# 2. Water Quality Impact Evaluation

The Water Quality Impact Evaluation Checklist has been prepared for the Lake Apopka, Lake Harris, Wekiva River, and Lake Monroe Basins and attached in Sections 2.1 – 2.4. These basins are the main receiving surface water bodies within the project area. The existing state and local water quality regulations that will be required for this Wekiva Parkway/SR 46 Realignment PD&E Study are enclosed in the Appendices as follows:

- Appendix A: U.S. EPA Sole Source Aquifer Documentation.
- Appendix B: SJRMWD Permitting Regulations for Water Quality Chapters 40C-4, 40C-41, 40C-42 F.A.C.; and Applicants Handbook Section 11 Special Basin Criteria
- Appendix C: FDEP NPDES General Permit for Construction
- Appendix D: Drainage Evaluation Criteria and Methodology

These state and local regulations for water quality have been identified on page 2 of the Water Quality Impact Evaluation Checklist for the Lake Apopka, Lake Harris, Wekiva River, and Lake Monroe Basin Evaluations.

The stormwater regulations for water quantity have not been included in the referenced Appendices because they are considered a standard requirement for all projects; however they are discussed in the attached Drainage Evaluation Criteria Methodology.

2.1	Lake Apopka/Ocklawaha River Basin Evaluation Checklist

Project Name: Wekiva Parkway/SR 46 Re	ealignment PD&E Study	
County: Orange County		
FIN: 238275 1 22 01 and 240200 1 22 01		
Federal Aid Project No.: TBD		
Short Project Description: Construction of consisting of t		of the Western Beltway SR 429 a Bypass, Wekiva Parkway, and SR 46 Counties.
Approximately one-half mile of the Wekiva Painterchange is located within the Lake Apopka	rkway, north of the planned Us unit of the Ocklawaha River I	S 441/John Land Apopka Expressway 3asin.
PART 1: DETERMINATION OF WQIE SCOP	E	
Does project increase impermeable surface an	rea? ⊠ Yes □ No	
Does project alter the drainage system?	⊠ Yes □ I	No
If the answer to both questions is no, complete	e the WQIE by checking Box A	A in Part 4.
Do environmental regulatory requirements app	oly? ⊠ Yes □ No	
If no, proceed to Part 4 and check Box B.		
PART 2: PROJECT CHARACTERISTICS		
20-year design ADT: 66,850- 68,250	_ Expected speed limit: _	70 MPH
Drainage area: 34.5 acres	44.0 % Impervious	56.0 % Pervious
Land Use: 55 % Residential	15 % Commercial	0 % Industrial
25	0 % Wetlands	5 % Other Natural
Potential large sources of pollution (identify):	Roadway and bridge ru	noff
Groundwater receptor (name of aquifer or N/A	A): Floridan Aquifer	
Designated well head protection area:	☐ Yes ☒ No N	lame:
Sole source aquifer: ☐ Yes ☒No	Name:	
Groundwater recharge mechanism: Infil	tration	and the second s
(Notify District Drainage Engineer if karst cond Surface water receptor (name or N/A):  Classification:	Lake Apopka/Ocklawaha Riv	ver □ V
Classification.		<b>.</b> •
Special designation (check all that apply):		
□ ONRW □ OFW	□ Aquatic Preserve	□ Wild & Scenic River
☐ Special Water ☐ SWIM Area	☐ Local Comp Plan	
☑ Other (specify): Lake Apopka is lister	d as an impaired water body b	y FDEP
Conceptual storm water conveyances & syste	em (check all that apply):	
Swales □ Curb and Gutter	☐ Scuppers ☑ Pip	pe ☐ French Drains
⊠ Retention/Detention Ponds	□ Other	

