					
Assessment conducted by: T.Callahan, R. McLoughlin ECT Inc.			Assessment date(s): 5/16/2019		

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

Site/Project Name NRFC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-238_2 (W-SRF-136)
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/16/2019

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	The AA is part of a larger wetland system that is dissected by both the FGT corridor and Tram Road. The wetland encompasses a stream which cuts through the FGT corridor and is culverted under Tram road. The AA is hydrologically connected to large wetland systems both to the north and to the south. Other than the liner features this system is in a relatively remote location with few barriers to wild life. Aquatic wildlife is uninhibited and benefits to downstream habitats are significant. The traffic noise and road crossing of tram road does pose as a significant inhibitor to larger mammal species.	
	w/o pres or current 6	with 6
.500(6)(b)Water Environment (n/a for uplands)	Distinct hydrologic indicators present (Standing water, saturation, high water table, stained leaves, water marks, muck presence). Natural flows patterns are somewhat altered due to the maintained, built up FGT corridor and the cannalization under Tram road. Water levels and flow are appropriate to support healthy hydrophytic vegetation. Plant community composition demonstrates relatively good water quality especially further south from Tram road. The main potential contributor to water quality degradation is runoff from the roadside ditches.	
	w/o pres or current 6	with 6
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	the AA is primarily hardwood mixed forested system. The dominant species being Nyssa with some old growth Taxodium. The understory is more open especially in the heart of the wetland. The perimeter become more shrubby with species such as clethra and lyonia. No exotic invasive species were observed and regeneration and recruitment of native species is normal and natural. Topographic features are slightly less than optimal as the flow is channelized under tram road. Conversion to herbaceous will remove structural habitat, but promote understory species.	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.63	with 0.5

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.13 x 1.828 = 0.238

Delta = [with-current]
-0.13

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

For mitigation assessment areas
RFG = delta/(t-factor x risk) #DIV/0! =

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

Site/Project Name NRFC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-238_2 (W-SRF-136A_1))
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/16/2019

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	The AA is part of a larger wetland system that is dissected by both the FGT corridor and Tram Road. The wetland is connected to W-SRF-136 via stream which cuts through the FGT corridor and is culverted under Tram road. The AA is hydrologically connected to large wetland systems both to the north and to the south. Other than the liner features this system is in a relatively remote location with few barriers to wild life. Aquatic wildlife is uninhibited and benefits to downstream habitats are significant. The traffic noise and road crossing of tram road does pose as a major inhibitor to larger mammal species.	
	w/o pres or current 6	with
.500(6)(b)Water Environment (n/a for uplands)	Distinct hydrologic indicators present (Standing water, saturation, high water table, stained leaves, water marks, muck presence). Natural flows patterns are somewhat altered due to the maintained, built up FGT corridor and the cannalization under Tram road. Water levels and flow are appropriate to support healthy hydrophytic vegetation. No indication of water quality degradation based on plant community composition. Potential contribution to water quality degradation is runoff from the roadside ditches.	
	w/o pres or current 5	with
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The AA is primarily hardwood mixed forested system. The dominant species being Nyssa with some old growth Taxodium. The understory is more open especially in the heart of the wetland. The perimeter becomes more shrubby with species such as clethra and lyonia. No exotic invasive species were observed and regeneration and recruitment of native species is normal and natural. Topographic features are slightly less than optimal as the flow is channelized under tram road. Conversion to herbaceous will remove structural habitat, but promote understory species.	
	w/o pres or current 6	with

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.56667	with 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = delta x acres = 0

Delta = [with-current]
-0.56666667

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

For mitigation assessment areas
RFG = delta/(t-factor x risk) = #DIV/0!

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-241_4 (W-SRF-134)	
FLUCCs code 630		Further classification (optional) Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number St. Marks River / 50990000		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 area is a mature mixed forested wetland slough that is a head water system. It connects to several other forested wetland systems before draining south to the St. Marks River					
Assessment area description The assessment area is a mixed forested wetland system surrounded by a pine plantation. There are pockets of cypress swamps intermixed with hardwoods. The System connects with larger wetlands south beyond the survey area.					
Significant nearby features Lake Erie, St. Marks River, Old Plank road			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Black bear, bobcat, deer, gray squirrel, otter, raccoon, opossum flying squirrel, gray fox, white-tailed deer, barred owl, pileated woodpecker, turkey, wood duck, chickadee, titmouse, yellow-billed cuckoo, chicken turtle, limpkin, Carolina wren, five-lined skink, box turtle, ring neck snake, gray rate snake, eastern king snake, cottonmouth, red-shouldered hawk, ruby-throated hummingbird, hermit thrush, yellow-throated warbler, hairy woodpecker, yellow-crowned night heron, and cardinal.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), bald eagle (T, foraging, nesting, long-term), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal), little blue heron (SSC, foraging, nesting, seasonal), and eastern indigo snake (FE, hunting, incidental).		
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: Stephen R. Florey / Kaylee August			Assessment date(s): 15-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-241_4 (W-SRF-134)
Impact or Mitigation Impact	Assessment conducted by: Stephen R. Florey / Kaylee August	Assessment date: 5/15/2019

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	Area is located in a rural area southeast of the City of Tallahassee. It is a large wetland system that continues south beyond the survey area. With the exception of the maintained FGT corridor there are no major barriers to wildlife access. The AA provides optimal support for most wildlife species and downstream habitats derive significant benefits from discharges.						
<table border="1"> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>5</td> <td>5</td> </tr> </table>	w/o pres or current	with	5	5			
w/o pres or current	with						
5	5						
.500(6)(b) Water Environment (n/a for uplands)	The assessment area is a mature forested wetland system located in a rural location of Tallahassee, Florida. There are several strong hydrological indicators present (Inundation, Saturation, Water Marks, Muck). Water levels and flow appear appropriate. The only potential for water quality degradation is harvesting/planting activities within the surrounding pine plantation.						
<table border="1"> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>5</td> <td>4</td> </tr> </table>	w/o pres or current	with	5	4			
w/o pres or current	with						
5	4						
.500(6)(c) Community structure	The assessment area is a forested wetland system that has not been harvested of hardwood trees in the past 50 years. The canopy consists primarily of Cypress and various hardwoods and there is a healthy understory of shrubs and ferns. No exotic invasive species were observed. Conversion from forested to herbaceous will remove the structural habitat but promote the understory species.						
<table border="1"> <tr> <td>1. Vegetation and/or</td> <td>2. Benthic Community</td> </tr> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>5</td> <td>3</td> </tr> </table>	1. Vegetation and/or	2. Benthic Community	w/o pres or current	with	5	3	
1. Vegetation and/or	2. Benthic Community						
w/o pres or current	with						
5	3						

Score = sum of above scores/30 (if uplands, divide by 20)
current
or w/o pres
with
0.5
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 = 0.1x2.219 = 0.222

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) =

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-243A_2 (W-SRF-132)	
FLUCCs code 630		Further classification (optional) Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number St. Marks River / 50990000		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 area is a mature mixed forested wetland slough that is a head water system. It connects to several other forested wetland systems before draining south to the St. Marks River					
Assessment area description The assessment area is a mixed forested wetland system surrounded by a pine plantation. There are pockets of cypress swamps intermixed with hardwoods. The System connects with larger wetlands south beyond the survey area.					
Significant nearby features Lake Erie, St. Marks River, Old Plank road			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Black bear, bobcat, deer, gray squirrel, otter, raccoon, opossum flying squirrel, gray fox, white-tailed deer, barred owl, pileated woodpecker, turkey, wood duck, chickadee, titmouse, yellow-billed cuckoo, chicken turtle, limpkin, Carolina wren, five-lined skink, box turtle, ring neck snake, gray rate snake, eastern king snake, cottonmouth, red-shouldered hawk, ruby-throated hummingbird, hermit thrush, yellow-throated warbler, hairy woodpecker, yellow-crowned night heron, and cardinal.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), bald eagle (T, foraging, nesting, long-term), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal), little blue heron (SSC, foraging, nesting, seasonal), and eastern indigo snake (FE, hunting, incidental).		
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: Stephen R. Florey / Kaylee August			Assessment date(s): 14-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-243A_2 (W-SRF-132)
Impact or Mitigation Impact	Assessment conducted by: Stephen R. Florey / Kaylee August	Assessment date: 5/14/2019

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	Area is located in a rural area southeast of the City of Tallahassee. It is a large wetland system that continues south beyond the survey area. With the exception of the maintained FGT corridor there are no major barriers to wildlife access. The AA provides optimal support for most wildlife species and downstream habitats derive significant benefits from discharges.	w/o pres or current	with
		7	7
.500(6)(b) Water Environment (n/a for uplands)	The assessment area is a mature forested wetland system located in a rural location of Tallahassee, Florida. There are several strong hydrological indicators present (Inundation, Saturation, Water Marks, Muck). Water levels and flow appear appropriate. The only potential for water quality degradation is harvesting/planting activities within the surrounding pine plantation.	w/o pres or current	with
		7	7
.500(6)(c) Community structure	The assessment area is a forested wetland system that has not been harvested of hardwood trees in the past 50 years. The canopy consists primarily of Cypress and various hardwoods and there is a healthy understory of shrubs and ferns. No exotic invasive species were observed. Conversion from forested to herbaceous will remove the structural habitat but promote the understory species.	w/o pres or current	with
1. Vegetation and/or 2. Benthic Community		7	3

Score = sum of above scores/30 (if uplands, divide by 20)	current	with
	0.7	0.57

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

For impact assessment areas
FL = 0.13 x 1.872 = 0.243

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)
=

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-243B (W-SRF-132)	
FLUCCs code 630		Further classification (optional) Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number St. Marks River / 50990000		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 area is a mature mixed forested wetland slough that is a head water system. It connects to several other forested wetland systems before draining south to the St. Marks River					
Assessment area description The assessment area is a mixed forested wetland system surrounded by a pine plantation. There are pockets of cypress swamps intermixed with hardwoods. The System connects with larger wetlands south beyond the survey area.					
Significant nearby features Lake Erie, St. Marks River, Old Plank road			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Black bear, bobcat, deer, gray squirrel, otter, raccoon, opossum flying squirrel, gray fox, white-tailed deer, barred owl, pileated woodpecker, turkey, wood duck, chickadee, titmouse, yellow-billed cuckoo, chicken turtle, limpkin, Carolina wren, five-lined skink, box turtle, ring neck snake, gray rate snake, eastern king snake, cottonmouth, red-shouldered hawk, ruby-throated hummingbird, hermit thrush, yellow-throated warbler, hairy woodpecker, yellow-crowned night heron, and cardinal.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), bald eagle (T, foraging, nesting, long-term), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal), little blue heron (SSC, foraging, nesting, seasonal), and eastern indigo snake (FE, hunting, incidental).		
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: Stephen R. Florey / Kaylee August			Assessment date(s): 14-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-243B (W-SRF-132)
Impact or Mitigation Impact	Assessment conducted by: Stephen R. Florey / Kaylee August	Assessment date: 5/14/2019

