

Tropical Environmental Consultants

A Willow Environmental LLC Company

www.TropicalEnvironmentalConsultants.com 28200 Old 41 Rd. #209 Bonita Springs, FL 239-455-6232

"Finding Balance" since 1983

For questions regarding wetland delineation procedures, the need for special permits, or to obtain agency

-INFORMAL WETLAND DETERMINATION (STEP 1)-

FIELD INSPECTION AND DATA REPORT

verification of the findings and conclusions presented herein prior to site planning or development, please contact **TEC** 38396240009 Site PID#: County: Collier Acres: 5 Address: 5051 GREEN BLVD NAPLES FL 34116 Subdivision/legal: GOLDEN GATE EST UNIT 34 TR 81 OR 1445 PG 185 Report authorized to (CLIENT¹): (BUYER) Lissette Garcia Agent: NOT AUTHORIZED Inspection date: 4 DECEMBER 2024 Inspected by: Asher Williams Prior agency history identified: ✓ NO YES: **REGULATORY SUMMARY** This report is a 'Step 1' informal wetland survey. Prior to construction, the recommended next step is: Step 2 ERP (wetland) permit Formal Determination Listed Species Survey Other/TBD-see notes 0.82 Tropical Environmental Consultants identified acres of wetland² habitat within the study site excluding perennial surface waters, i.e. canals, lakes, ponds. That portion which is not deemed as wetland, or is comprised of other surface waters, is upland as depicted on the accompanying map found within this report. All findings and conclusions presented herein are informal and non-binding, subject to agency review and verification. For questions regarding wetland delineation procedures, the need for special permits,

		(ERP permit) UND		N/A	Anticipated permitting time-frame (months)
					ired to address the presence of wetland habitat within
the site?	☐ YES	(dredge and fill	permit)	N/A	Anticipated permitting time-frame (months)
	✓ NO	` UND	ETERMINED		

or to obtain agency verification of the findings and conclusions presented herein prior to site planning or

Will State (FDEP/WMD) permits or approvals be required to address the presence of wetland habitat within

Were listed species (or evidence thereof) observed on site³?

Local county or city municipalities may require a permit *prior to any mechanical actions or land alteration* conducted within a property, regardless of the type, location, or scope. TEC recommends obtaining a verification of these findings with the State, as well as reviewing local rules and regulations with the development/environmental services department of the city or county of jurisdiction prior to ANY site work.

1 All findings are the sole property of TEC. and the client named above, and may not be released to un-authorized third parties.

development, please contact TEC for further assistance.

² The wetland delineation provided in this report was conducted per Florida Department of Environmental Protection (Ch.62-340 of the F.A.C.), and United States Army Corps of Engineers (1987 Wetland Delineation Manual-GACPRS) criteria and is subject to agency verification.

³ TEC did not conduct a listed species survey during completion of this report and therefore does not indicate whether listed species are absent from the site.



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BUILDING SUITABILITY SUMMARY

Further explanation of each corresponding question is provided within the "Question Detail" sheet at the conclusion of this report.

Q1	Shall a state FDEP/SWFMD and/or federal environmental resource permit authorizing for wetland								
	impacts be required for this property? V NO YES N/A- Upland								
Q2	If present, is the on-site wetland isolated, contiguous, or undetermined per State definition?								
	☐ Isolated ☐ Contiguous ✓ Undetermined (may connect offsite) ☐ N/A- Upland								
Q3	Will compensatory mitigation likely be required? ✓ NO ☐ YES COMMENTS: NOT APPLICABLE - WETLAND AVOIDABLE								
Q4	If wetlands are impacted, what is the functional <u>quality</u> (UMAM/WRAP/ETC) of the								
	wetland resource, and thus the relative cost of mitigation for these areas?								
	VERY HIGH HIGH MEDIUM ✓ LOW VERY LOW N/A- Upland								
Q5	If wetlands are found on site, what is the anticipated seasonal high water (SHW) elevation during a typical rainy-season, and for how long will near-ground water levels persist?								
	MAJORITY OF SITE 0-2 inches □ above ✓ below ground N/A weeks/year.								
	MINORITY OF SITE N/A inches above below ground N/A weeks/year.								
Q6	Was limestone observed near (6" +-) or above the surface of the site? NO YES								
Q7	Will the property potentially qualify for a reduction of the assessed value, and therefore the taxable								
	value, by local county Property Appraiser due to the presence of wetlands on-site? NO YES								
Q8	Are exotic-nuisance plant species prolific throughout the lot? NO YES								
Q9	During completion of the field visit, did TEC biologists witness the presence or evidence of protected								
	(listed) animal species? NO YES								

