Final Environmental Assessment for Phase II Air Cargo Facility Development

Volume 2: Appendix I

Lakeland Linder International Airport Polk County, Florida

October 2021

APPENDIX I Wetland Documentation

I.1 Wetland and Other Surface Water Descriptions I.2 UMAM Worksheets This page intentionally left blank.

APPENDIX I.1

Wetland and Other Surface Water Descriptions

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ID	FLUCFCS Code and Description ¹	USFWS Classification ²	Acres in BSA					
Wetland	ls							
WL 1	630 – Wetland Forested Mixed	PFO1/3C	5.6					
WL 2	621 – Cypress / 631 – Wetland Scrub	PFO2C / PFO1/2C	11.5					
WL 6	631 – Wetland Scrub	PFO1/2C	11.2					
		TOTAL WETLANDS:	28.3					
Other S	Other Surface Waters							
Ditch 1	510 – Streams and waterways	PUBx	0.3					
TOTAL OTHER SURFACE WATERS:								

Wetlands and Other Surface Wat	ters within the BSA
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¹ FDOT, Florida Land Use, Cover and Forms Classification System (FLUCFCS) Handbook, 1999.

² Cowardin, Lewis M., et.al. U.S. Fish and Wildlife Service Classification of Wetlands and Deepwater Habitats of the United States. 1979.

Wetland 1 (WL 1)

FLUCFCS: 630 – Wetland Forested Mixed

USFWS: PFO1/3C – Palustrine, Forested, Broad-leaved Deciduous/Needle-leaved Evergreen, Seasonally Flooded

WL 1 is comprised of a forested wetland that predominantly consists of water oak (*Quercus nigra*), laurel oak (*Q. laurifolia*), red maple (*Acer rubrum*), Caroline willow (*Salix caroliniana*), slash pine (*Pinus elliottii*), Virginia chain fern (*Woodwardia virginica*), and primrose willow (*Ludwigia peruviana*). WL 1 is located directly south of Drane Field Road on the east side of Kelvin Howard Road. An upland-cut drainage ditch within WL 1 flows north to south underneath Drane Field Road. To facilitate drainage of this poorly drained site with high groundwater levels, the USACE constructed a series of relatively deep drainage ditches between 1941 and 1945, including the one that runs through the eastern portion of WL 1. The ditches served to lower groundwater levels at the site, and to provide more efficient conveyance for flows from off-site areas north of Drane Field Road. WL 1 comprises approximately 5.6 acres of the BSA.

<u>WL 2</u>

FLUCFCS: 621 – Cypress / 631 – Wetland Scrub

USFWS: PFO2C / PFO1/2C – Palustrine, Forested, Needle-leaved Deciduous, Seasonally Flooded / Palustrine, Forested, Broad-leaved/Needle-leaved Deciduous, Seasonally Flooded

Historically a forested wetland, WL 2 has been cleared of canopy species in the past and is currently identified as a scrub wetland. However, during the April 2020 field review, WL 2 appeared to be succeeding back into a forested wetland with a cypress dome near the center. WL 2 is an isolated system located on the west side of Kelvin Howard Road and is adjacent to a stormwater management facility to the west outside of the BSA. Dominant vegetation within WL 2 includes bald cypress (*Taxodium distichum*), red maple, sweet bay (*Magnolia virginiana*), saltbush (*Baccharis halimifolia*), elderberry (*Sambucus canadensis*), and Virginia chain fern. The fringe of WL 2 consists predominantly of Brazilian pepper (*Schinus terebinthifolia*), peppervine (*Nekemias arborea*), cogon grass (*Imperata cylindrica*), and wax myrtle (*Morella cerifera*). During the wet season, water flows through a shallow drainage ditch in the southern portion of the wetland that flows from east to west and consists of primrose willow, alligatorweed (*Alternanthera philoxeroides*), Carolina willow, and soft rush (*Juncus effusus*). WL 2 comprises approximately 11.5 acres of the BSA.

<u>WL 6</u>

FLUCFCS: 631 – Wetland Scrub

USFWS: PFO1/2C – Palustrine, Forested, Broad-leaved/Needle-leaved Deciduous, Seasonally Flooded

Similar to WL 2, WL 6 historically was a forested wetland but is now a scrub wetland due to historic clearing of canopy species. However, during the April 2020 field review, WL 6 appeared to be succeeding back into a forested wetland. WL 6 is an isolated system located on the east side of Kelvin Howard Road south of Air Park Drive. Dominant vegetation within WL 6 includes bald cypress, red maple, sweet bay, saltbush, elderberry, primrose willow, and Virginia chain fern. WL 6 comprises approximately 11.2 acres of the BSA.