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 pres or current 7 with 7	Area is located in a rural area southeast of the City of Tallahassee. It is a large wetland system that continues south beyond the survey area. With the exception of the maintained FGT corridor there are no major barriers to wildlife access. The AA provides optimal support for most wildlife species and downstream habitats derive significant benefits from discharges.
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current 7 with 7	The assessment area is a mature forested wetland system located in a rural location of Tallahassee, Florida. There are several strong hydrological indicators present (Inundation, Saturation, Water Marks, Muck). Water levels and flow appear appropriate. The only potential for water quality degradation is harvesting/planting activities within the surrounding pine plantation.
.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 has not been harvested of hardwood trees in the past 50 years. The canopy consists primarily of Cypress and various hardwoods and there is a healthy understory of shrubs and ferns. No exotic invasive species were observed. Conversion from forested to herbaceous will remove the structural habitat but promote the understory species.

Score = sum of above scores/30 (if uplands, divide by 20) current 0.7 or w/o pres with 0.57
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If preservation as mitigation, Preservation adjustment factor (0 - 1, 0.1 increments) = Adjusted mitigation delta = 0

For impact assessment areas FL = 0.13 x 0.077 = 0.010
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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) =

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-243D (W-SRF-132)	
FLUCCs code 630		Further classification (optional) Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number St. Marks River / 50990000		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 area is a mature mixed forested wetland slough that is a head water system. It connects to several other forested wetland systems before draining south to the St. Marks River					
Assessment area description The assessment area is a mixed forested wetland system surrounded by a pine plantation. There are pockets of cypress swamps intermixed with hardwoods. The System connects with larger wetlands south beyond the survey area.					
Significant nearby features Lake Erie, St. Marks River, Old Plank road			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Black bear, bobcat, deer, gray squirrel, otter, raccoon, opossum flying squirrel, gray fox, white-tailed deer, barred owl, pileated woodpecker, turkey, wood duck, chickadee, titmouse, yellow-billed cuckoo, chicken turtle, limpkin, Carolina wren, five-lined skink, box turtle, ring neck snake, gray rate snake, eastern king snake, cottonmouth, red-shouldered hawk, ruby-throated hummingbird, hermit thrush, yellow-throated warbler, hairy woodpecker, yellow-crowned night heron, and cardinal.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), bald eagle (T, foraging, nesting, long-term), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal), little blue heron (SSC, foraging, nesting, seasonal), and eastern indigo snake (FE, hunting, incidental).		
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: Stephen R. Florey / Kaylee August			Assessment date(s): 14-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-243D (W-SRF-132)
Impact or Mitigation Impact	Assessment conducted by: Stephen R. Florey / Kaylee August	Assessment date: 5/14/2019

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 pres or current	Area is located in a rural area southeast of the City of Tallahassee. It is a large wetland system that continues south beyond the survey area. With the exception of the maintained FGT corridor there are no major barriers to wildlife access. The AA provides optimal support for most wildlife species and downstream habitats derive significant benefits from discharges.	with
		7
.500(6)(b) Water Environment (n/a for uplands) w/o pres or current	The assessment area is a mature forested wetland system located in a rural location of Tallahassee, Florida. There are several strong hydrological indicators present (Inundation, Saturation, Water Marks, Muck). Water levels and flow appear appropriate. The only potential for water quality degradation is harvesting/planting activities within the surrounding pine plantation.	with
		7
.500(6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current	The assessment area is a forested wetland system that has not been harvested of hardwood trees in the past 50 years. The canopy consists primarily of Cypress and various hardwoods and there is a healthy understory of shrubs and ferns. No exotic invasive species were observed. Conversion from forested to herbaceous will remove the structural habitat but promote the understory species.	with
		3

Score = sum of above scores/30 (if uplands, divide by 20) current	with
0.7	0.57

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

For impact assessment areas
FL = 0.13 x 1.332 = 0.173

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) =

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-243E_2 (W-SRF-132)	
FLUCCs code 630		Further classification (optional) Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number St. Marks River / 50990000		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 area is a mature mixed forested wetland slough that is a head water system. It connects to several other forested wetland systems before draining south to the St. Marks River					
Assessment area description The assessment area is a mixed forested wetland system surrounded by a pine plantation. There are pockets of cypress swamps intermixed with hardwoods. The System connects with larger wetlands south beyond the survey area.					
Significant nearby features Lake Erie, St. Marks River, Old Plank road			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Black bear, bobcat, deer, gray squirrel, otter, raccoon, opossum flying squirrel, gray fox, white-tailed deer, barred owl, pileated woodpecker, turkey, wood duck, chickadee, titmouse, yellow-billed cuckoo, chicken turtle, limpkin, Carolina wren, five-lined skink, box turtle, ring neck snake, gray rate snake, eastern king snake, cottonmouth, red-shouldered hawk, ruby-throated hummingbird, hermit thrush, yellow-throated warbler, hairy woodpecker, yellow-crowned night heron, and cardinal.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), bald eagle (T, foraging, nesting, long-term), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal), little blue heron (SSC, foraging, nesting, seasonal), and eastern indigo snake (FE, hunting, incidental).		
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: Stephen R. Florey / Kaylee August			Assessment date(s): 14-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-243E_2 (W-SRF-132)
Impact or Mitigation Impact	Assessment conducted by: Stephen R. Florey / Kaylee August	Assessment date: 5/14/2019

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 pres or current 7	with 7	Area is located in a rural area southeast of the City of Tallahassee. It is a large wetland system that continues south beyond the survey area. With the exception of the maintained FGT corridor there are no major barriers to wildlife access. The AA provides optimal support for most wildlife species and downstream habitats derive significant benefits from discharges.
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current 7	with 7	The assessment area is a mature forested wetland system located in a rural location of Tallahassee, Florida. There are several strong hydrological indicators present (Inundation, Saturation, Water Marks, Muck). Water levels and flow appear appropriate. The only potential for water quality degradation is harvesting/planting activities within the surrounding pine plantation.
.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 has not been harvested of hardwood trees in the past 50 years. The canopy consists primarily of Cypress and various hardwoods and there is a healthy understory of shrubs and ferns. No exotic invasive species were observed. Conversion from forested to herbaceous will remove the structural habitat but promote the understory species.

Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres 0.7	with 0.57
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If preservation as mitigation, Preservation adjustment factor (0 - 1, 0.1 increments) =	
Adjusted mitigation delta =	0

For impact assessment areas FL = 0.13 x 1.619 = 0.210
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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) =

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

Site/Project Name NRFC FGT Corridor Alignment		Application Number	Assessment Area Name or Number W-ECT-N-250B_1 (W-TRC-006)	
FLUCCs code 621	Further classification (optional) Cypress		Impact or Mitigation Site? Impact	Assessment Area Size
Basin/Watershed Name/Number St. Marks River Basin/ 50990000	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 system is part of a large network of cypress domes to the north of the AA. The wetland network is clearly hydrologically connected via several streams throughout the systems. The upland areas are actively planted with slash pine. To the west, the wetland abuts Old Plank Road.				
Assessment area description This large wetland system begins in the west as a ponded herbaceous wetland abut Old Plank Road with open areas across the FGT corridor. As the system stays to the north of the FGT corridor it becomes a large interconnected cypress swamp. The interior of the wetland is protected by a thick shrubby Titi perimeter. This wetland network is surrounded by planted pine.				
Significant nearby features None		Uniqueness (considering the relative rarity in relation to the regional landscape.) Not Unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.		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) MAMMALS: black bear, panther, bobcat, deer, otter, mink, raccoon, opossum, gray squirrel, gray fox; BIRDS: red-shouldered hawk, barred owl, pileated woodpecker, wood duck, egrets, herons, purple gallinule, limpkin, prothonotary warbler, swallow-tailed kite, rusty blackbird, great crested flycatcher, wood stork; AMPHIBIANS: cricket frog, flatwoods & mole salamanders, oak & narrow mouth toads, pinewoods treefrog; REPTILES: water moccasin, alligator, mud snake, mud turtle, snapping turtle, ribbon snake.		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal) little blue heron (SSC, foraging, nesting, seasonal).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): N/A				
Additional relevant factors: N/A				
Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.		Assessment date(s): 5/14/2019		

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

Site/Project Name NRFC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-250B_1 (W-TRC-006)
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/14/2019

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	This Wetland system is part of a larger wetland system that continues on both sides of the FGT corridor. The Area is a relatively remote undeveloped property with all uplands currently planted with slash pine. The FGT corridor is maintained and built up causing channelization in some areas, however culvers and creeks maintain connection. The system offers optimal support for most wildlife species and does not have any significant barriers aside from Old Plank road to the west.	
	w/o pres or current 8	with 8
.500(6)(b)Water Environment (n/a for uplands)	Distinct hydrologic indicators present (saturation, stained leaves, water marks, muck presence). Natural flows patterns are somewhat altered due to the maintained, built up FGT corridor. Wetland connectivity has been channelized by several individual streams crossing via culverts. Water levels are appropriate and consistent within the heart of the wetlands while the perimeter remains saturated. The only potential hydrological stress comes from the pine production and all associated equipment. There are no nearby developed features that could potentially contribute to water quality degradation.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The forested portion of this wetland system is cypress dominated with other mixed coniferous and hardwood species throughout. The interior of the feature has good species diversity, however the perimeter is primarily Titi. Plant condition is good and regeneration and recruitment appears near normal. Minimal exotic presence was observed (Lygodium). Conversion to herbaceous will remove structural habitat, but promote understory species.	
	w/o pres or current 8	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.8	with 0.63

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.17 x 0.501 = 0.085

Delta = [with-current]
-0.17

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

For mitigation assessment areas
RFG = delta/(t-factor x risk) = #DIV/0!