The conclusions presented herein are based on TEC staff interpretation of the rules and procedures set fourth by the regulating agencies contemporaneous with the inspection date. The type of environmental resource permit(s) deemed required (if any) is based upon the anticipated impact footprint for a 2,000 sq. ft. residence and associated structures (unless otherwise noted). An environmental resource permit (ERP), approved variance, or exemption is ALWAYS required when impacting wetlands. Local building departments may accept this report as part of a complete building permit application, however this does not exempt you from the need for additional State/Federal permits or approvals should environmental resources be impacted in fact (please refer to "Question Detail" page Q1 for more information). For State verification please contact TEC, FDEP 239-344-5600, or SFWMD 239-338-2929.

SUMMARY NOTES: THE PROPERTY CONTAINS RESIDENCES AND ASSOCIATED INFRASTRUCTURE CONSTRUCTED PRIOR TO 1994 WHICH ARE UPLANDS AND NOT SUBJECT TO ENVIRONMENTAL RESOURCE PERMITTING. IN-TACT WETLANDS ARE PRESENT IN THE NORTH SECTION OF THE SITE AND ARE AVOIDABLE FOR SITE PLANNING PURPOSES. CONSTRUCTION WITHIN A 25' BUFFER OF THE WETLANDS WOULD REQUIRE A VERIFICATION OF EXEMPTION THROUGH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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Site Documentation Photographs

Parcel North: Vegetation

Soil Profile

3158°S (T) ● 26.200917°, -81.709293° ▲ 5m



Parcel Center I



Parcel Center II



1994 Aerial Image





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Upland-Wetland Determination Map

(approximate- subject to agency verification)





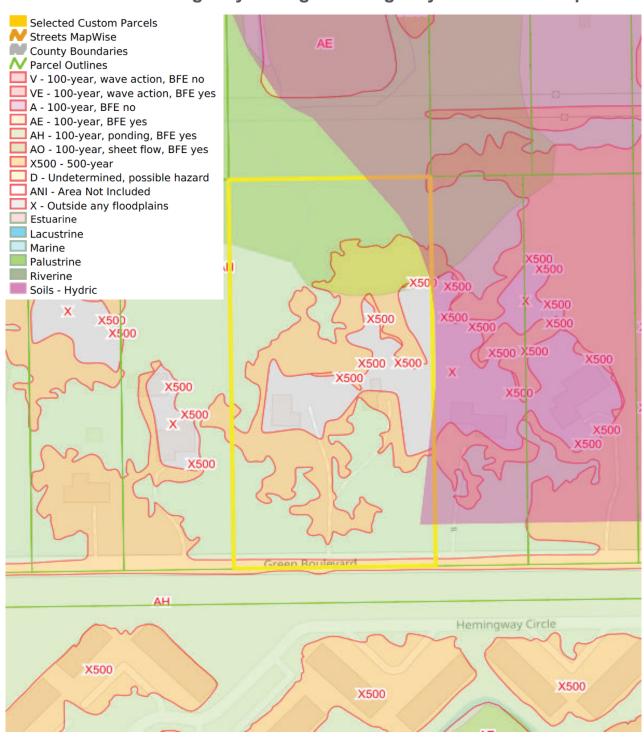
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National Wetlands Inventory, Hydric Soils, Federal Emergency Management Agency Flood Zone Map