<u>Ditch 1</u>

FLUCFCS: 510 – Streams and Waterways USFWS: PUBx – Palustrine, Unconsolidated Bottom, Excavated

Ditch 1 is an upland-cut drainage ditch that is seasonally inundated by surface water during the wet season and intermittently flooded after rainfall events in the dry season. This ditch is located in the proposed fuel area and consists of steep slopes and a sandy bottom. Vegetation within the ditch consists of primrose willow, camphorweed (*Pluchea rosea*), elderberry, pennywort (*Hydrocotyle* spp.), and dogfennel (*Eupatorium capillifolium*). Ditch 1 is part of a stormwater management system that directs water into the stormwater pond directly south of the ditch. It is under the jurisdiction of the SWFWMD through Environmental Resource Permit (ERP) Number 49002237.068 issued in October 2010. This ditch comprises approximately 0.3 acre of the BSA. During the April 29, 2020 field review, the ditch was inundated with approximately 12 inches of water and various fish species were observed.

APPENDIX I.2 UMAM Worksheets

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Site/Project Name		Application Number			Assessment Area Name or Number		
Phase II Air Cargo Facility De	velopment at LAL				WL 1		
FLUCCs code	Further classification	ation (optional)		Impa	ct or Mitigation Site?	Assessment Area Size	
630: Wetland Forested Mixed		alustrine, Foreste dle-leaved Evergi Flooded			Direct Impact	1.2 acres	
Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classific	ation	(i.e.OFW, AP, other local/stat	e/federal designation of impor	
Alafia River	Class I	Ш			N/A		
Geographic relationship to and hy	drologic connection with	n wetlands, other	surface water, up	lands			
WL 1 is located on Airport property WL 1 flows north to south undern to the west, Phase Assessment area description	, ,	VL 1 is bounded b	y Drane Field Rd	l to the	e north, disturbed land	and Kelv in Howard Rd	
Assessment area description							
WL 1 is comprised of a forested		antly consists of chain fern, and pr		oak, re	ed maple, Caroline willo	ow, slash pine, Virginia	
Significant nearby features			Uniqueness (co regional landsca		ring the relative rarity	in relation to the	
Lakeland Linde	r International Airport		The assessment area is not considered unique, as surrounding areas consists of depressional wetlands.				
Functions			Mitigation for pre	evious	permit/other historic u	se	
Functions include water quality plant habitat, and	improvement, groundw wildlife foraging habitat		None known				
Anticipated Wildlife Utilization Bas species that are representative of expected to be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Snakes, small man	nmals, song birds, frog	JS.	Eastern indigo snake (T, foraging, breeding, resting); various listed wading birds				
Observed Evidence of Wildlife Ut	ilization (List species di	irectly observed,	or other signs su	ch as	tracks, droppings, cas	ings, nests, etc.):	
	Evidence of wildlife w	<i>v</i> as not observed	during the April 20	020 fie	eld rev iew.		
Additional relevant factors:							
Hydrology has been impacted by	large ditch and industri	ial build up to eas	t and south.				
Assessment conducted by:			Assessment dat	e(s)			
Tia Norman, AECOM			29-Apr-20				

Form 62-345.900(1), F.A.C.