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

Site/Project Name NRFC FGT Corridor Alignment		Application Number	Assessment Area Name or Number W-ECT-N-250B_2 (W-TRC-006)	
FLUCCs code 621	Further classification (optional) Cypress		Impact or Mitigation Site? Impact	Assessment Area Size
Basin/Watershed Name/Number St. Marks River Basin/ 50990000	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 system is part of a large network of cypress domes to the north of the AA. The wetland network is clearly hydrologically connected via several streams throughout the systems. The upland areas are actively planted with slash pine. To the west, the wetland abuts Old Plank Road.				
Assessment area description This large wetland system begins in the west as a ponded herbaceous wetland abut Old Plank Road with open areas across the FGT corridor. As the system stays to the north of the FGT corridor it becomes a large interconnected cypress swamp. The interior of the wetland is protected by a thick shrubby Titi perimeter. This wetland network is surrounded by planted pine.				
Significant nearby features None		Uniqueness (considering the relative rarity in relation to the regional landscape.) Not Unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.		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) MAMMALS: black bear, panther, bobcat, deer, otter, mink, raccoon, opossum, gray squirrel, gray fox; BIRDS: red-shouldered hawk, barred owl, pileated woodpecker, wood duck, egrets, herons, purple gallinule, limpkin, prothonotary warbler, swallow-tailed kite, rusty blackbird, great crested flycatcher, wood stork; AMPHIBIANS: cricket frog, flatwoods & mole salamanders, oak & narrow mouth toads, pinewoods treefrog; REPTILES: water moccasin, alligator, mud snake, mud turtle, snapping turtle, ribbon snake.		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal) little blue heron (SSC, foraging, nesting, seasonal).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): N/A				
Additional relevant factors: N/A				
Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.		Assessment date(s): 5/14/2019		

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

Site/Project Name NRFC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-250B_2 (W-TRC-006)
Impact or Mitigation Impact	Assessment conducted by: T.Callahan, R. Mcloughlin ECT Inc.	Assessment date: 5/14/2019

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	<p>This Wetland system is part of a larger wetland system that continues on both sides of the FGT corridor. The Area is a relatively remote undeveloped property with all uplands currently planted with slash pine. The FGT corridor is maintained and built up causing channelization in some areas, however culvers and creeks maintain connection. The system offers optimal support for most wildlife species and does not have any significant barriers aside from Old Plank road to the west.</p>	w/o pres or current	with
		6	6
.500(6)(b)Water Environment (n/a for uplands)	<p>Distinct hydrologic indicators present (saturation, stained leaves, water marks, muck presence). Natural flows patterns are somewhat altered due to the maintained, built up FGT corridor. Wetland connectivity has been channelized by several individual streams crossing via culverts. Water levels are appropriate and consistent within the heart of the wetlands while the perimeter remains saturated. The only potential hydrological stress comes from the pine production and all associated equipment. There are no nearby developed features that could potentially contribute to water quality degradation.</p>	w/o pres or current	with
		6	6
.500(6)(c)Community structure	<p>The forested portion of this wetland system is cypress dominated with other mixed coniferous and hardwood species throughout. The interior of the feature has good species diversity, however the perimeter is primarily Titi. Plant condition is good and regeneration and recruitment appears near normal. Minimal exotic presence was observed (Lygodium). Conversion to herbaceous will remove structural habitat, but promote understory species.</p>	w/o pres or current	with
1. Vegetation and/or 2. Benthic Community		7	3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	with
or w/o pres	
0.63	0.5

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.13 x 0.000001 = 0.000

Delta = [with-current]
-0.13

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

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

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-253_2 (W-RM-116)	
FLUCCs code 621		Further classification (optional) Cypress		Impact or Mitigation Site? 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 Pine plantation habitat surrounds AA. Pine adjacent to AA has been harvested. AA is connected to other wetlands off site. Utility ROW in close proximity to AA. Two lane roads near AA.					
Assessment area description AA is cypress wetland. Additional species included titi and shiny lyonia. Standing water in areas of AA. No native upland buffer as pine has been harvested.					
Significant nearby features none			Uniqueness (considering the relative rarity in relation to the regional landscape.) not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) MAMMALS: black bear, panther, bobcat, deer, otter, mink, raccoon, opossum, gray squirrel, gray fox; BIRDS: red-shouldered hawk, barred owl, pileated woodpecker, wood duck, egrets, herons, purple gallinule, limpkin, prothonotary warbler, swallow-tailed kite, rusty blackbird, great crested flycatcher, wood stork; AMPHIBIANS: cricket frog, flatwoods & mole salamanders, oak & narrow mouth toads, pinewoods treefrog; REPTILES: water moccasin, alligator, mud snake, mud turtle, snapping turtle, ribbon snake.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal) little blue heron (SSC, foraging, nesting, seasonal).		
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: Ramon Mendieta, ECT, Inc.			Assessment date(s): 22-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-253_2 (W-RM-116)
Impact or Mitigation Impact	Assessment conducted by: Ramon Mendieta, ECT Inc.	Assessment date: 5/22/2019

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 pres or current 6 with 6	Habitats outside of AA are a predominately pine plantation. Habitats outside of the AA do not represent the full range of habitats needed to fulfill live history requirements of some wildlife listed in Part 1. Two-lane roads in proximity to AA may limit access to wildlife. Invasive exotic or other invasive plant species are present in the proximity of the AA. Land uses outside the AA have an adverse affect on wildlife.
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current 7 with 7	Water levels and flows appear as expected, considering seasonal variation and antecedent weather and other climatic effects. Soil moisture appears normal. Drainage patterns affected by past impacts to surrounding uplands and past agricultural practices outside of the AA. No evidence of use by wildlife with specific hydrologic requirements. Wetland receives runoff from pine plantation.
.500(7)(c)Community Structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 7 with 3	All or nearly all plant cover is appropriate and desirable. Cover by FAC species is high. Invasive exotic or other invasive plant species provide little to no vegetative cover.

Score = sum of above scores/30 (if uplands, divide by 20) current 0.66 or w/o pres with 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 = 0.13x1.06 = 0.138

Delta = [with-current] -0.13

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) =

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-255 (W-RM-115)	
FLUCCs code 617		Further classification (optional) Mixed Wetland Hardwoods		Impact or Mitigation Site? 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 Pine plantation habitat surrounds AA. Pine adjacent to AA has been harvested. AA is connected to other wetlands off site. Utility ROW in close proximity to AA. Two lane roads near AA.					
Assessment area description AA is mixed wetland hardwood wetland. Species observed included slash pine, cypress, swamp bay, and Carolina willow. Additional species included titi, shiny lyonia, St. John's wort, and red root. Standing water in areas of AA. Algal matting in areas. No native upland buffer on western boundary as pine has been harvested.					
Significant nearby features none			Uniqueness (considering the relative rarity in relation to the regional landscape.) not unique		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) MAMMALS: opossum, raccoon, gray & flying squirrels, otter, gray fox, white-tailed deer, bobcat, black bear; BIRDS: downy, hairy & pileated woodpeckers, wood duck, turkey, chickadee, titmouse, Carolina wren, cardinal, ruby-throated hummingbird, yellow-throated & prothonotary warblers, hermit thrush, yellow-billed cuckoo, barred owl, limpkin, yellow-crowned night heron, wood stork, swallow-tailed and Mississippi kites, red-shouldered hawk; REPTILES: green anole, chicken & box turtles, five-lined skink, ring-neck snake, gray rat snake, eastern king snake, water moccasin, alligator; AMPHIBIANS: cricket frog, marbled, mole, three-lined, slimy and southern dusky salamanders.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida panther (FE, hunting, incidental), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, foraging, roosting, seasonal), tricolored heron (SSC, foraging, roosting, nesting, seasonal), snowy egret (SSC, roosting, nesting, seasonal), little blue heron (SSC, roosting, nesting, seasonal).		
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: Ramon Mendieta, ECT, Inc.			Assessment date(s): 21-May-19		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-255 (W-RM-115)
Impact or Mitigation Impact	Assessment conducted by: Ramon Mendieta, ECT Inc.	Assessment date: 5/21/2019

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 pres or current 6 with 6	Habitats outside of AA are a predominately pine plantation. Habitats outside of the AA do not represent the full range of habitats needed to fulfill live history requirements of some wildlife listed in Part 1. Two-lane roads in proximity to AA may limit access to wildlife. Invasive exotic or other invasive plant species are present in the proximity of the AA. Land uses outside the AA have an adverse affect on wildlife.
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current 7 with 7	Water levels and flows appear as expected, considering seasonal variation and antecedent weather and other climatic effects. Soil moisture appears normal. Drainage patterns affected by past impacts to surrounding uplands and past agricultural practices outside of the AA. No evidence of use by wildlife with specific hydrologic requirements. Wetland receives runoff from pine plantation.
.500(7)(c)Community Structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 7 with 3	All or nearly all plant cover is appropriate and desirable. Cover by FAC species is high. Invasive exotic or other invasive plant species provide little to no vegetative cover.