IIIII cm	1 2 3 4 5 6						§ denotes	the Rule, s	subsection,
FDE	EP SLERC August 2019 Cha	apter	62-34	0, F.A.C	. Data For	m	referenced fro		
1. [Date: SEE RPRT 2. Staff Present: 5	SEE RE	PRT			3.	Form recor	der(s): SE	E RPT
4. (4. County: SEE RPRT 5. Site Name: SEE RPRT Tracking #:								
6. F	Point ID: SEE RPRT			GPS Coo	rdinates:	_			
7. [Distances and bearings from fixed obje	ects (if r	no GPS):	N/A					
8. 0	Current condition of described point: (Autho	rized or	legal conditio	n OUnautho	orized or	illegal condit	tion	
9. \	Work type: ☐ Identification	● D	elineatio	n					
F	Point status:	Non-W	Vetland S	Surface Wate	r OUpla	and			
10.	Vegetative Stratum §62-340.400: appropriate vegetative stratum. (Do	not ind	clude FA canopy	C species w (Min. 10% ar	hen determini eal extent)	ng 10% ⊜Groun	minimum a	real exter	nt.)
11.	Plant List §62-340.200(2),(6),(16), §	62-340	.400, §62	2-340.450, F.	A.C.:			eal extent	
	is under current conditions, withou		_		•			estimator:	
	ect and identify plants in an area just la not extend into different communities of				d classify the pl		•		
	Record the scientific name (binomial		. –	ord the perce	ent areal		ach species um selecte		
á	and status of <u>each</u> plant species		exter	nt in the cand	ору,	the n	umbers fror	m only tha	
	necessary to identify/delineate and c				groundcover		ım's columr	_	
	he plant community in the selected a			nns for each	-	- ' '	opriate statu		
#	•			Subcanopy	Groundcover	Upland	Facultative	Fac. Wet	_
	Taxodium sp.	0	15				4.5		15
	Quercus laurifolia	F	15				15		
	Sable palmetto	F	15		5		15		
	Cupaniopsis anacardioides	F			5				
	Urena lobata	F			5				
	Ficus aurea	F	5				5		
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14. 15									
15.									
16.									
17.									
18.									
19.									
20.	Demonstrate to the first	1 1		41	40		0.5		45
40	Percent areal extent totals for th			· · · · · · · · · · · · · · · · · · ·		0	35	0	15
12.	In the stratum selected in #10: What			extent of O	bligate plants	?15	_		

	Point ID/Location: SEE RPT Soil describer: SEE RPT										
	14. LRR/MLRA U Textures: Peat, Mucky Peat, Mucky Mineral (S or F), Sand, Fine, Marl										
15. ls	a soil pr	ofile ev	aluation po	ossible?	Yes ○ No I	f no, why?			(If No, s	skip to	ວ #18)
	16. Soil Description: As is under current conditions, without considering RSJ ¹ or the legality of any alterations										
Soil su	ırtace, o	r 0 inch	depth for p	ourposes o			e muck or mineral sur as darker than matrix), LA				
Horizon	beginning to ending Depth (inches)	Matrix Texture	moist condition Matrix Hue Value/ Chroma	for sandy matrix horizons w value ≤ 3: % Organio Coating	RC (redox concer horizon; bounda - OB (organic bodie - H ₂ S (hydrogen su	ntrations): Reco ries (sharp/clea es): Record text ulfide odor): Indi Physically Mix	as darker than matrix), Lord in moist condition hue ar/diffuse); shape (rounde ture (muck or mucky mine cate shallowest depth where (PM), Nonsoil (any next)	value/chr ed/linear/a eral), % vo ere detect	roma; % ngular). olume in ted	volum horiz	ne in
1	0-2	S	10YR 6/1		ORGANIC BO	DIES 20% \	VOLUME				
2	2-18	S	10YR 5/1		DA 10YR 4/1 1 LA 10YR 6/1 1						
3	3										
4											
5											
6											
17. Hy	dric So	il Field	Indicator	s: If pres	ent, check all Hyd	Iric Soil Field	Indicators satisfied a				
	exture			andy Textu		☑ Fine Text			ending		
` ′	Histosol'				Gleyed Matrix*		ny Gleyed Matrix*	Prese	itor Be ent De	epth	Depth
` ′	Histic Ep Black His	•		i) Sandy R i) Stripped			eted Matrix ox Dark Surface	1A	6	0	2
` ′	Hydroge			/) Ourpped /) Dark Su		` '	eted Dark Surface	2			
` ′	Stratified		— '	,	e Below Surface		x Depression	3			
<u>√</u> (A6)	Organic	Bodies	(S9) Thin Dar	k Surface	(F10) Mar	·	4			
(A7)	5cm Mu	cky Mine	eral*(S1	2) Barrier	Islands 1cm Muck	_ ` ′	-Manganese Masses	5			
— ` ′	Muck Pr					` ′	oric Surface	6			
` ′	1cm Mud		v Dark Surfe	200			y Shallow Dark Surface				
— ,) Deplete) Thick D		v Dark Surfa face		tand-alone D Test - bo and hydrologic indicato	- 1	To combine layers/indic requirements, see NRC	ators to m	neet thick Soils Tec	ness hnical	Note 4
`	<u> </u>					I	the uppermost 12 inc	-			
	•	•		•	stone fill, gravel, etc		Soil profile or		•		
				•	_	,	○ Inconclusive (e.	.g., evalu	ation to	12+ in	ches
lf r	If no or inconclusive, is the soil hydric as determined by other NRCS methods? impeded by disturbance, water, nonsoil, no site access, etc.)										
	○Yes ← Which method(s)?										
							indicator would be pre		t for dis	turba	nce)
			e soil profil profile is:	e 20 inch 18	es or greater from inches Why?	i the soil surf	face?	No			
					· —	texture comp	action, weather condit	ions ins	pection	interr	upted)
•	(e.g., root refusal, nonsoil, water table, loose sand, heavy texture, compaction, weather conditions, inspection interrupted) 21. Observed height or depth of standing water from soil surface: inches										