Site/Project Name		Application Number	Assessment A	ea Name or Number		
Phase II Air Cargo Facilit	y Development at LAL			WL 1		
mpact or Mitigation		Assessment conducted by:	Assessment da	ite		
Direct Ir	mpact	Tia Norman		29-Apr-20		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each indicator is based on what would be suitable or the type of wetland or surface water	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 insufficier		
500(6)(a) Location and Landscape Support	How ard Rd. WL 1 is boo Rd to the w est, Phase I facility to the east. Surro	ort property directly south unded by Drane Field Rd t development of the air ca ounding development, airp vildlife movement to and fi	o the north, disturbed la irgo facility to the south, port perimeter fencing, a	nd and Kelvin How ard and a manufacturing nd active airfield		
500(6)(b)Water Environment (n/a for uplands) p pres or current with	to wildlife at a marginal appears to have had an standing water present area of the wetland. Th sandy redox and strippo	er environment within WL capacity. However, a larg a adverse effect on the hy in the ditch feature; howe e soils observed within th ed matrix. Water level indi nditions of the wetland fe	ye upland-cut ditch bised ydrology as a w hole in the ever, none w as observe his feature w ere hydric w cators are not distinct of	ets the w etland and it he feature. There is ed w ithin the forested with dark surface,		
500(6)(c)Community structure 1 Vegetation and/or 2 Benthic Community	Beneficial w etland vege because of the hydrolog present including w ater	etation present include rec gy issues a number of su oak, laurel oak, slash pin getation w ithin this w etlar w as primarily limited to the	ccessional canopy and e, and Carolina w illow . nd w hich consisted of P	shrub species w ere Гhere w as minor eruvian primrose w illo		
o pres or current with 5 0	-			e w etland.		

For mitigation assessment areas

RFG = delta/(t-factor x risk) =

Delta = [with-current]

-0.400

0.000

Adjusted mitigation delta =

If mitigation

Risk factor =

Time lag (t-factor) =

0.400

Site/Project Name		Application Number			Assessment Area Name or Number		
Phase II Air Cargo Facility De	velopment at LAL			WL 1		L 1	
FLUCCs code	Further classification	ation (optional)		Impa	ct or Mitigation Site?	Assessment Area Size	
630: Wetland Forested Mixed		llustrine, Forested dle-leaved Evergi Flooded		ŝ	Secondary Impact	0.3 acre	
Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classific	ation	(i.e.OFW, AP, other local/stat	e/federal designation of impor	
Alafia River	Class I	11			N/A		
Geographic relationship to and hy	drologic connection with	n wetlands, other	surface water, up	lands			
	, ,	VL 1 is bounded b	y Drane Field Rd	l to the	e north, disturbed land	and Kelv in Howard Rd	
Assessment area description							
WL 1 is comprised of a forested		antly consists of chain fern, and pr		oak, re	ed maple, Caroline willo	ow, slash pine, Virginia	
Significant nearby features			Uniqueness (co regional landscap		ring the relative rarity i	in relation to the	
Lakeland Linde	r International Airport		The assessment area is not considered unique, as surrounding areas consists of depressional wetlands.				
Functions			Mitigation for pre	evious	permit/other historic u	se	
Functions include water quality plant habitat, and	improvement, groundw wildlife foraging habitat		None known				
Anticipated Wildlife Utilization Bas species that are representative of expected to be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Snakes, small man	nmals, song birds, frog	S.	Eastern indigo snake (T, foraging, breeding, resting); various listed wading birds				
Observed Evidence of Wildlife Ut	ilization (List species di	irectly observed,	or other signs su	ch as	tracks, droppings, cas	ings, nests, etc.):	
	Evidence of wildlife w	vas not observed	during the April 20	020 fie	eld rev iew		
Additional relevant factors:							
Hydrology has been impacted by	Hydrology has been impacted by large ditch and industrial build up to east and south.						
Assessment conducted by:			Assessment date	e(s):			
Tia Norman, AECOM			29-Apr-20				

Form 62-345.900(1), F.A.C.

Site/Project Name		Application Number	Assessment A	rea Name or Number		
Phase II Air Cargo Fac	lity Development at LAL			WL 1		
mpact or Mitigation		Assessment conducted by:	Assessment d	ate:		
Seconda	ry Impact	Tia Norman		29-Apr-20		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each indicator is based on what would be suitable for the ty pe of wetland or sufface water	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 insufficier		
.500(6)(a) Location and Landscape Support	How ard Rd. WL 1 is boo Rd to the w est, Phase I facility to the east. Surro	ort property directly south unded by Drane Field Rd t development of the air ca ounding development, airp vildlife movement to and fi	o the north, disturbed la irgo facility to the south port perimeter fencing, a	and and Kelvin How ard , and a manufacturing and active airfield		
.500(6)(b)Water Environmen (n/a for uplands) /o pres or current with 4 4	t to wildlife at a marginal appears to have had an standing w ater present area of the w etland. Th sandy redox and strippe	er environment within WL capacity. How ever, a larg adverse effect on the hy in the ditch feature; how e e soils observed within th ed matrix. Water level indi nditions of the wetland fe	e upland-cut ditch bise /drology as a w hole in t ever, none w as observ iis feature w ere hydric cators are not distinct c	cts the w etland and it he feature. There is ed w ithin the forested w ith dark surface,		
.500(6)(c)Community structu 1. Vegetation and/or 2. Benthic Community /o pres or current with 5 4	Beneficial w etland vege because of the hydrolog present including w ater nuisance and exotic veg	etation present include rec gy issues a number of su oak, laurel oak, slash pin getation w ithin this w etlar w as primarily limited to the	ccessional canopy and e, and Carolina w illow . nd w hich consisted of F	shrub species w ere There w as minor Peruvian primrose w illo		
Score = sum of above scores/30 (if uplands, divid	e If preservation as mit	tigation,	For impact asse	essment areas		
by 20)	Preservation adjustm	ent factor =				