Score = sum of above scores/30 (if uplands, divide by 20) current 0.67 or w/o pres with 0.54

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

For impact assessment areas FL = delta x acres = 0.13x0.446=0.058
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Delta = [with-current] -0.13

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) =

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number	Assessment Area Name or Number W-ECT-N-259_4 (W-RGK-006)	
FLUCCs code 630, 646	Further classification (optional) Cypress, Mixed Scrub-shrub wetland		Impact or Mitigation Site? Impact	Assessment Area Size
Basin/Watershed Name/Number Chicken Branch HUC031200010503	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 appears to drain south to St. Mark's River and is connected to a larger wetland complex. Upland forest dominated by Long Leaf Pine surrounds this wetland feature.				
Assessment area description The assessment area is characterized as a cypress swamp with areas of scrub shrub wetland. Water flows across the access road and through a culvert under the access road and is connected by a ditch through the maintained easement. Several piles of excess sediment are placed near the wetland which enters the system. Additionally, the access road has increased the water level for the northern portion of the wetland.				
Significant nearby features Eagle Lake, St Mark's River		Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique.		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention.		Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Black bear, bobcat, deer, gray squirrel, otter, raccoon, opossum flying squirrel, gray fox, white-tailed deer, barred owl, pileated woodpecker, turkey, wood duck, chickadee, titmouse, yellow-billed cuckoo, chicken turtle, limpkin, Carolina wren, five-lined skink, box turtle, ring neck snake, gray rate snake, eastern king snake, cottonmouth, red-shouldered hawk, ruby-throated hummingbird, hermit thrush, yellow-throated warbler, hairy woodpecker, yellow-crowned night heron, and cardinal.		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), bald eagle (T, foraging, nesting, long-term), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal), little blue heron (SSC, foraging, nesting, seasonal), and eastern indigo snake (FE, hunting, incidental).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): fish sp., bullfrogs, red bellied woodpecker, turkey vulture, deer tracks, toad tadpoles				
Additional relevant factors: NA				
Assessment conducted by: RK, RM		Assessment date(s): 5/16/2019		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-259_4 (W-RGK-006)
Impact or Mitigation Impact	Assessment conducted by: RK, RM	Assessment date: 5/16/2019

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	A large forested wetland system is located within and extending north and south of the survey area. This wetland extends into the maintained easement and is connected on both the north/south portions of the wetland as it flows across the access road and by a culvert under the access road that drains through a ditch. 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 by the access road bisecting the wetland. No invasive flora were observed.	
	w/o pres or current 7	with 7
.500(6)(b)Water Environment (n/a for uplands)	Distinct hydrologic indicators present (presence of surface water, high water table, stained leaves). Natural flow patterns are somewhat altered due to the access road damming the flow and channelizing it through a culvert. 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, however, stormwater runoff from the City of Tallahassee tertiary treated spray fields north of the wetland are a potential source of untreated runoff inputs to the system. Less water absorption and pollution retention is expected from the wetland system if it changes to herbaceous habitat.	
	w/o pres or current 7	with 7
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Area is dominated by canopy (Cypress and Titi) and sub-canopy species. Within the existing easement a wet marsh has formed that is mainly dominated by herbaceous vegetation. Age and size distribution is near normal for a cypress 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. Aquatic species were observed within the wetland, several species of fish and the aquatic larval stages of amphibians were identified.	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.7	0.57

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = .13 x 1.139 = 0.148

Delta = [with-current]
-0.13

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

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

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-261_3 (W-RGK-004)	
FLUCCs code 630		Further classification (optional) Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Basin/Watershed Name/Number Chicken Branch HUC031200010503		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 appears to drain south to large wetland complex. Upland forest dominated by Long Leaf Pine surrounds this wetland feature.					
Assessment area description The assessment area is characterized as a cypress swamp with areas of scrub shrub and emergent marsh. Water flows over the access road and maintained easement connecting the wetland. Several piles of excess sediment are placed near the wetland which enables sediment to enter the wetland system. Additionally, the access road has increase the water level for the northern portion of the wetland. Two culverts were identified under the access road but are undersized so the majority of the water flows over the access road.					
Significant nearby features Eagle Lake, St Mark's River			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique.		
Functions BIOLOGICAL: Vertical heterogeneity (3-4 strata); wading bird feeding, roosting, nesting; macroinvertebrate habitat; small-medium-large mammal habitat (cover, food, dens); amphibian/reptile cover, breeding, and feeding. PHYSICAL/CHEMICAL: Water quality treatment; sediment/erosion control; recharge/discharge; detrital export; flood retention/detention			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Black bear, bobcat, deer, gray squirrel, otter, raccoon, opossum flying squirrel, gray fox, white-tailed deer, barred owl, pileated woodpecker, turkey, wood duck, chickadee, titmouse, yellow-billed cuckoo, chicken turtle, limpkin, Carolina wren, five-lined skink, box turtle, ring neck snake, gray rate snake, eastern king snake, cottonmouth, red-shouldered hawk, ruby-throated hummingbird, hermit thrush, yellow-throated warbler, hairy woodpecker, yellow-crowned night heron, and cardinal.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Florida black bear (T, foraging, incidental), Florida panther (FE, hunting, incidental), bald eagle (T, foraging, nesting, long-term), American alligator (SSC, habitat, long-term), limpkin (SSC, foraging, frequent), wood stork (FE, roosting, foraging, long-term), tricolored heron (SSC, foraging, nesting, seasonal), snowy egret (SSC, foraging, nesting, seasonal), little blue heron (SSC, foraging, nesting, seasonal), and eastern indigo snake (FE, hunting, incidental).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): fish sp., bullfrogs, red bellied woodpecker, turkey vulture, deer tracks, toad tadpoles					
Additional relevant factors: NA					
Assessment conducted by: RK, RM			Assessment date(s): 5/16/2019		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-261_3 (W-RGK-004)
Impact or Mitigation Impact	Assessment conducted by: RK, RM	Assessment date: 5/16/2019

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	A large forested wetland system is located within and extending north and south of the survey area. This wetland had standing water across the cleared easement which flows over the access road. 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 by the access road bisecting the wetland. No invasive flora were observed.	
	w/o pres or current 6	with 6
.500(6)(b) Water Environment (n/a for uplands)	Distinct hydrologic indicators present (presence of surface water, high water table, stained leaves). Natural flow patterns are somewhat altered due to the access road damming the flow through the assessment area and the undersized culverts under the access road. 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, however, stormwater runoff from the City of Tallahassee tertiary treated spray fields north of the wetland are a potential source of untreated runoff inputs to the system. Less water absorption and pollution retention is expected from the wetland system if it changes to a herbaceous dominated habitat.	
	w/o pres or current 7	with 7
.500(6)(c) Community structure 1. Vegetation and/or 2. Benthic Community	Area is dominated by canopy (Cypress and Titi) and sub-canopy species. Within the existing easement a wet marsh has formed that is mainly dominated by herbaceous vegetation. Age and size distribution is near normal for a cypress 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 and expand the wet marsh. Aquatic species were observed within the wetland, several species of fish and the aquatic larval stages of amphibians were identified.	
	w/o pres or current 5	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.6	with 0.53

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.07 x 0.362 = 0.025

Delta = [with-current]
-0.07

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

For mitigation assessment areas
RFG = delta/(t-factor x risk) = #DIV/0!

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-272B	
FLUCCs code 621		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Assessment Area Size		Basin/Watershed Name/Number Ochlockonee River		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 Surrounded by upland forests (Appalachicola National Forest)/silviculture, connects directly to other wetland systems upstream and downstream.					
Assessment area description This is a cypress slough dominated by bald cypress.					
Significant nearby features Silvicultural operations, electrical power lines			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-272B
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7 (reduced by proximity of silviculture); b) Invasive exotic species = 10 (very low coverage); c) Wildlife access to and from outside = 7 (reduced to proximity of silviculture); d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 7 (silviculture); f) Hydrologically connected areas downstream of assessment area = 9 (connects directly); g) Dependency of downstream areas on assessment area = 9 (downstream areas are highly dependent).	
	w/o pres or current 8	with 7
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year); b) water level indicators = 8 (hydroperiod appears normal); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion adjacent landuses); e) evidence of fire history = 10 (area is fire managed); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 8 (water appears clean; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 7 (minor).	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.77	0.6

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

For impact assessment areas
FL = delta x acres =
FL = 0.17 x 0.003 = 0.001

Delta = [with-current]
-0.17

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-271	
FLUCCs code 641		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
<p>Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands</p> <p>Smaller isolated and outer edges of mixed forested wetlands that are isolated and receive surface water runoff from adjacent silviculture lands.</p>					
<p>Assessment area description</p> <p>The canopy stratum in the outer edges and smaller isolated Mixed Forested wetlands (630) comprises red maple, bald-cypress, sweetbay, sweetgum, slash pine (recruited), and dahoon (Ilex cassine), with occurrences of loblolly bay (Gordonia lasianthus) and planted slash pine along the edges. The subcanopy stratum comprises red maple, slash pine, loblolly bay, and wax myrtle. The shrub stratum comprises slash pine, fetterbush, highbush blueberry, wax myrtle, and saw palmetto. The groundcover comprises of a variety of species including wax myrtle, Virginia chain fern, flatsedge, greenbrier, dogfennel, yelloweyed grass, cinnamon fern, blackberry, maidencane, fetterbush, grape vine, and spikerush (<i>Eleocharis sp.</i>), among others.</p>					
Significant nearby features Silvicultural operations, roadways			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-271
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6; b) Invasive exotic species = 8; c) Wildlife access to and from outside = 7; d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 6; f) Hydrologically connected areas downstream of assessment area = 8; g) Dependency of downstream areas on assessment area = 6, benefit to downstream areas.	
	w/o pres or current 8	with 8
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7; b) water level indicators = 7, altered hydroperiod due to silvicultural practices; c) soil moisture = 7, consistent with expected; d) soil erosion or deposition = 5, erosion during clearing, coupled with existing erosion from roadway, adjacent landuses; e) evidence of fire history = 6; f) vegetation community zonation = 5, removal of canopy, conversion to herbaceous; g) hydrologic stress on vegetation = 5, canopy removal, routine maintenance; h) use by animal species with specific hydrological requirements = 8; i) vegetative species tolerant of and associated with water quality degradation = 7; j) direct observation of water quality = 6, temporary impact during clearing coupled with existing minor sedimentation due to recreational activities. K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, ; b) invasive exotics or other invasive plant species = 7, very little nuisance species; c) regeneration and recruitment = 3, removal of canopy, recruitment affected by maintenance; d) age & size distribution = 4, atypical of forested wetland; e) density and quality of coarse woody debris, snag, den, and cavity = 4; f) plant condition = 4, ; g) land management practices = 6, silvicultural practices and access roads, h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 8 very minor.	
	w/o pres or current 8	with 8

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.80	0.8

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

For impact assessment areas
FL = delta x acres =

Delta = [with-current]
0.00

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-272B	
FLUCCs code 621		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Assessment Area Size		Basin/Watershed Name/Number Ochlockonee River		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 Surrounded by upland forests (Appalachicola National Forest)/silviculture, connects directly to other wetland systems upstream and downstream.					
Assessment area description This is a cypress slough dominated by bald cypress.					
Significant nearby features Silvicultural operations, electrical power lines			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-272B
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7 (reduced by proximity of silviculture); b) Invasive exotic species = 10 (very low coverage); c) Wildlife access to and from outside = 7 (reduced to proximity of silviculture); d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 7 (silviculture); f) Hydrologically connected areas downstream of assessment area = 9 (connects directly); g) Dependency of downstream areas on assessment area = 9 (downstream areas are highly dependent).	
	w/o pres or current 8	with 7
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year); b) water level indicators = 8 (hydroperiod appears normal); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion adjacent landuses); e) evidence of fire history = 10 (area is fire managed); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 8 (water appears clean; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 7 (minor).	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.77	0.6