Point ID/Location:					Indicator evaluator:		
22. Hydrologic Indicators: As is under current conditions, without considering RSJ¹ or the legality of any alterations							
Hydrologic Indicators per §62-340.500, F.A.C. (and as applied to §62-340.600, F.A.C.)	Present at or near point	Predicted during normal high water or wet season+	Within 100 ft waterward of point (not for upland points)	by *) note the height fro as well as waterward (with	and compass direction of the point. (potential indicators denoted m ground surface at the point		
(1) Algal mats*							
(2) Aquatic mosses or liverworts*							
(3) Aquatic plants*							
(4) Aufwuchs							
(5) Drift lines and rafted debris*							
(6) Elevated lichen lines*							
(7) Evidence of aquatic fauna							
(8) Hydrologic data*	✓						
(9) Morphological plant adaptations*	✓			PNEUM INTACT			
(10) Secondary flow channels							
(11) Sediment deposition*							
(12) Tussocks or hummocks*							
(13) Water marks*							
Highest water level indicator heigh	t at point	:2_ind	ches	oove Ground Surface ONdoove Soil Surface ON/	o Water Level Indicators A (described point is Upland)		
23. Is one or more hydrologic indic wet season conditions at the de							
24. Delineation by Wetland Defin	_		. ,,				
As is under current conditions, was a wetland boundary been db) If yes to 24a, can the boundary l	elineated	l at the de	escribed po	oint?	rations: (If No, skip to #25) ● Yes ○ No		
25. A & B Test Wetland Criteria §	62-340.3	300(2)(a),	(b), F.A.C				
As is under current conditions, without considering RSJ¹ or the legality of any alterations: a) Is the areal extent of Obligate plants in the stratum selected in #10 greater than the areal extent of all Upland plants in that stratum? (See #12) • Yes • No • Vegetation Absent (skip to #25f) • Evaluation Impossible (skip to #26a) b) Is the areal extent of Obligate and/or Facultative Wet plants in the stratum selected in #10 equal to or greater than 80% of all the plants in that stratum, excluding Facultative plants? (See #13) • Yes • No							
c) Is the soil hydric as identified using standard NRCS definitions and practices? (see #19)							
d) Is the substrate composed of riverwash, nonsoil (see #18), rock outcrop-soil complex, or is the substrate located within an artificially created wetland area? Ores Ores No If yes, which condition is present?							
e) Is one or more of the hydrologic in	dicators ir	n §62-340.	.500, F.A.C	. present at the described po	oint? (See #23)		
f) Are the A Test criteria met per §6 (Note: If yes to 25a and yes to eithe		` , ` ,		•	′es ∩ No		
g) Are the B Test criteria met per §62-340.300(2)(b), F.A.C. at the described point? (Note: If yes to 25b and yes to either 25c, 25d, or 25e, B Test criteria are met)							
h) Are there any alterations or conditions affecting reliable application of the A or B Test such that the Altered Sites Test is more appropriate? ○ Yes							