If mitigation

Risk factor =

Time lag (t-factor) =

For mitigation assessment areas

RFG = delta/(t-factor x risk) =

Delta = [with-current]

-0.067

0.333

0.400

Site/Project Name	Application Number	r		Assessment Area Name or Number			
Phase II Air Cargo Facility De	velopment at LAL			WL 2			
FLUCCs code	Further classificat	tion (optional)		Impac	t or Mitigation Site?	Assessment Area Size	
621: Cypress		ustrine, Forested, I ious, Seasonally F			Direct Impact	1.4 acres	
Basin/Watershed Name/Number	Affected Waterbody (Clas	ss)	Special Classification	ON (i.e.C	FW, AP, other local/state/federal	designation of importance)	
Alafia River	Class	II			N/A		
Geographic relationship to and hyd	rologic connection with	wetlands, other su	urface water, uplan	ds			
WL 2 is an isolated system located the west outside of the project are the east,		disturbed land and	d Drane Field Rd t	o the r	north, disturbed land ar		
Assessment area description							
The assessment area	a comprises the central p	portion of WL 2 an	nd consists of a cyp	ress do	ome dominated by bal	d cypress.	
Significant nearby features			Uniqueness (cor landscape.)	nsiderii	ng the relative rarity in	relation to the regional	
Lakeland Linde	r International Airport		The assessment area is not considered unique, as surrounding areas consists of depressional wetlands.				
Functions			Mitigation for pre	vious	permit/other historic us	9	
Functions include water quality im habitat, and wil	provement, groundwate dlife foraging habitat.	r recharge, plant	None known				
Anticipated Wildlife Utilization Bas that are representative of the assess be found)		· ·	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Snakes, small mar	nmals, song birds, frogs.		Eastern indigo snake (T, foraging, breeding, resting); various listed wading birds				
Observed Evidence of Wildlife Utiliz	zation (List species direc	ctly observed, or of	l ther signs such as t	racks,	droppings, casings, nes	ts, etc.):	
	Evidence of wildlife v	was not observed o	during the April 20	20 fiel	ld review.		
Additional relevant factors:							
The assessment area has been affe	cted by historic clearing	and surrounding o	development activ	ities.			
Assessment conducted by:			Assessment date(s) :			
Tia Norman, AECOM			29-Apr-20				

Site/Project Name		Application Number	/	Assessment Are	a Name or Number	
Phase II Air Cargo Facil	ty Development at LAL			WL 2		
Impact or Mitigation		Assessment conducted by:	/	Assessment dat	e	
Direct Impact		Tia Norman			29-Apr-20	
Scoring Guidance	Optimal (10)	Moderate(7)	Mini	imal (4)	Not Present (0	
The scoring of each indicator is based on what would be suitable for the ty pe of wetland or surface water	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 lev e wetland/s	el of support of surface water nctions	Condition is insuffic to provide wetland/surface wa functions	
500(6)(a) Location and Landscape Support	and adjacent to a storm is bounded by disturbed Rd to the east, manufac south. Surrounding dev	tem located on Airport pro w ater management facility d land and Drane Field Rd sturing facilities and an art elopment, airport perimete o and from the assessme	y to the west to the north ificial pond er fencing, a	st outside of th n, disturbed lar to the w est, a	he project area. W nd and Kelvin How nd LAL airfield to t	
.500(6)(b)Water Environment (n/a for uplands) /o pres or current with 7 0	The hydrology and wate to wildlife at a marginal	er environment w ithin WL capacity. Water level india nditions of the w etland fe	cators are n			
.500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community /o pres or <u>current</u> with 7 0		s dominated by bald cypre	ess w ith little	e to no exotic/	invasive species	
Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mit		F	or impact asses	sment areas	

FL = delta x acres (1.4) = 0.86

For mitigation assessment areas

RFG = delta/(t-factor x risk) =

Delta = [with-current] -0.600

with

0.000

Adjusted mitigation delta =

If mitigation

Risk factor =

Time lag (t-factor) =

0.600

or w/o pres

Form 62-345.900(2), F.A.C.