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

For impact assessment areas
FL = delta x acres =
FL = 0.17 x 0.003 = 0.001

Delta = [with-current]
-0.17

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-276B	
FLUCCs code 641		Further classification (optional)		Impact or Mitigation Site? Existing Condition	Assessment Area Size
Basin/Watershed Name/Number Ochlockonee River		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 Smaller isolated and outer edges of mixed forested wetlands that are isolated and receive surface water runoff from adjacent silviculture lands.					
Assessment area description The canopy stratum in the outer edges and smaller isolated Mixed Forested wetlands (630) comprises red maple, bald-cypress, sweetbay, sweetgum, slash pine (recruited), and dahoon (Ilex cassine), with occurrences of loblolly bay (Gordonia lasianthus) and planted slash pine along the edges. The subcanopy stratum comprises red maple, slash pine, loblolly bay, and wax myrtle. The shrub stratum comprises slash pine, fetterbush, highbush blueberry, wax myrtle, and saw palmetto. The groundcover comprises of a variety of species including wax myrtle, Virginia chain fern, flatsedge, greenbrier, dogfennel, yelloweyed grass, cinnamon fern, blackberry, maidencane, fetterbush, grape vine, and spikerush (<i>Eleocharis sp.</i>), among others.					
Significant nearby features Silvicultural operations, roadways			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-276D	
FLUCCs code 641		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 Smaller isolated and outer edges of mixed forested wetlands that are isolated and receive surface water runoff from adjacent silviculture lands.					
Assessment area description The canopy stratum in the outer edges and smaller isolated Mixed Forested wetlands (630) comprises red maple, bald-cypress, sweetbay, sweetgum, slash pine (recruited), and dahoon (Ilex cassine), with occurrences of loblolly bay (Gordonia lasianthus) and planted slash pine along the edges. The subcanopy stratum comprises red maple, slash pine, loblolly bay, and wax myrtle. The shrub stratum comprises slash pine, fetterbush, highbush blueberry, wax myrtle, and saw palmetto. The groundcover comprises of a variety of species including wax myrtle, Virginia chain fern, flatsedge, greenbrier, dogfennel, yelloweyed grass, cinnamon fern, blackberry, maidencane, fetterbush, grape vine, and spikerush (<i>Eleocharis sp.</i>), among others.					
Significant nearby features Silvicultural operations, roadways			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-276D
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6; b) Invasive exotic species = 8; c) Wildlife access to and from outside = 7; d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 6; f) Hydrologically connected areas downstream of assessment area = 8; g) Dependency of downstream areas on assessment area = 6, benefit to downstream areas.	
	w/o pres or current 7	with 7
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7; b) water level indicators = 7, altered hydroperiod due to silvicultural practices; c) soil moisture = 7, consistent with expected; d) soil erosion or deposition = 5, erosion during clearing, coupled with existing erosion from roadway, adjacent landuses; e) evidence of fire history = 6; f) vegetation community zonation = 5, removal of canopy, conversion to herbaceous; g) hydrologic stress on vegetation = 5, canopy removal, routine maintenance; h) use by animal species with specific hydrological requirements = 8; i) vegetative species tolerant of and associated with water quality degradation = 7; j) direct observation of water quality = 6, temporary impact during clearing coupled with existing minor sedimentation due to recreational activities. K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, ; b) invasive exotics or other invasive plant species = 7, very little nuisance species; c) regeneration and recruitment = 3, removal of canopy, recruitment affected by maintenance; d) age & size distribution = 4, atypical of forested wetland; e) density and quality of coarse woody debris, snag, den, and cavity = 4; f) plant condition = 4, ; g) land management practices = 6, silvicultural practices and access roads, h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 8 very minor.	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.73	0.6

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

For impact assessment areas
FL = delta x acres =
FL = 0.13 x 0.011 = 0.001

Delta = [with-current]
0.13

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-277A	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Assessment Area Size		Basin/Watershed Name/Number Ochlockonee River		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 Surrounded by upland forests (Appalachicola National Forest)/silviculture, connects directly to other wetland systems upstream and downstream.					
Assessment area description This is a cypress slough dominated by bald cypress.					
Significant nearby features Silvicultural operations, electrical power lines			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-277A
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7 (reduced by proximity of silviculture); b) Invasive exotic species = 10 (very low coverage); c) Wildlife access to and from outside = 7 (reduced to proximity of silviculture); d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 7 (silviculture); f) Hydrologically connected areas downstream of assessment area = 9 (connects directly); g) Dependency of downstream areas on assessment area = 9 (downstream areas are highly dependent).	
	w/o pres or current 8	with 6
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year); b) water level indicators = 8 (hydroperiod appears normal); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion adjacent landuses); e) evidence of fire history = 10 (area is fire managed); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 8 (water appears clean; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 7 (minor).	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.77	0.57

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

For impact assessment areas
FL = delta x acres =
FL = 0.2 x 0.062 = 0.012

Delta = [with-current]
-0.2

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

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

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

Site/Project Name NFRC FGT Corridor Alignment		Application Number		Assessment Area Name or Number W-ECT-N-278B (W-TRC-004)	
FLUCCs code 653		Further classification (optional) Intermittent Ponds		Impact or Mitigation Site? Impact	
Assessment Area Size		Basin/Watershed Name/Number Wakulla Basin		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 wetland is classified as an ephemeral pond and is located within Appalachicola National Forest. Several other ephemeral ponds are located near this feature and during peak wet season may connect. Upland forest dominated by Long Leaf Pine surrounds this wetland feature.					
Assessment area description The assessment area mainly consists of an herbaceous stratum including Panicum, Andropogon, Bog Button, Pink Sundew, and some Hypericum. Other ephemeral ponds are located directly to the North, all of which are surrounded by upland Long Leaf Pine Forest. A transmission line corridor is located directing to the South.					
Significant nearby features Munson Slough to the West			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not unique to the area.		
Functions 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.			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Flatwoods salamander, mole salamander, tiger salamander, dwarf salamander, striped newt, oak toad, cricket frog, pinewoods tree frog, barking tree frog, squirrel tree frog, little grass frog, southern chorus frog, narrow mouth toad, eastern spade foot toad, gopher frog, white ibis, wood stork, sandhill crane, wading birds, snipe, marsh rabbit, and raccoon.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Frosted Flatwoods Salamander (T, long term, breeding), Florida sandhill crane (T, foraging, nesting, seasonal), wood stork (FE, foraging, seasonal), bald eagle (T, foraging, incidental), alligator (SSC, foraging, breeding, long-term), white ibis (SSC, foraging, long-term), tricolored heron (SSC, foraging, long-term), little blue heron (SSC, foraging, long-term), and snowy egret (SSC, foraging, long-term).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.): Red Headed Woodpecker, Fence Swifts, Green Anoles, Deer Tracks, Raccoon Droppings, Crayfish Burrows.					
Additional relevant factors: Surrounding Oaks were artificially killed, possibly in attempt to maintain habitat for breeding amphibians. Active endangered Red Cockaded Woodpecker (<i>Dryobates borealis</i>) colonies are located in the near vicinity.					
Assessment conducted by: TC,RM			Assessment date(s): 5/8/2019		

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

Site/Project Name NFRC FGT Corridor Alignment	Application Number	Assessment Area Name or Number W-ECT-N-278B (W-TRC-004)
Impact or Mitigation Impact	Assessment conducted by: TC, RM	Assessment date: 5/8/2019

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	The assessment area is a isolated ephemeral pond located within Appalachicola National Forest and is surrounded by uplands dominated by Long Leaf Pines. This wetland feature is believed to serve as an important breeding habitat for amphibians, specifically the Striped Newt (Notophthalmus perstriatus) which has been extirpated and reintroduced into the area. An existing transmission line corridor is located directly to the south of the wetland but should not significantly impact the feature. Wildlife access is not limited by distance or barriers. An offroading trail does intersect the wetland thus damaging a small portion of it.		
	w/o pres or current 7	with 7	
.500(6)(b)Water Environment (n/a for uplands)	Being an ephemeral pond, this wetland only has water present for a portion of the year. At the time of survey this feature was dry but still maintained hydrologic indicators such as water stained leaves, dried algal matting, and evidence of crayfish burrows. Community zonations was appropriate in all strata. No evidence of runoff that might effect water quality.		
	w/o pres or current 8	with 8	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Area is dominated by the herbacious stratum consisting of Panicum, Bog Button, Andropogon, Hypericum, and patches of Pink Sundew. Plant conditions were good despite apparently dry conditions. No invasive species were observed.		
	w/o pres or current 7	with 3	

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.73	with 0.6

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta = 0

For impact assessment areas
FL = 0.13 x 0.056 = 0.007

Delta = [with-current]
-0.13

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

For mitigation assessment areas
RFG = delta/(t-factor x risk) #DIV/0! =

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-279A	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 Surrounded by upland forests (Appalachicola National Forest)/silviculture, connects directly to other wetland systems upstream and downstream.					
Assessment area description The canopy stratum in the Mixed Forested wetlands (630) comprises red maple, water oak, sweet-bay, slash pine, and bald cypress. The shrub stratum and ground cover are dominated by sweet bay, giant cane, and southern bayberry, highbush blueberry, myrtle-leaved holly, and cinnamon fern.					
Significant nearby features Silvicultural operations, electrical power lines			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-279A
Impact or Mitigation Impact (Fill)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7 (reduced by proximity of silviculture); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 6 (reduced to proximity of silviculture); d) functions that benefit fish & wildlife downstream-distance or barriers = 6; e) Impacts to wildlife listed in Part 1 by outside land uses = 7 (silviculture); f) Hydrologically connected areas downstream of assessment area = 8 (connects directly); g) Dependency of downstream areas on assessment area = 8 (downstream areas are moderately dependent).	
	w/o pres or current 7	with 0
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year; b) water level indicators = 8 (hydroperiod appears normal); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion adjacent landuses); e) evidence of fire history = 10 (area is fire managed); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 8 (water appears clean; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 7 (minor).	
	w/o pres or current 7	with 0