Point ID/Location:
26. C Test Wetland Criteria §62-340.300(2)(c), F.A.C.
As is under current conditions, without considering RSJ¹ or the legality of any alterations:
a) Per §62-340.300(2)(c), F.A.C. is the described point Pine Flatwoods or Improved Pasture, or does it have
drained soils? ○ Yes ● No If yes , select which of the following are met, then skip to #26d
☐ Pine Flatwoods ☐ Improved Pasture ☐ Drained Soils
Pine Flatwoods must have flat terrain, a monotypic or mixed canopy of long leaf pine or slash pine, and a ground cover dominated by saw palmetto with other species that are <u>NOT</u> obligate or facultative wet. Improved Pasture means areas where the dominant native plant community has been replaced with planted or natural recruitment of herbaceous species which are <u>NO</u> obligate or facultative wet species and which have been actively maintained for livestock through mechanical means or grazing. Drained Soils are those in which permanent alterations, <u>excluding mechanical pumping</u> , preclude the formation of hydric soils.
b) Are the soils at the described point saline sands (salt flats-tidal flats), or have they been field verified by NRCS's Keys to Soil Taxonomy (4th ed. 1990) as Umbraqualfs, Sulfaquents, Hydraquents, Humaquepts, Histosols (exceptions), Argiaquolls, or Umbraquults? Yes No
c) Do the soils at the described point have a NRCS hydric soil field indicator (see #17), <u>and</u> is the point located within a map unit named or designated by the NRCS as frequently flooded, depressional, or water?
Map Unit:
d) Are the C Test criteria met per §62-340.300(2)(c), F.A.C. at the described point? Yes No (Note: If no to 26a and yes to either 26b or 26c, C Test criteria are met)
e) Are there any alterations or conditions affecting reliable application of the C Test such that the Altered Sites Te is more appropriate? Yes No
27. D Test Wetland Criteria §62-340.300(2)(d), F.A.C.
As is under current conditions, without considering RSJ ¹ or the legality of any alterations:
a) Is the soil hydric as verified by a NRCS hydric soil field indicator? (See #17)
● Yes \bigcirc No (skip to #27d) \bigcirc Inconclusive \leftarrow Why? (skip to #28)
b) Does any NRCS hydric soil field indicator begin at the soil surface or are any of the following indicators present: A1, A2, A3, A4, A5, A7, A8, A9, S4, F2? • Yes • No (If yes, then hydrologic indicator §62-340.500(8) or (11) is me
c) Is one or more of the hydrologic indicators in §62-340.500, F.A.C. present at the described point? (See #23) ● Yes ○N
d) Are the D Test criteria met per §62-340.300(2)(d), F.A.C. at the described point? • Yes • No (Note: If yes to 27a and yes to either 27b or 27c, D Test criteria may be met)
e) Are there any alterations or conditions affecting reliable application of the D Test such that the Altered Sites Te is more appropriate? Yes No
28. Altered Sites Tests §62-340.300(3), F.A.C. (Legal/Authorized or Illegal/Unauthorized)
For purposes of Chapter 62-340, F.A.C. altered refers to any natural or man-induced condition(s) which masks or eliminates reliable expression of wetland indicators (i.e. hydrophytic vegetation, hydric soils, and hydrologi indicators). Unaltered or normal does not require a natural condition , only an expression of wetland indicators that is sufficient to reliably identify or delineate the wetland using the criteria in §62-340.300, F.A.C.
Are alterations affecting <u>normal</u> wetland condition? ○ Yes ● No (skip to #32) ○ Evaluation Impossible (skip to #3
29. Authorized or Legally Altered Vegetation and Soils Test Criteria §62-340.300(3)(a), F.A.C.
a) Are there authorized or legal alterations affecting <u>reliable</u> expression of vegetation at the described point? Output Yes Output No If yes, how?
b) Are there authorized or legal alterations affecting <u>reliable</u> soil evaluation at the described point?
c) If yes to 29a or 29b, which criteria tests are affected by the legal alterations? ☐ A Test ☐ B Test ☐ C Test ☐ D Test
d) Using the most reliable available information and reasonable scientific judgment, would the types of evidence and characteristics contemplated in §62-340.300, F.A.C. identify or delineate the described point as a wetland with cessation of the legal altering activities? OYes ONo If no, why? (If no, skip to #3
e) If yes to 29d, what §62-340.300, F.A.C. evidence is present now and/or will be present in the future with cessation of legal altering activities? Plants Soils Hydrologic indicators
f) If yes to 29d, which tests would be passed with cessation of legal altering activities? ☐ Wetland Definition ☐ A Test ☐ B Test ☐ C Test ☐ D Test Why?