### PART 3: ENVIRONMENTAL REGULATORY REQUIREMENTS

Regulatory Agency (check all that apply)	Reference citation for regulatory criteria (attach copy of pertinent pages)	Most Stringent criteria (check all that apply)		
SEPA 🗆				
DEP 🗵	NPDES General Permit			
DEP/SJRWMD** ⊠	Chapters 40C-4, 40C-41, 40C-42, F.A.C., Phosphorus Criteria for Lake Apopka	$\boxtimes$		
THER				
Specify)				
Proceed to Part 4 and check Box C.	RMWD apply with permitting through th	ne Florida Department of		
PART 4: WQIE DOCUMENTATION				
∆. □ Water quality is no	Water quality is not an issue.			
checking the "none	No regulatory requirements apply to water quality issues. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
through complianc FDEP** (Document by che	Regulatory requirements apply to water quality issues. Water quality issues will be mitigated through compliance with the quantity design requirements placed by <a href="FDEP**">FDEP**</a> , an authorized regulatory agency. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
*NOTE: Drainage criteria for the Sc Environmental Protection.	IRMWD apply with permitting through th	ne Florida Department of		
Evaluator Name (print): Amy L	Windom, P.E.			
Office: CH2M HILL, Inc., 225 Ea	st Robinson Street, Suite 505, Orlando,	FL 32801- 4322		
Signature: AMAL	Window Date:	1e13/2010		
Certificate Number: Florida PE	/			

2.2	Lake Harris/Ocklawaha River Basin Evaluation Checklist

Project Name:Wekiva Parkway/SR 46 Realignment PD&E Study
County: Lake County
FIN: 238275 1 22 01 and 240200 1 22 01
Federal Aid Project No.: TBD
Short Project Description:  Construction of a limited access extension of the Western Beltway SR 429 consisting of three components: the Apopka Bypass, Wekiva Parkway, and SR 46 Connector in Orange, Seminole and Lake Counties.
The Lake Harris unit of the Ocklawaha River Basin extends approximately one mile to the east of the intersection of US 441 and SR 46 in Lake County.
PART 1: DETERMINATION OF WQIE SCOPE
Does project increase impermeable surface area?   ☑ Yes □ No
Does project alter the drainage system?   ☑ Yes □ No
If the answer to both questions is no, complete the WQIE by checking Box A in Part 4.
Do environmental regulatory requirements apply?   ☑ Yes □ No
If no, proceed to Part 4 and check Box B.
PART 2: PROJECT CHARACTERISTICS
20-year design ADT: 54,020- 54,710 Expected speed limit: 45 MPH
Drainage area: 57.8 acres 57.8 % Impervious 42.2 % Pervious
Land Use:     30     % Residential     10     % Commercial     10     % Industrial       40     % Agricultural     10     % Wetlands     % Other Natural       Potential large sources of pollution (identify):     Roadway and bridge runoff
9
9-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7
Sole source aquifer: ☐Yes ☒ No Name:
Groundwater recharge mechanism: Infiltration
(Notify District Drainage Engineer if karst conditions expected)
Surface water receptor (name or N/A): Lake Harris/Ocklawaha River
Classification: □ I □ II □ II □ IV □ V
Special designation (check all that apply):
□ ONRW □ OFW □ Aquatic Preserve □ Wild & Scenic River
□ Special Water □ SWIM Area □ Local Comp Plan ☑ MS4 Area
☑ Other (specify): Lake Harris is listed as an impaired water body by FDEP
Conceptual storm water conveyances & system (check all that apply):
Swales
⊠ Retention/Detention Ponds

### PART 3: ENVIRONMENTAL REGULATORY REQUIREMENTS

Regulatory Age all tha	ency (check at apply)	Reference citation for regulatory criteria (attach copy of pertinent pages)	Most Stringent criteria (check all that apply)	
USEPA				
FDEP	X	NPDES General Permit		
FDEP/SJRWMD	** 🗵	Chapters 40C-4, 40C-41, 40C-42, F.A.C.,	X	
OTHER (Specify)			0	
Environmental P		RMWD apply with permitting through th	ne Florida Department of	
PART 4: WQIE	DOCUMENTATION			
A. 🗆	Water quality is not	an issue.		
В. 🗆	No regulatory requirements apply to water quality issues. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
C. 🗵	Regulatory requirements apply to water quality issues. Water quality issues will be mitigated through compliance with the quantity design requirements placed by <u>FDEP**</u> , an authorized regulatory agency. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
**NOTE: Draina Environmental F		RMWD apply with permitting through th	ne Florida Department of	
Evaluator Name	(print): Amy L	Windom, P.E.		
Office: CH2N	/ HILL, Inc., 225 Eas	t Robinson Street, Suite 505, Orlando,	FL 32801- 4322	
Signature: _	Gmy J.	Window Date:	6/3/2010	