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.73	0

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

For impact assessment areas
FL = delta x acres =
FL: 0.005 ac. x 0.73 = 0.004

Delta = [with-current]
-0.73

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-280A	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 Surrounded by upland forests (Appalachicola National Forest)/silviculture, connects directly to other wetland systems upstream and downstream.					
Assessment area description The canopy stratum in the Mixed Forested wetlands (630) comprises red maple, water oak, sweet-bay, slash pine, and bald cypress. The shrub stratum and ground cover are dominated by sweet bay, giant cane, and southern bayberry, highbush blueberry, myrtle-leaved holly, and cinnamon fern.					
Significant nearby features Silvicultural operations, electrical power lines			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-280A
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7 (reduced by proximity of silviculture); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 6 (reduced to proximity of silviculture); d) functions that benefit fish & wildlife downstream-distance or barriers = 6; e) Impacts to wildlife listed in Part 1 by outside land uses = 7 (silviculture); f) Hydrologically connected areas downstream of assessment area = 8 (connects directly); g) Dependency of downstream areas on assessment area = 8 (downstream areas are moderately dependent).	
	w/o pres or current 7	with 7
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year; b) water level indicators = 8 (hydroperiod appears normal); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion adjacent landuses); e) evidence of fire history = 10 (area is fire managed); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 8 (water appears clean; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 7 (minor).	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.73	0.6

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

For impact assessment areas
FL = delta x acres =
FL = 0.13 x 0.042 = 0.005

Delta = [with-current]
0.13

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-280C	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	Assessment Area Size
Basin/Watershed Name/Number Ochlockonee River		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 Surrounded by upland forests (Appalachicola National Forest)/silviculture, connects directly to other wetland systems upstream and downstream.					
Assessment area description The canopy stratum in the Mixed Forested wetlands (630) comprises red maple, water oak, sweet-bay, slash pine, and bald cypress. The shrub stratum and ground cover are dominated by sweet bay, giant cane, and southern bayberry, highbush blueberry, myrtle-leaved holly, and cinnamon fern.					
Significant nearby features Silvicultural operations, electrical power lines			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-280C
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7 (reduced by proximity of silviculture); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 6 (reduced to proximity of silviculture); d) functions that benefit fish & wildlife downstream-distance or barriers = 6; e) Impacts to wildlife listed in Part 1 by outside land uses = 7 (silviculture); f) Hydrologically connected areas downstream of assessment area = 8 (connects directly); g) Dependency of downstream areas on assessment area = 8 (downstream areas are moderately dependent).	
	w/o pres or current 7	with 7
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year; b) water level indicators = 8 (hydroperiod appears normal); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion adjacent landuses); e) evidence of fire history = 10 (area is fire managed); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 8 (water appears clean; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 7 (minor).	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.73	0.6

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

For impact assessment areas
FL = delta x acres =
FL = 0.13 x 0.004 = 0.001

Delta = [with-current]
0.13

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-283	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 Surrounded by disturbed uplands (residential development), may connect to other wetlands via ditches.					
Assessment area description The canopy stratum in the Mixed Forested wetlands (630) comprises red maple, water oak, and sweet-bay. The shrub stratum and ground cover are dominated by southern magnolia, giant cane, and slender crown grass.					
Significant nearby features Residential development, roadways, electrical power lines, light industrial operations			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-283
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 5 (reduced by proximity of busy roads and houses); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 5 (reduced to proximity of roads and houses); d) functions that benefit fish & wildlife downstream-distance or barriers = 6 (downstream flow somewhat limited by roads and ditching); e) Impacts to wildlife listed in Part 1 by outside land uses = 5 (reduced due to residential development); f) Hydrologically connected areas downstream of assessment area = 7 (affected by ditches); g) Dependency of downstream areas on assessment area = 7 (downstream areas somewhat dependent).	
	w/o pres or current 6	with 6
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7 (appropriate for time of year; b) water level indicators = 6 (slightly altered hydroperiod due to ditching); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion from adjacent landuses); e) evidence of fire history = 7 (consistent with expected); f) vegetation community zonation = 7 (consistent with expected); g) hydrologic stress on vegetation = 7 (consistent with expected); h) use by animal species with specific hydrological requirements = 3 (none observed); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 6 (water receives residential runoff); K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 7	with 7
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 5 (moderate coverage of nuisance species); c) regeneration and recruitment = 6 (recruitment of canopy species somewhat lacking; d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 5 (lower than expected); f) plant condition = 7 (consistent with expected); g) land management practices = 5 (residential), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 6 (average).	
	w/o pres or current 6	with 6

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.63	0.63333

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

For impact assessment areas
FL = delta x acres =

Delta = [with-current]
0.00

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

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

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-283
Impact or Mitigation Impact (Fill)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 5 (reduced by proximity of busy roads and houses); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 5 (reduced to proximity of roads and houses); d) functions that benefit fish & wildlife downstream-distance or barriers = 6 (downstream flow somewhat limited by roads and ditching); e) Impacts to wildlife listed in Part 1 by outside land uses = 5 (reduced due to residential development); f) Hydrologically connected areas downstream of assessment area = 7 (affected by ditches); g) Dependency of downstream areas on assessment area = 7 (downstream areas somewhat dependent).	
	w/o pres or current 6	with 0
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7 (appropriate for time of year); b) water level indicators = 6 (slightly altered hydroperiod due to ditching); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion from adjacent landuses); e) evidence of fire history = 7 (consistent with expected); f) vegetation community zonation = 7 (consistent with expected); g) hydrologic stress on vegetation = 7 (consistent with expected); h) use by animal species with specific hydrological requirements = 3 (none observed); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 6 (water receives residential runoff); K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 7	with 0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected); b) invasive exotics or other invasive plant species = 5 (moderate coverage of nuisance species); c) regeneration and recruitment = 6 (recruitment of canopy species somewhat lacking; d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 5 (lower than expected); f) plant condition = 7 (consistent with expected); g) land management practices = 5 (residential), h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 6 (average).	
	w/o pres or current 6	with 0

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.63	0

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

For impact assessment areas
FL = delta x acres =
FL: 0.005 ac. x 0.63 = 0.003

Delta = [with-current]
-0.63

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-288_2	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 Smaller isolated and outer edges of mixed forested wetlands that are isolated and receive surface water runoff from adjacent silviculture lands.					
Assessment area description The canopy stratum in the outer edges and smaller isolated Mixed Forested wetlands (630) comprises red maple, bald-cypress, sweetbay, sweetgum, slash pine (recruited), and dahoon (Ilex cassine), with occurrences of loblolly bay (Gordonia lasianthus) and planted slash pine along the edges. The subcanopy stratum comprises red maple, slash pine, loblolly bay, and wax myrtle. The shrub stratum comprises slash pine, fetterbush, highbush blueberry, wax myrtle, and saw palmetto. The groundcover comprises of a variety of species including wax myrtle, Virginia chain fern, flatsedge, greenbrier, dogfennel, yelloweyed grass, cinnamon fern, blackberry, maidencane, fetterbush, grape vine, and spikerush (<i>Eleocharis sp.</i>), among others.					
Significant nearby features Silvicultural operations, roadways			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-288_2
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6; b) Invasive exotic species = 8; c) Wildlife access to and from outside = 7; d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 6; f) Hydrologically connected areas downstream of assessment area = 8; g) Dependency of downstream areas on assessment area = 6, benefit to downstream areas.
w/o pres or current	with
7	5
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7; b) water level indicators = 7, altered hydroperiod due to silvicultural practices; c) soil moisture = 7, consistent with expected; d) soil erosion or deposition = 5, erosion during clearing, coupled with existing erosion from roadway, adjacent landuses; e) evidence of fire history = 6; f) vegetation community zonation = 5, removal of canopy, conversion to herbaceous; g) hydrologic stress on vegetation = 5, canopy removal, routine maintenance; h) use by animal species with specific hydrological requirements = 8; i) vegetative species tolerant of and associated with water quality degradation = 7; j) direct observation of water quality = 6, temporary impact during clearing coupled with existing minor sedimentation due to recreational activities. K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current	with
8	8
.500(6)(c)Community structure	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, ; b) invasive exotics or other invasive plant species = 7, very little nuisance species; c) regeneration and recruitment = 3, removal of canopy, recruitment affected by maintenance; d) age & size distribution = 4, atypical of forested wetland; e) density and quality of coarse woody debris, snag, den, and cavity = 4; f) plant condition = 4, ; g) land management practices = 6, silvicultural practices and access roads, h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 8 very minor.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current	with
7	3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.73	0.53333

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

For impact assessment areas
FL = delta x acres =

Delta = [with-current]
-0.20

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

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

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-288_2
Impact or Mitigation Impact (Fill)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6; b) Invasive exotic species = 8; c) Wildlife access to and from outside = 7; d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 6; f) Hydrologically connected areas downstream of assessment area = 8; g) Dependency of downstream areas on assessment area = 6, benefit to downstream areas.
w/o pres or current 7	with 0
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7; b) water level indicators = 7, altered hydroperiod due to silvicultural practices; c) soil moisture = 7, consistent with expected; d) soil erosion or deposition = 5, erosion during clearing, coupled with existing erosion from roadway, adjacent landuses; e) evidence of fire history = 6; f) vegetation community zonation = 5, removal of canopy, conversion to herbaceous; g) hydrologic stress on vegetation = 5, canopy removal, routine maintenance; h) use by animal species with specific hydrological requirements = 8; i) vegetative species tolerant of and associated with water quality degradation = 7; j) direct observation of water quality = 6, temporary impact during clearing coupled with existing minor sedimentation due to recreational activities. K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current 8	with 0
.500(6)(c)Community structure	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, ; b) invasive exotics or other invasive plant species = 7, very little nuisance species; c) regeneration and recruitment = 3, removal of canopy, recruitment affected by maintenance; d) age & size distribution = 4, atypical of forested wetland; e) density and quality of coarse woody debris, snag, den, and cavity = 4; f) plant condition = 4, ; g) land management practices = 6, silvicultural practices and access roads, h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 8 very minor.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 7	with 0

Score = sum of above scores/30 (if uplands, divide by 20)
current
or w/o pres
7
with
0