Point ID/Location:
30. Authorized or Legally Altered Hydrology Test Criteria §62-340.300(3)(b), F.A.C.
a) Has wetland hydrology of the area been legally drained or lowered? Yes No (<i>If no, skip to #31</i>) If yes, how?
b) Has wetland hydrology been legally eliminated at the described point? Yes No (If no, skip to #31)
c) If yes to 30b, using reasonable scientific judgment or §62-340.550, F.A.C., have dredging or filling activities authorized by Part IV of Chapter 373, F.S. permanently eliminated wetland hydrology at the described point such that the wetland definition cannot be met? Yes (point is upland) No (If yes, skip to #31)
Chapter 373, F.S. Part II activities (e.g., water use permits) or other temporary hydrologic alterations (e.g., surface water pumps, drought) do not apply to this or any other Ch. 62-340, F.A.C. determinations.
d) If no to 30c, what §62-340.300, F.A.C. evidence is present now and/or will be present in the future with cessation of temporary hydrologic drainage?
e) If no to 30c, Which tests would be passed with cessation of temporary hydrologic alterations?
31. Unauthorized or Illegally Altered Sites Test Criteria §62-340.300(3)(c), F.A.C.
If the altering activity is a violation of regulatory requirements, then application of §62-340.300(3)(c), F.A.C. and all provisions of Chapter 62-340, F.A.C. are utilized to identify or delineate the wetland in a forensic manner. This identification or delineation reflects the condition immediately prior to the unauthorized alteration.
a) Have any unauthorized alterations affected the normal wetland condition at the described point?
b) If yes to 31a, which criteria tests are affected by the unauthorized alterations?
☐ A Test ☐ B Test ☐ C Test ☐ D Test
c) With reasonable scientific judgment is the described point a wetland, or would it have been a wetland immediately prior to the unauthorized alteration? OYes ONo If no, why? (If no, skip to #32)
d) If yes to 31c, what §62-340.300, F.A.C. evidence is present now and/or was present immediately prior to the unauthorized alteration?
e) If yes to 31c, which tests would be passed immediately prior to the unauthorized alteration? ☐ Wetland Definition ☐ A Test ☐ B Test ☐ C Test ☐ D Test Why?
32. Wetland and Other Surface Water Summary §62-340.600(2)(a-e), F.A.C.:
Given normal expression, cessation of authorized alterations, or immediately prior to any unauthorized alterations:
a) With reasonable scientific judgment is the described point a wetland as defined in §62-340.200(19), F.A.C. and located by Ch. 62-340, F.A.C.? • Yes ONo If yes, which criteria identified or delineated the wetland?
⊠ Wetland Definition
If summary answers differ from answers in 25f, 25g, 26d, or 27d, why?
b) Is the described point located at or within the Mean High Water Line of a tidal water body? Yes No MHWL Unknown
c) Is the described point located at or within the Ordinary High Water Line of a non-tidal natural water body or natural watercourse?
d) Is the described point located at or within the top of the bank of an artificial lake, borrow pit, canal, ditch, or other type of artificial water body or watercourse with side slopes of 1 foot vertical to 4 feet horizontal or steeper , excluding spoil banks when the canals and ditches have resulted from excavation into the ground? Yes No
e) Is the described point located at or within the Seasonal High Water Line of an artificial lake, borrow pit, canal, ditch, or other type of artificial water body or watercourse with side slopes <u>flatter</u> than 1 foot vertical to 4 feet horizontal or an artificial water body created by diking or impoundment above the ground? Yes No
33. Connection or Isolation of Wetland per Applicant's Handbook Vol.1 Section 2.0
If the described point is a wetland, does it have a connection via wetlands or other surface waters, or is it wholly surrounded by uplands and therefore isolated? Connected Isolated N/A (Point is not wetland)