2.3	Wekiva River/St. John's River Basin Evaluation Checklist

Project Name: Wekiy	a Parkway/SR 46 Re	ealignment PD	&E Study		
County: Orange, Lake	, and Seminole Cour	nties			
FIN: 238275 1 22 01 a	and 240200 1 22 01		01500		
Federal Aid Project No.:	TBD				
Short Project Description	consisting of t	hree compone	ess extension of t nts: the Apopka B nole and Lake Cou	ypass, Wekiva Pa	vay SR 429 arkway, and SR 46
This segment includes th SR 46.	e majority of the stud	ly area north o	f US 441 and 2.7 r	miles east of the	Wekiva River along
PART 1: DETERMINATION	ON OF WQIE SCOP	E			
Does project increase im	permeable surface a	rea? ⊠ Ye	s □ No		
Does project alter the dra	inage system?		Yes □ No		
If the answer to both que	stions is no, complete	e the WQIE by	checking Box A in	Part 4.	
Do environmental regular					
If no, proceed to Part 4 a					
PART 2: PROJECT CHA	ARACTERISTICS				
20-year design ADT:	64,620	_ Expected sp	eed limit: 4	5- 70 MPH	
Drainage area:10	90.7 acres	43.5	% Impervious	56.5	% Pervious
Land Use: 15	_ % Residential	5	% Commercial		% Industrial
20	_ % Agricultural	10	% Wetlands	50	% Other Natural
Potential large sources of	f pollution (identify):	Roadwa	ay and bridge runc	ff	
Groundwater receptor (n	ame of aquifer or N/A	A): <u>Flo</u>	ridan Aquifer		
Designated well head pro	otection area:	☐ Yes	⊠ No Nan	ne:	
Sole source aquifer:	☐ Yes ☒ No	Name:			
Groundwater recharge m	nechanism: Infi	Itration		2000	
(Notify District Drainage	Engineer if karst con	ditions expecte	ed)		
Surface water receptor (		Wekiva River			
Classification:		⊠III	□IV	□V	
Special designation (che	ck all that apply):				
□ ONRW	⊠ OFW	□ Aquati	c Preserve	☐ Wild & Sce	enic River
☐ Special Water	☐ SWIM Area	☐ Local (	Comp Plan		i;
☑ Other (specify):	This project is within Wekiva River is not				River Basin.
Conceptual storm water	conveyances & syste	em (check all th	nat apply):		
⊠ Swales □ Co	urb and Gutter	☐ Scuppers	⊠ Pipe		French Drains
⊠ Retention/Detention I	Ponds	☐ Other			

### PART 3: ENVIRONMENTAL REGULATORY REQUIREMENTS

Florida PE 44155

Certificate Number:

Regulatory A	gency (check hat apply)	Reference citation for regulatory criteria (attach copy of pertinent pages)	Most Stringent criteria (check all that apply)	
USEPA				
FDEP	×	NPDES General Permit		
FDEP/SJRWM	D** 🗵	Chapters 40C-4, 40C-41, 40C-42, F.A.C., & Recharge Criteria for Wekiva River Study Area	☒	
OTHER (Specify)		Wekiva Basin Area Task Force Final Report 1-15-03		
Environmental Proceed to Pa		RMWD apply with permitting through th		
A. 🗆	Water quality is not	an issue.		
В. 🗆	No regulatory requirements apply to water quality issues. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
C. 🗵	Regulatory requirements apply to water quality issues. Water quality issues will be mitigated through compliance with the quantity design requirements placed by <u>FDEP**</u> , an authorized regulatory agency. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
**NOTE: Drain Environmental		RMWD apply with permitting through tl	ne Florida Department of	
Evaluator Nan	ne (print): Amy L	.Windom, P.E.		
	,,	st Robinson Street, Suite 505, Orlando	FL 32801-4322	
Signature:	mu I	WUADM Date:	6/3/201D	