Site/Project Name		Application Number			Assessment Area Name or Number		
Phase II Air Cargo Facility Development at LAL			WL 2		L 2		
FLUCCs code	Further classificat	tion (optional)		Impac	t or Mitigation Site?	Assessment Area Size	
631: Wetland Scrub		- Palustrine, Fores e-leaved Deciduor Flooded	•		Direct Impact	10.1 acres	
Basin/Watershed Name/Number	Affected Waterbody (Clas	ss)	Special Classificati	ON (i.e.C	FW, AP, other local/state/federal	designation of importance)	
Alafia River	Class I	11			N/A		
Geographic relationship to and hyd	rologic connection with	wetlands, other su	unface water, uplan	ıds			
		disturbed land and	d Drane Field Rd t	o the r	north, disturbed land an		
Assessment area description WL 2 has been cleared of canopy s back into a forested wetland. Dom fringe consists of Brazilian pep wetland flows f	ninant vegetation includ	es bald cypress, re grass, and wax my	d maple, sweet ba rtle. A shallow dra	ay, salt ainage	bush, elderberry, and V ditch present in the so	/irginia chain fern. The uthern portion of the	
Significant nearby features			Uniqueness (cor landscape.)	nsiderii	ng the relative rarity in	relation to the regional	
Lakeland Linder International Airport			The assessment area is not considered unique, as surrounding areas consists of depressional wetlands.				
Functions			Mitigation for pre	vious	permit/other historic use	9	
Functions include water quality im habitat, and wil	provement, groundwate dlife foraging habitat.	r recharge, plant			None known		
Anticipated Wildlife Utilization Bas that are representative of the assess be found)		· ·	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Snakes, small mar	mmals, song birds, frogs		Eastern indigo snake (T, foraging, breeding, resting); various listed wading birds				
Observed Evidence of Wildlife Utili	zation (List species direc	ctly observed, or of	 :her signs such as t	tracks,	droppings, casings, nes	ts, etc.):	
	Evidence of wildlife v	was not observed o	during the April 20	20 fiel	d review.		
Additional relevant factors:							
Hydrology has been impacted by la	rge ditch in southern po	rtion of wetland th	nat flows into artific	cal por	nd west of the wetland.		
Assessment conducted by:			Assessment date((s):			
Tia Norman, AECOM			29-Apr-20				

Site/Project Name		Application Number	Assessment A	rea Name or Number		
Phase II Air Cargo Facil	ity Development at LAL			WL 2 Assessment date:		
mpact or Mitigation		Assessment conducted by:	Assessment da			
Imp	pact	Tia Norman		29-Apr-20		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each indicator is based on what would be suitable for the ty pe of wetland or surface water	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 insufficien		
500(6)(a) Location and Landscape Support /o pres or current with 3 0	w estw ard outside of th the north, disturbed land artificial pond to the w es	ort property on the w est s le project area. WL 2 is b d and Kelvin How ard Rd to st, and LAL airfield to the active airfield operations a	ounded by disturbed lar o the east, manufacturin south. Surrounding dev	id and Drane Field Rd t ig facilities and an elopment, airport		
.500(6)(b)Water Environment (n/a for uplands) //o pres or current with 5 0	to w ildlife at a marginal w etland and it appears feature. There is standii w ithin the forested area	er environment w ithin WL capacity. How ever, a larg to have had an adverse e ng w ater present in the di a of the w etland. The soils el indicators are not distin nd feature.	e cut ditch bisects the s ffect on the hydrology a tch feature; how ever, r observed within this fe	southern portion of the as a w hole in the none w as observed eature w ere hydric w it		
.500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community //o pres or <u>current</u> with 5. 0	Beneficial w etland vege elderberry, and Virginia successional canopy ar w ithin this w etland on th	etation present include rec chain fern. How ever, be nd shrub species are pres he fringes w hich consiste ted of nuisance and exoti ed.	cause of the hydrology sent. There w as nuisan d of Brazilian pepper, p	issues a number of ce and exotic vegetation eppervine, and cogon		
Score = sum of above scores/30 (if uplands, divide by 20)	e Preservation as mit		For impact asse	essment areas		

FL = delta x acres (10.1) = 4.8

For mitigation assessment areas

RFG = delta/(t-factor x risk) =

-0.433 Form 62-345.900(2), F.A.C.

