PART 2, CHAPTER 11

WATER RESOURCES

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WATER RESOURCES

11.1 OVERVIEW

Pursuant to ***23 United States Code (U.S.C.) § 327*** and the implementing Memorandum of Understanding (MOU) executed on December 14, 2016, the Florida Department of Transportation (FDOT) has assumed and Federal Highway Administration (FHWA) has assigned its responsibilities under the ***National Environmental Policy Act (NEPA)*** for highway projects on the State Highway System (SHS) and Local Agency Program (LAP) projects off the SHS (***NEPA*** Assignment). In general, FDOT's assumption includes all highway projects in Florida which source of federal funding comes from FHWA or which constitute a federal action through FHWA. ***NEPA*** Assignment includes responsibility for environmental review, interagency consultation, and other activities pertaining to the review or approval of ***NEPA*** actions. Consistent with law and the MOU, FDOT will be the Lead Federal Agency for highway projects with approval authority resting in the Office of Environmental Management (OEM).

This chapter provides procedures for assessing and documenting potential impacts to water resources from transportation projects to comply with ***NEPA***, the ***Clean Water Act (CWA)***, and other related federal and state environmental laws and regulations. The ***CWA*** is the primary law regulating pollution of the nation's waterways. Originally enacted in 1948 as the ***Federal Water Pollution Control Act***, it was amended in 1972 under the ***CWA*** to add programs for water quality improvements with the goal of restoring and maintaining the chemical, physical, and biological integrity of the country's water ***(33 U.S.C. § 1251 et seq)***. The ***Clean Water Act*** became the Act's common name with the amendments in 1972. The ***CWA*** made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. Additionally, the Environmental Protection Agency (EPA) has set water quality standards for all contaminants in surface waters. In Florida, the Florida Department of Environmental Protection (FDEP) and five regional Water Management Districts (WMDs) implement the ***CWA*** programs under ***Chapters 403*** and ***373, Florida Statutes (F.S.)***.

Section 403.021(2), F.S., declares that it is public policy of the state to conserve the waters of the state and to protect, maintain, and improve their quality. Even though state surface water quality standards applicable to waters of the state do not apply within a stormwater management system, as provided by ***Section 373.4142, F.S.***, as long as the stormwater management system is designed, constructed, operated, and maintained for stormwater treatment in accordance with a valid permit, this statute does require FDOT to provide reasonable assurance that the water quality within its stormwater management system will not adversely impact public health, fish and wildlife, or adjacent waters. Therefore, FDOT projects are evaluated for potential impacts on water quality from stormwater runoff, and are designed to address and mitigate impacts from stormwater

runoff through compliance with stormwater management plans and applicable regulatory requirements. ***Section 373.4596, F.S.***, requires FDOT projects to fully comply with state, WMD, and when delegated by the state, local government stormwater management programs.

Additionally, this chapter provides guidance on documenting water resource information and coordinating with water resource agencies and other stakeholders. The chapter does not cover impacts to wetlands and other surface waters not related to stormwater. See ***Part 2, Chapter 9, Wetlands and Other Surface Waters*** for wetland evaluation procedures.

The term "water resources" used throughout this chapter includes both surface and groundwater, aquatic preserves, Outstanding Florida Waters (OFWs), and Sole Source Aquifers (SSA). The level of water quality impact analysis depends upon the extent of potential impacts of a proposed project on surface and/or groundwater resources. Specifically, the impacts covered in this chapter are related to direct and indirect stormwater discharges from transportation projects into surface water (other than wetlands) and groundwater.

11.1.1 Definitions

Basin Management Action Plan (BMAP) – a comprehensive plan, coordinated by the FDEP, of regulatory and non-regulatory actions to meet the Total Maximum Daily Load (TMDL) for a given waterbody. BMAPs are designed to implement restoration strategies that reduce pollutant concentrations to meet a TMDL.

Designated Uses – the present and future most beneficial use of a body of water as designated by the Environmental Regulation Commission by means of the Waterbody Classification.