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

For impact assessment areas
FL = delta x acres =
FL: 0.01 ac. x 0.73 = 0.007

Delta = [with-current]
-0.73

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-288_1	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 Smaller isolated and outer edges of mixed forested wetlands that are isolated and receive surface water runoff from adjacent silviculture lands.					
Assessment area description The canopy stratum in the outer edges and smaller isolated Mixed Forested wetlands (630) comprises red maple, bald-cypress, sweetbay, sweetgum, slash pine (recruited), and dahoon (Ilex cassine), with occurrences of loblolly bay (Gordonia lasianthus) and planted slash pine along the edges. The subcanopy stratum comprises red maple, slash pine, loblolly bay, and wax myrtle. The shrub stratum comprises slash pine, fetterbush, highbush blueberry, wax myrtle, and saw palmetto. The groundcover comprises of a variety of species including wax myrtle, Virginia chain fern, flatsedge, greenbrier, dogfennel, yelloweyed grass, cinnamon fern, blackberry, maidencane, fetterbush, grape vine, and spikerush (<i>Eleocharis sp.</i>), among others.					
Significant nearby features Silvicultural operations, roadways			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-288_1
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6; b) Invasive exotic species = 8; c) Wildlife access to and from outside = 7; d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 6; f) Hydrologically connected areas downstream of assessment area = 8; g) Dependency of downstream areas on assessment area = 6, benefit to downstream areas.	
	w/o pres or current 7	with 5
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7; b) water level indicators = 7, altered hydroperiod due to silvicultural practices; c) soil moisture = 7, consistent with expected; d) soil erosion or deposition = 5, erosion during clearing, coupled with existing erosion from roadway, adjacent landuses; e) evidence of fire history = 6; f) vegetation community zonation = 5, removal of canopy, conversion to herbaceous; g) hydrologic stress on vegetation = 5, canopy removal, routine maintenance; h) use by animal species with specific hydrological requirements = 8; i) vegetative species tolerant of and associated with water quality degradation = 7; j) direct observation of water quality = 6, temporary impact during clearing coupled with existing minor sedimentation due to recreational activities. K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, ; b) invasive exotics or other invasive plant species = 7, very little nuisance species; c) regeneration and recruitment = 3, removal of canopy, recruitment affected by maintenance; d) age & size distribution = 4, atypical of forested wetland; e) density and quality of coarse woody debris, snag, den, and cavity = 4; f) plant condition = 4, ; g) land management practices = 6, silvicultural practices and access roads, h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 8 very minor.	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.73	0.53

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

For impact assessment areas
FL = delta x acres =
FL = 0.2 x 0.306 = 0.061

Delta = [with-current]
-0.20

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

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

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-288_1
Impact or Mitigation Impact (Fill)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6; b) Invasive exotic species = 8; c) Wildlife access to and from outside = 7; d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 6; f) Hydrologically connected areas downstream of assessment area = 8; g) Dependency of downstream areas on assessment area = 6, benefit to downstream areas.	
	w/o pres or current 7	with 0
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7; b) water level indicators = 7, altered hydroperiod due to silvicultural practices; c) soil moisture = 7, consistent with expected; d) soil erosion or deposition = 5, erosion during clearing, coupled with existing erosion from roadway, adjacent landuses; e) evidence of fire history = 6; f) vegetation community zonation = 5, removal of canopy, conversion to herbaceous; g) hydrologic stress on vegetation = 5, canopy removal, routine maintenance; h) use by animal species with specific hydrological requirements = 8; i) vegetative species tolerant of and associated with water quality degradation = 7; j) direct observation of water quality = 6, temporary impact during clearing coupled with existing minor sedimentation due to recreational activities. K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, ; b) invasive exotics or other invasive plant species = 7, very little nuisance species; c) regeneration and recruitment = 3, removal of canopy, recruitment affected by maintenance; d) age & size distribution = 4, atypical of forested wetland; e) density and quality of coarse woody debris, snag, den, and cavity = 4; f) plant condition = 4, ; g) land management practices = 6, silvicultural practices and access roads, h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 8 very minor.	
	w/o pres or current 7	with 0

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.73	0

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

For impact assessment areas
FL = delta x acres =
FL: 0.01 ac. x 0.73 = 0.007

Delta = [with-current]
-0.73

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-289_1	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Assessment Area Size		Basin/Watershed Name/Number Ochlockonee River		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 Smaller isolated and outer edges of mixed forested wetlands that are isolated and receive surface water runoff from adjacent silviculture lands.					
Assessment area description The canopy stratum in the outer edges and smaller isolated Mixed Forested wetlands (630) comprises red maple, bald-cypress, sweetbay, sweetgum, slash pine (recruited), and dahoon (Ilex cassine), with occurrences of loblolly bay (Gordonia lasianthus) and planted slash pine along the edges. The subcanopy stratum comprises red maple, slash pine, loblolly bay, and wax myrtle. The shrub stratum comprises slash pine, fetterbush, highbush blueberry, wax myrtle, and saw palmetto. The groundcover comprises of a variety of species including wax myrtle, Virginia chain fern, flatsedge, greenbrier, dogfennel, yelloweyed grass, cinnamon fern, blackberry, maidencane, fetterbush, grape vine, and spikerush (<i>Eleocharis sp.</i>), among others.					
Significant nearby features Silvicultural operations, roadways			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-289_1
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6; b) Invasive exotic species = 8; c) Wildlife access to and from outside = 7; d) functions that benefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife listed in Part 1 by outside land uses = 6; f) Hydrologically connected areas downstream of assessment area = 8; g) Dependency of downstream areas on assessment area = 6, benefit to downstream areas.	
	w/o pres or current 7	with 5
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7; b) water level indicators = 7, altered hydroperiod due to silvicultural practices; c) soil moisture = 7, consistent with expected; d) soil erosion or deposition = 5, erosion during clearing, coupled with existing erosion from roadway, adjacent landuses; e) evidence of fire history = 6; f) vegetation community zonation = 5, removal of canopy, conversion to herbaceous; g) hydrologic stress on vegetation = 5, canopy removal, routine maintenance; h) use by animal species with specific hydrological requirements = 8; i) vegetative species tolerant of and associated with water quality degradation = 7; j) direct observation of water quality = 6, temporary impact during clearing coupled with existing minor sedimentation due to recreational activities. K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, ; b) invasive exotics or other invasive plant species = 7, very little nuisance species; c) regeneration and recruitment = 3, removal of canopy, recruitment affected by maintenance; d) age & size distribution = 4, atypical of forested wetland; e) density and quality of coarse woody debris, snag, den, and cavity = 4; f) plant condition = 4, ; g) land management practices = 6, silvicultural practices and access roads, h) topographic features = 7, ; i) siltation or algal growth in submerged aquatic plant communities = 8 very minor.	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.73	0.53

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

For impact assessment areas
FL = delta x acres =
FL = 0.2 x 0.089 = 0.018

Delta = [with-current]
-0.20

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-290_1	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Assessment Area Size		Basin/Watershed Name/Number Ochlockonee River		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 Upper portion of wetlands draining to the Ochlockonee River, surrounded by a forested uplands (State Forest)					
Assessment area description The canopy stratum in the Mixed Forested wetlands (630) comprises red maple, water oak, and sweet-bay. The shrub stratum and ground cover are dominated by southern magnolia, giant cane, and slender crown grass.					
Significant nearby features Electrical power lines, roadways			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-290_1
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6 (reduced by proximity of busy roads); b) Invasive exotic species = 8 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 7 (reduced to proximity of roads); d) functions that benefit fish & wildlife downstream-distance or barriers = 7 (downstream flow somewhat limited by roads and ditching; e) Impacts to wildlife listed in Part 1 by outside land uses = 7; f) Hydrologically connected areas downstream of assessment area = 7 (connects via ditches); g) Dependency of downstream areas on assessment area = 7 (downstream areas somewhat dependent).	
	w/o pres or current 7	with 5
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year; b) water level indicators = 7 (altered hydroperiod due to ditching); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 6 (some existing erosion adjacent landuses); e) evidence of fire history = 10 (area is fire managed); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 9 (none observed); j) direct observation of water quality = 8 (water appears clean; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 8	with 8
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected, groundcover somewhat lacking); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking; d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7; i) siltation or algal growth in submerged aquatic plant communities = 8 (very minor).	
	w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.73	0.53

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

For impact assessment areas
FL = delta x acres =
FL = 0.2 x 0.042 = 0.008

Delta = [with-current]
-0.20

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-292	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Assessment Area Size		Basin/Watershed Name/Number Ochlockonee River		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 Upper portion of wetlands draining to the Ochlockonee River adjacent to a road and connected through a culvert to smaller upstream wetlands.					
Assessment area description The canopy stratum in the Mixed Forested wetlands (630) comprises red maple, water oak, and sweet-bay. The shrub stratum and ground cover are dominated by southern magnolia, giant cane, and slender crown grass.					
Significant nearby features State forest, surface streets			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-292
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6 (reduced by proximity of busy roads; b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 6 (reduced to proximity of roads); d) functions that benefit fish & wildlife downstream-distance or barriers = 7 (downstream flow somewhat limited by roads and ditching; e) Impacts to wildlife listed in Part 1 by outside land uses = 5 (adjacent to industrial facility and/or silviculture); f) Hydrologically connected areas downstream of assessment area = 6; g) Dependency of downstream areas on assessment area = 6 (downstream areas somewhat dependent).
w/o pres or current 6	with 4
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year; b) water level indicators = 7 (altered hydroperiod due to silvicultural practices and/or ditching); c) soil moisture = 9 (consistent with expected); d) soil erosion or deposition = 7 (some existing erosion from roadway, adjacent landuses); e) evidence of fire history = 8 (consistent with expected); f) vegetation community zonation = 8 (consistent with expected); g) hydrologic stress on vegetation = 8 (consistent with expected); h) use by animal species with specific hydrological requirements = 8 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (none observed); j) direct observation of water quality = 8 (water appears clean but does receive road runoff); K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current 8	with 8
.500(6)(c)Community structure	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected, groundcover somewhat lacking); b) invasive exotics or other invasive plant species = 8 (very little nuisance species); c) regeneration and recruitment = 7 (recruitment of canopy species somewhat lacking; d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 7 (consistent with expected); f) plant condition = 7 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 7; i) siltation or algal growth in submerged aquatic plant communities = 7 (very minor).
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 7	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
0.70	0.5