Delta = [with-current]

with

0.000

Adjusted mitigation delta =

If mitigation

Risk factor =

Time lag (t-factor) =

0.433

r w/o pres

Site/Project Name	Application Number			Assessment Area Name or Number		
Phase II Air Cargo Facility De	velopment at LAL		WL 2		L 2	
FLUCCs code	Further classificat	tion (optional)		Impac	t or Mitigation Site?	Assessment Area Size
631: Wetland Scrub		- Palustrine, Fores e-leaved Deciduor Flooded			Secondary Impact	0.7 acre
Basin/Watershed Name/Number	Affected Waterbody (Clas	ss)	Special Classificati	on (i.e.C	DFW, AP, other local/state/federal (designation of importance)
Alafia River	Class I	11			N/A	
Geographic relationship to and hyd	rologic connection with	wetlands, other su	urface water, uplan	nds		
		disturbed land and	d Drane Field Rd t	o the r	north, disturbed land an	
Assessment area description WL 2 has been cleared of canopy s back into a forested wetland. Dom fringe consists of Brazilian pep wetland flows f	inant vegetation includ	es bald cypress, re grass, and wax my	ed maple, sweet ba ntle. A shallow dra	ay, salt ainage	bush, elderberry, and V ditch present in the sou	irginia chain fern. The uthern portion of the
Significant nearby features					ng the relative rarity in	
Lakeland Linde	r International Airport		The assessment area is not considered unique, as surrounding areas consists of depressional wetlands.			
Functions			Mitigation for pre	vious	permit/other historic use	
Functions include water quality im habitat, and wil	provement, groundwate dlife foraging habitat.	r recharge, plant	None known			
Anticipated Wildlife Utilization Bas that are representative of the assess be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)			
Snakes, small ma	mmals, song birds, frogs		Eastern indigo snake (T, foraging, breeding, resting); various listed wading birds			
Observed Evidence of Wildlife Utili	zation (List species direc	ctly observed, or of	l ther signs such as t	tracks,	droppings, casings, nes	s, etc.):
	Evidence of wildlife v	was not observed o	during the April 20	20 fiel	ld review.	
Additional relevant factors:						
Hydrology has been impacted by la	rge ditch in southern po	rtion of wetland th	nat flows into artific	cal por	nd west of the wetland.	
Assessment conducted by:			Assessment date((s):		
Tia Norman, AECOM			29-Apr-20			

Site/Project Name		Application Number	Assessment A	Assessment Area Name or Number WL 2 Assessment date:		
Phase II Air Cargo Facili	ty Development at LAL					
mpact or Mitigation		Assessment conducted by:	Assessment d			
Secondary	/ Impact	Tia Norman		29-Apr-20		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each indicator is based on what would be suitable for the ty pe of wetland or surface water	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 lev el of support o wetland/surface water functions	Condition is insufficie		
500(6)(a) Location and Landscape Support	w estw ard outside of th the north, disturbed land artificial pond to the w es	ort property on the east s e project area. WL 2 is b d and Kelvin How ard Rd t st, and LAL airfield to the active airfield operations a	ounded by disturbed lar o the east, manufacturir south. Surrounding dev	nd and Drane Field Rd ng facilities and an elopment, airport		
500(6)(b)Water Env ironment (n/a for uplands) 'o pres or current with 5 5	to w ildlife at a marginal w etland and it appears feature. There is standin w ithin the forested area	er environment within WL capacity. How ever, a larg to have had an adverse e ng water present in the di a of the wetland. The soils el indicators are not distin nd feature.	ge cut ditch bisects the effect on the hydrology tch feature; how ever, r s observed within this fe	southern portion of the as a w hole in the none w as observed eature w ere hydric w i		
500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community /o pres or current with 6 5	Beneficial w etland vege elderberry, and Virginia successional canopy ar w ithin this w etland on th	etation present include rec chain fern. How ever, be nd shrub species are pre he fringes w hich consiste ted of nuisance and exoti ted.	cause of the hydrology sent. There w as nuisan d of Brazilian pepper, p	issues a number of ce and exotic vegetati eppervine, and cogon		
6 5 Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mit Preservation adjustm		For impact asse	essment areas		