2.4	Lake Monroe/St. John's River Basin Evaluation Checklist

Project Name: Wekiva Parkway/SR 46	Realignment PD&E Stud	у	
County: Seminole County			
FIN: 238275 1 22 01 and 240200 1 22 0	1		20182 - 11 3
Federal Aid Project No.: TBD			
consisting of	n of a limited access extend of three components: the n Orange, Seminole and	Apopka Bypass, Weki	
The easternmost portion of the study area ju	ust west of I-4 and SR 46		
PART 1: DETERMINATION OF WQIE SCO			
Does project increase impermeable surface	area? ⊠ Yes □ No	)	
Does project alter the drainage system?	100	es □ No	
If the answer to both questions is no, compl	ete the WQIE by checkin	g Box A in Part 4.	
Do environmental regulatory requirements a	apply? ⊠ Yes □ N	10	
If no, proceed to Part 4 and check Box B.			
THE REPORT OF THE PARTIE OF TH			
PART 2: PROJECT CHARACTERISTICS	Evented around limit	. 45 MDU	
20-year design ADT: 91,120	Expected speed limit		0/ D-=-i
Drainage area: 140.3* acres	44.6 % Imper	A STATE OF THE STA	% Pervious
* NOTE: In addition there are 89.7 ac of the		150	
Land Use: 55 % Residential	20 % Comr		% Industrial
15 % Agricultural	10 % Wetla	507 (FOXUAL)	% Other Natural
Potential large sources of pollution (identify			
Groundwater receptor (name of aquifer or N	N/A): Floridan Aq	uifer	
Designated well head protection area:	☐ Yes ⊠ No	Name:	
Sole source aquifer: ☐Yes ☒	No Name:		
Groundwater recharge mechanism:li	nfiltration		
(Notify District Drainage Engineer if karst co	onditions expected)		
Surface water receptor (name or N/A):	Lake Monroe/St. Johr	ns River	
Classification:	⊠III □	IV 🗆 V	
Special designation (check all that apply):			
□ ONRW □ OFW	☐ Aquatic Preser		& Scenic River
☐ Special Water ☐ SWIM Area	☐ Local Comp Pl		Area
☑ Other (specify): Lake Monroe is list	sted as an impaired water	body by FDEP	
Conceptual storm water conveyances & sys	stem (check all that apply	v):	
Swales	☐ Scuppers	✓ Pipe	☐ French Drains
✓ Swales	□ Ocuppers □ Other		

#### PART 3: ENVIRONMENTAL REGULATORY REQUIREMENTS

Regulatory Ag all th	ency (check at apply)	Reference citation for regulatory criteria (attach copy of pertinent pages)	Most Stringent criteria (check all that apply)	
USEPA				
FDEP	$\boxtimes$	NPDES General Permit		
FDEP/SJRWM	)** ⊠	Chapters 40C-4, 40C-41, 40C-42, F.A.C.	X	
OTHER (Specify)		Wekiva Basin Area Task Force Final Report 1-15-03		
Protection.	ge criteria for the SJ 4 and check Box C.	RMWD apply with permitting through the	ne Florida Department of Environmen	
PART 4: WQIE	DOCUMENTATION			
A. 🗆	Water quality is not an issue.			
В. 🗆	No regulatory requirements apply to water quality issues. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
C. 🗵	Regulatory requirements apply to water quality issues. Water quality issues will be mitigated through compliance with the quantity design requirements placed by <u>FDEP**</u> , an authorized regulatory agency. (Document by checking the "none" box for water quality in Section 6.C.3 of the Environmental Determination Form or Section 5.C.3 of the SEIR.)			
**NOTE: Draina Protection.	age criteria for the S	IRMWD apply with permitting through t	ne Florida Department of Environmen	
Evaluator Name	e (print): Amy L	Windom, P.E.		
Office: CH2I	M HILL, Inc., 225 Ea	st Robinson Street, Suite 505, Orlando	FL 32801- 4322	
Signature:	, Smy L	Windom ) Date:	1013/7017	