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

For impact assessment areas
FL = delta x acres =
FL = 0.20 x 0.283= 0.057

Delta = [with-current]
-0.20

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-293	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 that has been isolated by a road and rail line and adjacent to light industrial facilities.					
Assessment area description The canopy stratum in the outer edges and smaller isolated Mixed Forested wetlands (630) comprises red maple, bald-cypress, sweetbay, sweetgum, loblolly pine (recruited), water oak, and swamp chestnut oak, with occurrences of planted loblolly pine along the edges. The subcanopy stratum comprises red maple, loblolly pine, sweetbay, American hornbeam, and sweetgum. The shrub stratum comprises highbush blueberry, wax myrtle, giant cane, fetterbush, needlepalm, Florida anise, and bluestem palmetto. The groundcover comprises of a variety of species including Virginia chain fern, flatsedge, greenbrier, dogfennel, yelloweyed grass, cinnamon fern, blackberry, grape vine, and shield ferns (<i>Thelypteris</i> sp.), among others.					
Significant nearby features Industrial operations, roadways, rail			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-293
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 5 (reduced by proximity of busy roads); b) Invasive exotic species = 5 (moderate coverage of Lygodium); c) Wildlife access to and from outside = 5 (reduced to proximity of roads); d) functions that benefit fish & wildlife downstream-distance or barriers = 5 (downstream flow limited by roads and ditching); e) Impacts to wildlife listed in Part 1 by outside land uses = 5 (adjacent to industrial facility and/or silviculture); f) Hydrologically connected areas downstream of assessment area = 5; g) Dependency of downstream areas on assessment area = 5 (downstream areas somewhat dependent).	
	w/o pres or current 5	with 3
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year); b) water level indicators = 7 (altered hydroperiod due to silvicultural practices and/or ditching); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 5 (some existing erosion from roadway, adjacent landuses); e) evidence of fire history = 7 (consistent with expected); f) vegetation community zonation = 7 (consistent with expected); g) hydrologic stress on vegetation = 7 (consistent with expected); h) use by animal species with specific hydrological requirements = 7 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 7 (water appears clean but does receive road runoff); K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 7	with 7
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected, groundcover somewhat lacking); b) invasive exotics or other invasive plant species = 6 (moderate nuisance species); c) regeneration and recruitment = 6 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 5 (lower than expected); f) plant condition = 6 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 6; ; i) siltation or algal growth in submerged aquatic plant communities = 6 (minor siltation from road runoff).	
	w/o pres or current 6	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.60	0.43

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

For impact assessment areas
FL = delta x acres =
FL = 0.17 x 0.165= 0.028

Delta = [with-current]
-0.17

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-294	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Assessment Area Size		Basin/Watershed Name/Number Ochlockonee River		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 that has been isolated by a road and rail line and adjacent to light industrial facilities.					
Assessment area description The canopy and shrub strata in the Mixed Forested wetlands (630) are dominated by red maple,water oak, and southern bayberry. The ground cover is dominated by slender crown grass and water oak and cinnamon fern.					
Significant nearby features Industrial operations, roadways, rail			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Industrial operations, roadways, rail			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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-294
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6 (reduced by proximity of busy roads); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 6 (reduced to proximity of roads); d) functions that benefit fish & wildlife downstream-distance or barriers = 7 (downstream flow somewhat limited by roads and ditching); e) Impacts to wildlife listed in Part 1 by outside land uses = 5 (adjacent to industrial facility and/or silviculture); f) Hydrologically connected areas downstream of assessment area = 6; g) Dependency of downstream areas on assessment area = 5 (downstream areas somewhat dependent).	
	w/o pres or current 6	with 4
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year); b) water level indicators = 7 (altered hydroperiod due to silvicultural practices and/or ditching); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 5 (some existing erosion from roadway, adjacent landuses); e) evidence of fire history = 7 (consistent with expected); f) vegetation community zonation = 7 (consistent with expected); g) hydrologic stress on vegetation = 7 (consistent with expected); h) use by animal species with specific hydrological requirements = 7 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 7 (water appears clean but does receive road runoff); K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 7	with 7
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected, groundcover somewhat lacking); b) invasive exotics or other invasive plant species = 6 (moderate nuisance species); c) regeneration and recruitment = 6 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 5 (lower than expected); f) plant condition = 6 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 6; ; i) siltation or algal growth in submerged aquatic plant communities = 6 (minor siltation from road runoff).	
	w/o pres or current 6	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.63	0.47

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

For impact assessment areas
FL = delta x acres =
FL = 0.17 x 0.528 = 0.090

Delta = [with-current]
-0.17

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

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

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-294
Impact or Mitigation Impact (Fill)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6 (reduced by proximity of busy roads); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 6 (reduced to proximity of roads); d) functions that benefit fish & wildlife downstream-distance or barriers = 7 (downstream flow somewhat limited by roads and ditching); e) Impacts to wildlife listed in Part 1 by outside land uses = 5 (adjacent to industrial facility and/or silviculture); f) Hydrologically connected areas downstream of assessment area = 6; g) Dependency of downstream areas on assessment area = 5 (downstream areas somewhat dependent).	
	w/o pres or current 6	with 0
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 8 (appropriate for time of year); b) water level indicators = 7 (altered hydroperiod due to silvicultural practices and/or ditching); c) soil moisture = 8 (consistent with expected); d) soil erosion or deposition = 5 (some existing erosion from roadway, adjacent landuses); e) evidence of fire history = 7 (consistent with expected); f) vegetation community zonation = 7 (consistent with expected); g) hydrologic stress on vegetation = 7 (consistent with expected); h) use by animal species with specific hydrological requirements = 7 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 8 (few observed); j) direct observation of water quality = 7 (water appears clean but does receive road runoff); K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 7	with 0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected, groundcover somewhat lacking); b) invasive exotics or other invasive plant species = 6 (moderate nuisance species); c) regeneration and recruitment = 6 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 5 (lower than expected); f) plant condition = 6 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 6; ; i) siltation or algal growth in submerged aquatic plant communities = 6 (minor siltation from road runoff).	
	w/o pres or current 6	with 0

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	with
0.63	0

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

For impact assessment areas
FL = delta x acres =
FL: 0.01 ac. x 0.63 = 0.006

Delta = [with-current]
-0.63

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

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

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

Site/Project Name Gulf NFRC Phase 3		Application Number		Assessment Area Name or Number W-GOL-295	
FLUCCs code 630		Further classification (optional)		Impact or Mitigation Site? Existing Condition	
Basin/Watershed Name/Number Ochlockonee River		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 that has been isolated by a road and rail line and adjacent to light industrial facilities.					
Assessment area description The canopy and shrub strata in the Mixed Forested wetlands (630) are dominated by red maple,water oak, and southern bayberry. The ground cover is dominated by slender crown grass and water oak and cinnamon fern.					
Significant nearby features Industrial operations, roadways, rail			Uniqueness (considering the relative rarity in relation to the regional landscape.) Not rare in relation to regional landscape		
Functions Wildlife habitat, 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, herpetofauna			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Possible occasional use by wading birds such as white ibis (SSC), wood stork (E), little blue heron (SSC), snowy egret (SSC), and tricolor heron (SSC).		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: M. Harrington/M. Goff			Assessment date(s): 4/16/2019		

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

Site/Project Name Gulf NFRC Phase 3	Application Number	Assessment Area Name or Number W-GOL-295
Impact or Mitigation Impact (Clearing)	Assessment conducted by: M. Harrington	Assessment date: 4/16/2019

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	Loss of canopy species associated with clearing the transmission line ROW would reduce the location and landscape support variable for wetland forests through loss of contiguous forested parcels and conversion to herbaceous community. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6 (reduced by proximity of busy roads); b) Invasive exotic species = 7 (minimal coverage of Lygodium); c) Wildlife access to and from outside = 6 (reduced to proximity of roads); d) functions that benefit fish & wildlife downstream-distance or barriers = 7 (downstream flow somewhat limited by roads and ditching); e) Impacts to wildlife listed in Part 1 by outside land uses = 5 (adjacent to industrial facility and/or silviculture); f) Hydrologically connected areas downstream of assessment area = 6; g) Dependency of downstream areas on assessment area = 5 (downstream areas somewhat dependent).	
	w/o pres or current 6	with 4
.500(6)(b)Water Environment (n/a for uplands)	Clearing the canopy will temporarily impact the water environment variable, converting forested system to a freshwater marsh, although silt fencing will reduce temporary turbidity impacts. Individual parameter scores: a) water levels and flows = 7 (appropriate for time of year); b) water level indicators = 5 (altered hydroperiod due to ditching); c) soil moisture = 7 (consistent with expected); d) soil erosion or deposition = 5 (some existing erosion from roadway, adjacent landuses); e) evidence of fire history = 7 (consistent with expected); f) vegetation community zonation = 7 (consistent with expected); g) hydrologic stress on vegetation = 7 (consistent with expected); h) use by animal species with specific hydrological requirements = 7 (consistent with expected); i) vegetative species tolerant of and associated with water quality degradation = 7 (consisten with expected); j) direct observation of water quality = 5 (receives direct road runoff); K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
	w/o pres or current 6	with 6
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	Clearing of canopy will convert the system to a freshwater marsh community with significant loss of functional value compared to existing forested system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7 (generally consistent with expected, groundcover somewhat lacking); b) invasive exotics or other invasive plant species = 6 (moderate nuisance species); c) regeneration and recruitment = 6 (recruitment of canopy species somewhat lacking); d) age & size distribution = 7 (typical of forested wetland); e) density and quality of coarse woody debris, snag, den, and cavity = 5 (lower than expected); f) plant condition = 6 (consistent with expected); g) land management practices = 6 (silvicultural practices and access roads), h) topographic features = 6; ; i) siltation or algal growth in submerged aquatic plant communities = 6 (minor siltation from road runoff).	
	w/o pres or current 6	with 3

Score = sum of above scores/30 (if uplands, divide by 20)	
current	
or w/o pres	
with	
6.00	0.43

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

For impact assessment areas
FL = delta x acres =
FL = 0.17 x 0.286 = 0.049

Delta = [with-current]
-0.17

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

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