FL = delta x acres (0.7) = 0.05

For mitigation assessment areas

RFG = delta/(t-factor x risk) =

current pr w/o pres with 0.500 0.433 Delta = [with-current]

	.	If mitigation		
= [with-current]		Time lag (t-factor) =		
-0.067		Risk factor =		

Adjusted mitigation delta =

Site/Project Name	Name Application Nun		ber		Assessment Area Name or Number				
Phase II Air Cargo Facility Development at LAL			W		L 6				
FLUCCs code	Further classifica	ation (optional)		Impa	ct or Mitigation Site?	Assessment Area Size			
631: Wetland Scrub		PFO1/2C – Palustrine, Fore leaved/Needle-leaved Deciduo Flooded				11.2 acres			
Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classific	ation	(i.e.OFW, AP, other local/stat	e/federal designation of impor			
Alafia River	Class I	Class III			N/A				
Geographic relationship to and hy	Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands								
WL 6 is an isolated system located on Airport property on the east side of Kelv in Howard Rd south of Air Park Dr and is bounded by Phase I development of the air cargo facility to the east, disturbed land and Air Park Dr to the north, Kelv in Howard Rd to the west, and LAL airfield to the south.									
Assessment area description									
WL 6 has been cleared of canopy species in the past and is currently identified as a scrub wetland. As of April 2020, WL 2 appears to be succeeding back into a forested wetland. Dominant vegetation includes bald cy press, red maple, sweet bay, saltbush, elderberry, primrose willow, and Virginia chain fern.									
Significant nearby features	cant nearby features		Uniqueness (considering the relative rarity in relation to the regional landscape.)						
Lakeland Linder International Airport		The assessment area is not considered unique, as surrounding areas consists of depressional wetlands.							
Functions			Mitigation for previous permit/other historic use						
Functions include water quality improvement, groundwater recharge, plant habitat, and wildlife foraging habitat.		None known							
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)						
Snakes, small mammals, song birds, frogs.		Eastern indigo snake (T, foraging, breeding, resting); various listed wading birds							
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):									
Evidence of wildlife was not observed during the April 2020 field review.									
Additional relevant factors:									
Hydrology has been impacted by surrounding development.									
Assessment conducted by:			Assessment date	e(s)					
Tia Norman, AECOM	Tia Norman, AECOM		29-Apr-20						

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Site/Project Name		Application Number	Assessment Are	Assessment Area Name or Number		
Phase II Air Cargo Facility Development at LAL				WL 6		
Impact or Mitigation		Assessment conducted by:	Assessment dat	Assessment date:		
Direct Impact		Tia Norman		29-Apr-20		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water	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 v/o pres or <u>current</u> with 3 0	and is bounded by Phas Park Dr to the north, Kel	ort property on the east s e I development of the air vin How ard Rd to the w e rimeter fencing, and activ he assessment area.	r cargo facility to the east st, and LAL airfield to the	, disturbed land and Air south. Surrounding		
.500(6)(b)Water Env ironment (n/a for uplands) w/o pres or current with 5 0	The hydrology and water environment within WL 6 supports the functions and provides benefits to wildlife at a marginal capacity. How ever, surrounding development and adjacent disturbance appears to have had an adverse effect on the hydrology as a whole in the feature. The soils observed within this feature were hydric with organic bodies and redox concentrations. Water level indicators are not distinct or consistent with the expected hydrologic conditions of the w etland feature.					
500(6)(c)Community structure Beneficial w etland vegetation present include red maple, bald cypress, sw eet bay, saltbush, elderberry, and Virginia chain fern. How ever, because of the hydrology issues a number of successional canopy and shrub species are present. There w as nuisance and exotic vegetation within this w etland w hich consisted of Peruvian primrose w illow. o pres or 0						
Score = sum of abov e scores/30 (if uplands, divide by 20) current or w/o pres with 0.467 0.000	If preservation as mit Preservation adjustme Adjusted mitigation de	ent factor =	For impact asses FL = delta x acres (11			

Delta = [with-current] -0.467

Time lag (t-factor) = Risk factor =

If mitigation

For mitigation assessment areas

RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C.