sar car	4. Photographs and/or videos: Soil profile with Data Form, Soil profile close-up, Cross section(s) at 6" depth for andy textures and/or critical depths for fine textures, Hydric soil indicators, Water table or inundation depth, Four ardinal directions of plant strata present, Hydrologic indicators (with scale as necessary), Critical plant ID (optional)								
#	Memory Card # / Metadata	Description, compass direction (if applicable)	Taken By						
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
0.									
11.									

Notes: See Site Documentation - WETLAND

Point ID/Location:

12. 13. 14.

Helpful Definitions for Applying Ch 62-340, F.A.C.

1RSJ stands for Reasonable Scientific Judgment where used throughout this Data Form (See <u>The Florida Wetlands Delineation Manual</u> pg. 2 & 12)

²HSTS stands for Hydric Soils Technical Standard (See NRCS Hydric Soils Technical Note 11)

Definition from §62.340.200(19) Florida Administrative Code

"Wetlands," as defined in subsection 373.019(17), F.S., means those areas that are inundated or saturated by surface water or ground water at a frequency and a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydric or alluvial, or possess characteristics that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are typically adapted to areas having soil conditions described above. These species, due to morphological, physiological, or reproductive adaptations, have the ability to grow, reproduce or persist in aquatic environments or anaerobic soil conditions. Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric seepage slopes, tidal marshes, mangrove swamps and other similar areas. Florida wetlands generally do not include longleaf or slash pine flatwoods with an understory dominated by saw palmetto.

Definition from §373.019(19) Florida Statutes

"Surface water" means water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be classified as surface water when it exits from the spring onto the earth's surface.

Definition from §373.019(14) Florida Statutes

"Other watercourse" means any canal, ditch, or other artificial watercourse in which water usually flows in a defined bed or channel. It is not essential that the flowing be uniform or uninterrupted.

Definition from §62.340.200(15) Florida Administrative Code

"Seasonal High Water" means the elevation to which the ground and surface water can be expected to rise due to a normal wet season.

From The Florida Wetlands Delineation Manual pg. 37

Ordinary high water is that point on the slope or bank where the surface water from the water body ceases to exert a dominant influence on the character of the surrounding vegetation and soils. The OHWL frequently encompasses areas dominated by non-listed vegetation and non-hydric soils. When the OHWL is not at a wetland edge, the general view of the area may present an "upland" appearance.

Definition from §403.803(14) Florida Statutes

"Swale" means a manmade trench which:

- (a) Has a top width-to-depth ratio of the cross-section equal to or greater than 6:1, or side slopes equal to or greater than 3 feet horizontal to 1 foot vertical;
- (b) Contains contiguous areas of standing or flowing water only following a rainfall event;
- (c) Is planted with or has stablized vegetation suitable for soil stabilization, stormwater treatment, and nutrient uptake; and
- (d) Is designed to take into acount the soil erodibility, soil percolation, slope, slope length, and drainage area so as to prevent erosion and reduce pollutant concentration of any discharge.



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Question Detail 1

Q1: The Florida Department of Environmental Protection will require E.R.P's (Environmental Resource Permits) for most projects proposing to alter the topography of the land via digging, filling, building, or machine clearing. Non-regulated or exempt activities include, but are not limited to; residential construction when confined to upland habitat, alteration of manmade isolated wetlands, and agricultural impacts. Unless noted otherwise, TEC determined the project's need for an ERP permit based upon a conceptual site configuration designed to minimize environmental loss as much as practicable. ***Prior to planning or land alteration efforts, TEC recommends the applicant obtain agency verification of the findings and conclusions including, but not limited to; the location and extent of uplands and wetlands on site as presented by TEC**** Neglecting to secure agency verification may subject the applicant to otherwise avoidable compliance/enforcement/ actions in cases where an agency concludes wetlands or surface waters were in fact adversely impacted after the fact. In addition, city or county regulations typically require prior notification or permits for vegetation removal actions in both upland and wetland areas.***

Please contact TEC with questions or for further assistance with the verification or permit process.

