

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**WATER QUALITY IMPACT EVALUATION CHECKLIST**

650-050-37  
ENVIRONMENTAL  
MANAGEMENT  
07/20

<b>PART 1: PROJECT INFORMATION</b>	
Project Name:	SR 31 PD&E Study
County:	Lee & Charlotte
FM Number:	428917-1-22-01 & 428917-2-21-01
Federal Aid Project No:	N/A
Brief Project Description:	The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) Study for the proposed improvements to State Road (SR) 31 from south of Bayshore Road (SR 78) in Lee County to Cook Brown Road in Charlotte County. The total project length is approximately 5.3 miles. The proposed action includes providing six lanes for SR 31 from SR 78 to CR 78 and four lanes from CR 78 to Cook Brown Road with an ultimate six lane condition.

**PART 2: DETERMINATION OF WQIE SCOPE**

Does project discharge to surface or ground water?  Yes  No

Does project alter the drainage system?  Yes  No

Is the project located within a permitted MS4?  Yes  No  
Name: \_\_\_\_\_

If the answers to the questions above are no, complete the applicable sections of Part 3 and 4, and then check Box A in Part 5.

**PART 3: PROJECT BASIN AND RECEIVING WATER CHARACTERISTICS**

**Surface Water**

Receiving water names: Caloosahatchee River, Owl Creek and various wetland systems that ultimately discharge to the Caloosahatchee River

Water Management District: South Florida Water Management District (SFWMD)

Environmental Look Around meeting date: 6/24/2020 and 9/28/2011  
*Attach meeting minutes/notes to the checklist.*

Water Control District Name(s) (list all that apply): N/A

**Groundwater**

Sole Source Aquifer (SSA)?  Yes  No  
Name \_\_\_\_\_

If yes, complete Part 5, D and complete SSA Checklist shown in Part 2, Chapter 11 of the PD&E Manual

Other Aquifer?  Yes  No  
Name Floridan

Springs vents?  Yes  No  
Name \_\_\_\_\_

Well head protection area?  Yes  No  
Name \_\_\_\_\_

Groundwater recharge?  Yes  No  
Name Rainfall, Infiltration

Notify District Drainage Engineer if karst conditions are expected or if a higher level of treatment may be needed due to a project being located within a WBID verified as Impaired in accordance with Chapter 62-303, F.A.C.

Date of notification: N/A

#### **PART 4: WATER QUALITY CRITERIA**

List all WBIDs and all parameters for which a WBID has been verified impaired, or has a TMDL in [Table 1](#). This information should be updated during each re-evaluation as required.

Note: If BMAP or RAP has been identified in [Table 1](#), [Table 2](#) must also be completed. Attach notes or minutes from all coordination meetings identified in [Table 2](#).

EST recommendations confirmed with agencies?  Yes  No

BMAP Stakeholders contacted?  Yes  No

TMDL program contacted?  Yes  No

RAP Stakeholders contacted?  Yes  No

Regional water quality projects identified in the ELA?  Yes  No

If yes, describe:

FDOT District One anticipates coordination with the County and SFWMD to potentially have a joint use of the Lee County Civic Center pond, located at the southwest end of the study, to provide treatment for a portion of SR 31 and provide an outfall for the closed basin, and provide flushing of the County's pond which has become stagnant.

Potential direct effects associated with project construction  Yes  No

and/or operation identified?  
If yes, describe:

Discuss any other relevant information related to water quality including Regulatory Agency Water Quality Requirements.

N/A


#### PART 5: WQIE DOCUMENTATION

- A. No involvement with water quality
- B. No water quality regulatory requirements apply.
- C. Water quality regulatory requirements apply to this project (provide Evaluator's information below). Water quality and stormwater issues will be mitigated through compliance with the design requirements of authorized regulatory agencies.
- D. EPA Ground/Drinking Water Branch review required.  Yes  No  
Concurrence received?  Yes  No  
If Yes, Date of EPA Concurrence: [Click here to enter a date..](#)  
*Attach the concurrence letter*

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

Evaluator Name (print): Renato Chuw

Title: Senior Drainage Engineer

Signature: 

Date: 12/15/2020

**Table 1: Water Quality Criteria**

Receiving Waterbody Name (list all that apply)	FDEP Group Number / Name	WBID(s) Numbers	Classification (I,II,III,IIIL,IV,V)	Special Designations*	NNC limits**	Verified Impaired (Y/N)	TMDL (Y/N)	Pollutants of concern	BMAP, RA Plan or SSAC
Caloosahatchee Estuary (Tidal Segment)	Group 3-Caloosahatchee	3240C	III		Estuary	No	Yes	Nutrients	
Palm Creek	Group 3-Caloosahatchee	3240C1	III		Streams	No	Yes	Nutrients	
Owl Creek	Group 3-Caloosahatchee	3240N	III		Streams	No	Yes	Nutrients	

\* ONRW, OFW, Aquatic Preserve, Wild and Scenic River, Special Water, SWIM Area, Local Comp Plan, MS4 Area, Other

**\*\* Lakes, Spring vents, Streams, Estuaries**

**Note: If BMAP or RAP has been identified in [Table 1](#), [Table 2](#) must also be completed.**

**Table 2: REGULATORY Agencies/Stakeholders Contacted**

Receiving Water Name (list all that apply)	Contact and Title	Date Contacted	Follow-up Required (Y/N)	Comments
Caloosahatchee River	SFWMD (Laura Layman, Angelica Hoffert)	9/28/2011, 6/24/2020	No	Pre-Application Meeting (1); Pre-Application Meeting (2);
	FDOT D1 (Patrick Bateman, Brent Setchell, Sergio Figueroa)	9/28/2011, 6/03/2020, 6/24/2020	No	Pre-Application Meeting (1); Drainage Pond Site Discussions; Pre-Application Meeting (2)

## **SR 31 PD&E Study – SFWMD Meeting Minutes**

Mtg. Date: September 28, 2011

Time: 10:00 am

Location: SFWMD – Fort Myers Office

Project: SR 31 PD&E Study  
From SR 80 to North of CR 78

Attendees: Dan Waters – SFWMD  
Laura Layman – SFWMD  
Ken Kellum – SFWMD  
Brent Setchell – FDOT  
Carlton Spirio – FDOT  
JJ McClish – FDOT  
Jim Wilt – FDOT (GEC)  
Renato Chuw – Inwood Consulting Engineers  
Lindy Wolfe – Inwood Consulting Engineers

Renato gave a brief project overview, and then the group discussed the following drainage criteria:

### Impaired Waters/Nutrient Loading Analysis:

Renato and Lindy described how WBID 3240C associated with the Caloosahatchee River was delisted for impairment of Dissolved Oxygen (Nutrients) and Nutrients (Chlorophyll-a) in 2010. Dan confirmed that if the project is not impaired SFWMD would not require pollutant loading analysis. It was decided that pollutant loading analysis will not be provided with the PD&E Study, however, a note will be added to the PSR that the impairment shall be checked again during the design phase, and if impaired, pollutant loading analysis will be required.

It was discussed that typically, SFWMD would require an additional 50% water quality treatment for projects that discharge to impaired waterbodies. Since it was determined that WBID 3240C has been delisted for impairment on nutrients, the 50% additional water quality would not be required, although SFWMD indicated that it may be useful to determine the locations of the sampling sites along the Caloosahatchee River for nutrient concentrations.

Laura asked where the County monitoring stations are and how often samples are collected. Carl said that FDEP also has stations, and that Tony Pellis at Lee County may be able to provide more information on the monitoring.

### Additional 50% Treatment:

Renato stated that the nearest OFW is more than 2 miles away from the project, so this project does not directly discharge to an OFW. The OFWs are on the Caloosahatchee River National Refuge



islands southwest of the project. SFWMD agreed that additional 50% treatment for OFWs would not be required.

#### Floodplain Compensation:

Renato asked SFWMD if the floodplain is associated with the tidal river, would compensation be required. Carl clarified that the project is in the floodplain, not the floodway. Dan said that we need to look at where the tidal floodplain limit is vs. the freshwater floodplain. For example, if ponds 2 and 3 (as shown in the roll plot used in the meeting) were in the tidal floodplain and ponds 1 and 5 were in the freshwater floodplain, ponds 2 and 3 would not require compensation, however ponds 1 and 5 would. The compensation for ponds 1 and 5 would not need to be cup for cup if it can be shown that the pre vs. post effects do not adversely impact the floodplain (i.e., raise the floodplain elevation).

#### Offsite Flooding:

Carl noted that there is offsite flooding in the Bayshore community north of the Civic Center, which is in a closed basin. He said that historic aerials show it was not always a closed basin, and there should be a cross drain for this area, but it was never constructed. He also mentioned that the cross drains adjacent to the community will actually flow west for some smaller storm events, and flow east in the larger events. Wanda Wooten is the contact person at Lee County Maintenance.

#### Joint-Use Pond (Lee County Civic Center):

Carl said that FDOT has had discussions with Lee County about using their ponds at the Civic Center for treatment of a portion of the roadway project because some storage may be available. Inwood will check the SFWMD permit.

#### Owl Creek:

It was noted that Owl Creek crosses the project at the existing cross drain CD-6.