Q2: Isolated wetlands do not flow into other wetlands or surface waters that are themselves connected to waters of the State. A wetland may connect via a man-made ditch or stream and eventually flow into the Gulf of Mexico or the Atlantic Ocean. Impacts to "Isolated" wetlands are generally considered minor, and wetland mitigation is often not required.

Q3: State and Federal agencies typically require wetland mitigation when a project proposes to eliminate or diminish the function of wetlands on site, and when impacts exceed 0.10 acres. Special exceptions allowing the applicant to avoid mitigation vary between the State and Federal agencies, and include, but are not limited to; property creation date, prior permit history, verification of "isolated" or "contiguous", minimization of impact, and several other site-specific criteria. For many projects, wetland mitigation is a specific condition of the permit, and must be completed prior to construction activities. The final determination shall be made by the applicable regulatory agencies.

Q4: Mitigation-related costs increase for impacts to higher quality wetlands, and for impacts which exceed generally accepted standard square footage thresholds for the use proposed. Therefore, construction of a typical-size residence positioned within low-quality wetland habitat will be less costly to mitigate than for the same residence constructed within high-quality wetlands. Likewise, a larger home will require more mitigation than a smaller home built within the same functioning wetland. The amount of mitigation required is directly related to the 'Quality' of wetlands being impacted. The quality of wetland(s) on this site is described on page one (1).

Q5: South Florida experiences a dry and wet season, typical to tropical and sub-tropical environments. Florida's rainy season occurs May/June and runs through September/October, with surface water levels dropping several feet after October. Excessive water levels within the building footprint will likely increase the need for fill material to elevate the building/septic ground and could increase overall project costs. Additionally, standing water may contribute to reduced recreational, building, gardening, or livestock use. A local builder knowledgeable of building and engineering-related elevation requirements may assist you in understanding what additional costs may be incurred as a result of low-lying or submerged lands. These levels will occur during the latter part of the summer rainy season. Standing water is anticipated to remain at or near ground level for approximately weeks. South Florida's rainy season occurs from June/July-October.

Q6: Limestone located near the surface of the lot may require special design/construction considerations including the placement of an on-site sewage treatment system in areas of elevated limestone. A general building contractor or septic Engineer may assist you in understanding these considerations.

Q7: Contact TEC or your local property tax collector for more information regarding the valuation of wet land for property tax purposes.



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Question Detail 2

Q8: Exotic-nuisance vegetation is difficult to control in the landscape and when found in dense quantities on vacant land, can spread rapidly, and tends to decrease the value of that land to wildlife and other native plant species. For these reasons, local county regulations often require a property owner to remove non-native nuisance species prior to issuing a Certificate of Occupancy, adding additional development costs to a project. Removal of any vegetation (including exotic species) by mechanical means may require a vegetation removal permit from your local County/City building department. **Q9:** Federal and State agencies provide special protections for endangered or threatened species. Additional environmental surveys and procurement of permits or verification of no negative affect may be required when altering habitat, even if listed species were not identified during completion of the informal wetland determination. It is up to the applicant via the services of an environmental consultant to ensure development actions do not adversely affect listed species. Federal agencies will conduct a review for listed species prior to the issuance of permits including permits for jurisdictional wetland impacts. Often the applicant will be responsible for providing to these agencies a species survey report during the review process.

ADDITIONAL QUESTIONS? NEED ASSISTANCE? CONTACT TEC FOR FURTHER INFORMATION

Thank you for allowing TEC to assist you with your environmental project needs!

"Finding balance between human use and the environment" since 1983

Jurisdictional Wetland Evaluations*Environmental Resource Permitting*Listed Species

Surveys*Water Use Permitting*Restorations*Consultations

Collier*Lee*Hendry*Charlotte*DeSoto

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