#### Adjacent Permits:

Laura noted that there was a permit application for the Caloosa Palms area on the southeast side of the bridge, but it was withdrawn. Carl asked SFWMD about the status of the commercial site on the northeast corner of SR 80 and SR 31. Laura said that the permit had been approved, but they have not had a pre-construction meeting yet. Carl said that the development has an FDOT drainage connection permit to discharge to SR 31 ROW. He also asked SFWMD if there was any flooding in the subdivision east of that parcel, and SFWMD said there were no reports of flooding.

#### Attenuation:

Renato asked SFWMD if attenuation would be required since the river is tidal. Dan said that water quantity attenuation may be required for some of the pond sites. For the ponds that directly discharge to the tidal river (e.g., Pond 1), attenuation would not be required. The ponds that discharge to a roadside swale (e.g., Pond 5) would require attenuation.

#### Pond Sites:

Laura asked if the pond sites had field reviews yet. Renato said they have not been reviewed, and they are preliminary and will be further reviewed in the PSR.



Bridge Improvements:

Ken asked about the improvements to the existing bridge. Renato said that it will be replaced and possibly raised and lengthened. Laura asked if FDOT had an easement over the bridge. Carl said that the bridge was built in the 50's – 60's based on the historic aerials, and he was not sure if there was an easement. Laura said she would check for any easements. She also said there is a pending Mitigation bank that may be in place early next year, but the project may be able to utilize the Little Pine Island bank.

Action Items:

1. Inwood to contact Lee County Maintenance staff to see if there are any flooding problems.
2. Inwood to check the Lee County Civic Center SFWMD permit for available storage in existing ponds.
3. Inwood to check on sovereign submerged lands easements over the bridge.

The meeting adjourned at approximately 10:45 am.

cc: All Attendees, Gwen Pipkin (FDOT), David Dangel (Inwood Consulting Engineers), Kristin Caruso (Scheda Ecological) (via e-mail)

*Note: The above reflects the writer's understanding of the contents of the meeting. If any misinterpretations or inaccuracies are included, please contact Lindy Wolfe at (407) 971-8850 as soon as possible for resolution and revisions if necessary.*

DATE: June 24, 2020

TO: **SFWMD**

FROM: Renato Chuw, PE

RE: FPID 428917-1-22-01 SR 31 PD&E from SR 78 (Bayshore Rd) to north of CR 78 (N. River Rd), Lee County

CC: Patrick Bateman (FDOT), Sergio Figueroa (FDOT), Brent Setchell (FDOT), David Dangel (Inwood), Zach Evans (Inwood)

The monthly SFWMD meeting was held on June 24, 2020 via teleconference with FDOT (Patrick Bateman, Brent Setchell, Sergio Figueroa, and Nicole Monies), SFWMD (Laura Layman and Angelica Hoffert) and Inwood (Renato Chuw, Zach Evans and Ben Shepherd) to discuss the SR 31 PD&E Study from SR 78 to CR 78 in Lee County. The purpose of the meeting was to re-introduce the project to SFWMD staff and discuss the permitting criteria for the project. The study was initiated in 2011 and a previous pre application meeting was held with SFWMD in September 2011. Key summary points are as follow:

- An overview of the scope of the study and history of the project was provided by Inwood. A graphical aerial showing the limits of the study, preliminary concepts and basin delineations, was shown during the teleconference call. A six lane new roadway is being evaluated east of the current SR 31 two-lane roadway and the FGT gas easement. The intent is for the existing SR 31 road to remain in place and construct the new six lane facility to the east. Potential pond sites have been located to the east of the proposed alignment.
- The majority of the parcels located east of SR 31 within the limits of the study are owned by Babcock Ranch development. Coordination between FDOT and Babcock Ranch has been ongoing since the start of the study.
- The major water features within the study limits were noted. Caloosahatchee River to the south and Owl Creek to the north.
- Inwood stated there are 3 WBIDs within the study limits, which are not impaired for nutrients, but there is a TMDL established in 2009 for the Caloosahatchee River for nutrients. Inwood will be preparing nutrient loading analysis for this project.
- Inwood stated that Owl Creek is a regulatory floodway and will require a FEMA No Rise Certificate to be done during the design phase.
- Inwood stated that the nearest OFW is more than 2 miles away from the project and from a prior pre application meeting for the adjacent SR 31 study segment from SR 80 to the bridge over the river, it was determined that OFW criteria was not required, therefore, OFW criteria (the additional 50% water quality treatment) is not required for this project. SFWMD concurred on this statement.
- The project was divided into three distinct drainage basins and each basin is proposed to have a stormwater management facility
- Nutrient loading will be done for all 3 basins as a watershed wide comparison. A net improvement will be provided for the project since each of the basins drain to the Caloosahatchee River.
- SFWMD asked if historic flow patterns will be changed as part of this project. Inwood stated that the existing flow patterns would be maintained in the proposed condition. A brief overview was given as to the existing drainage patterns for the project, which ultimately discharges to the Caloosahatchee River.
- Inwood stated that Basin 2 directly discharges to the Tidal Caloosahatchee River and will not need to meet pre vs post discharge criteria, however, basins 3 and 4 will meet pre vs post discharge as a conservative measure since the proposed ponds have indirect discharge points to the tidal river.
  - Pond 3 will have an indirect connection to the river via wetland systems
  - Pond 4 will have a direct connection to Owl Creek which ultimately outfalls to the river

- SFWMD stated the proposed improvements will need to ensure there are no changes to the tailwater condition for Babcock Ranch. Inwood explained that FDOT and Inwood are coordinating with the developer and they are aware of the preliminary pond sites identified for the study. The ponds will address the treatment and attenuation needs for the new SR 31 roadway runoff and modifications may be necessary in the future should the developer intend to use these ponds for development runoff as well.
- Inwood stated that a linear swale option will also be explored for the project. The linear swale option will be located between the existing FGT gas easement and the new SR 31 facility.
- Environmental look around options are being sought out as a requirement for the study. The existing pond for the Lee County Civic Center was brought up in prior discussions as part of the pre application meeting for the south segment of SR 31. It was indicated at the time by SFWMD, that there is very little vertical storage within the existing county pond. Further evaluation will be made regarding the county pond.
- Inwood asked if SFWMD was aware of any stormwater opportunities for regional treatment. SFWMD stated they were not aware of any projects. Inwood indicated that since Babcock Ranch is a major stakeholder for the project, the possibility exists for the stormwater ponds identified in the study, also serving the development (with future modifications), thus meeting the regional stormwater requirements.
- SFWMD stated that there has been flooding complaints at the Civic Center as well as flooding along SR 31. Inwood stated that the existing cross drains along SR 31 will look to be improved to alleviate flooding along the roadway. Most of the known flooding occurs at the Bayshore community, west of SR 31.
- SFWMD nor FDOT were not aware of any culvert improvements that have occurred near the Civic Center.
- Inwood stated that based on meeting minutes from the pre application meeting for the adjacent SR 31 south segment, anything west of the Franklin Locks did not need to meet floodplain compensation due to the tidal condition.
- SFWMD stated that may be applicable to the basin adjacent to the river (Basin 2), however, for basins 3 and 4 they may not be qualified as tidal. SFWMD indicated that they would need to review this once a permit application is submitted. FDOT suggested to evaluate whether basins 3 and 4 have indicators of being tidal and provide back-up. A separate meeting may be necessary to confirm the tidal floodplain condition. A review of the floodplain elevations and transect data was done during the teleconference and it appears the flood elevations remain constant at 6.8 ft between CR 78 and the river.
- SFWMD suggested to look at the improvements proposed by the Babcock Ranch development to see how they address floodplain compensation and if a tidal condition was established on their project. A permit modification was recently submitted to SFWMD by the development.
- As part of the model for the No-Rise certificate for the Owl Creek crossing, no adverse impacts could be shown to the floodplain from the minor encroachments of the roadway improvements.
- Inwood asked if floodplain compensation can be provided within the stormwater pond. SFWMD stated that the berms would be a barrier to prevent the water from leveling out and suggested that typically, a separate pond for floodplain compensation may be necessary.
- SFWMD suggested that an option would be to investigate if the area between the existing FGT gas easement and the new proposed roadway could be utilized as scrape down area for compensation.
- The following was in agreement between all parties:
  - Basin 2 would be exempt from floodplain compensation due to the immediate connection with the river.
  - Basin 3 would need further documentation and investigation if is affected by tidal conditions. Documentation will be provided in the Engineering Documents as part of the study. If deemed that it is not tidally influenced, floodplain compensation will be required.
  - Basin 4 impacts to the floodplain can be addressed through the same model to be developed for the No Rise certificate at Owl Creek crossing.
- Mitigation will be provided for wetland impacts for the project. The Babcock Ranch development has identified and will address the mitigation for the wetland impacts for SR 31.

- SFWMD inquired if there was a requirement distance for the new SR 31 roadway to be set farther east from the existing SR 31 roadway, since it impacted more wetlands. FDOT indicated that through coordination with FGT, a defined set back from the FGT easement was necessary. SFWMD mentioned this would need to be documented. SFWMD asked what the offset for the FGT gas line was. FDOT stated that 40 feet has been the go by.
- Species surveys will be done for this project as well.
- A coast guard permit will be needed for the bridge improvements over the Caloosahatchee River. FDOT indicated that the bridge improvements are being handled by the adjacent study segment from SR 80 to the river.

\*\*\*\*\*END OF MEETING\*\*\*\*\*

Note: The above reflects the writer's understanding of the contents of the meeting. If any misinterpretations or inaccuracies are included, please contact Renato Chuw at (407) 971-8850 as soon as possible for resolution and revisions if necessary.