Environmental Look Around (ELA) – an approach for proactively looking for opportunities for joint/regional stormwater management projects with agencies and/or stakeholders.

FDEP Group Number – the number and name assigned to waterbodies and water segments by FDEP, based on watersheds/basins that have been developed for the state and that form the basis for Basin Rotation.

Impaired Waters – surface waters that do not meet the standards set for them are determined to be "impaired" and in need of restoration. Using data from assessments, FDEP maintains a verified list of impaired Florida waterbodies. The impairments are separated into the following assessment categories:

1 Attains all designated uses.

2 Attains some designated uses and insufficient or no information or data are present to determine if remaining uses are attained.

3a No data and information are present to determine if any designated use is attained.

3b Some data and information are present but not enough to determine if any designated use is attained.

3c Enough data and information are present to determine that one or more designated uses may not be attained according to the Planning List methodology.

4a Impaired for one or more designated uses but does not require TMDL development because a TMDL has already been completed.

4b Impaired for one or more designated uses but does not require TMDL development because the water will attain water quality standards due to existing or proposed measures.

4c Impaired for one or more criteria or designated uses but does not require TMDL development because impairment is not caused by a pollutant.

4d Waterbody indicates non-attainment of water quality standards, but FDEP does not have enough information to determine a causative pollutant; or current data show a potentially adverse trend in nutrients or nutrient response variables; or there are exceedances of stream nutrient thresholds, but FDEP does not have enough information to fully assess non-attainment of the stream nutrient standard.

4e Waterbody indicates non-attainment of water quality standards and pollution control mechanisms or restoration activities are in progress or planned to address non-attainment of water quality standards, but FDEP does not have enough information to fully evaluate whether proposed pollution mechanisms will result in attainment of water quality standards.

5 Water quality standards are not attained and a TMDL is required.

Municipal Separate Storm Sewer System (MS4) – a publicly-owned conveyance or system of conveyances, such as roads with stormwater systems, municipal streets, or catch basins, that are designed or used for collecting or conveying stormwater that discharges into surface waters of the state.

Nonpoint Source – any pollutant source that cannot be considered a “point source” according to the ***CWA*** and EPA regulations. Nonpoint source pollution generally results from runoff, precipitation, atmospheric deposition, drainage, or seepage.

Numeric Nutrient Criteria (NNC) – statewide numeric nutrient standards for Florida’s waters (including springs, rivers, lakes and estuaries but excluding wetlands, tidal creeks,

managed conveyances and south Florida flowing waters) established under ***Chapter 62-302.531, Florida Administrative Code (F.A.C.)*** and ***Chapter 62-302.532, F.A.C.***

Point Source – any discernable, confined, and discrete conveyance from which pollutants may be discharged, such as a pipe, vessel, channel, or ditch.

Potable Water Well – any water well which supplies water for human consumption to a community water system or to a non-transient non-community water system. ***(Chapter 62-521, F.A.C.)***.

Reasonable Assurance Plan (RAP) or 4b Plan – waterbody restoration plan for waterbodies that are impaired but with control programs already in place to restore water quality standards.

Site Specific Alternative Criteria (SSAC) – an alternative surface water quality standard that can replace the criteria applicable statewide in cases where site specific information supports different numeric criteria. The SSAC must fully support and protect the designated uses of the waterbody.

Special Water – a waterbody demonstrated to be of exceptional recreational or ecological significance as listed in ***Chapter 62-302.700(9)(i), F.A.C.***

Surface Water Improvement and Management (SWIM) Program – established in 1987 as one mechanism to identify nonpoint pollutant sources and to consider a waterbody's needs as a system of connected resources rather than isolated wetlands or waterbodies. The WMDs are directly responsible for the SWIM program.

Total Maximum Daily Load (TMDL) – a scientific determination of the maximum amount of a given pollutant that a waterbody can absorb and still meet the water quality standards that protect human health and aquatic life. The FDEP is responsible for the TMDL program.

Water Quality Criteria – elements of the state water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports the present and future most beneficial use.

Waterbody Classification – a classification of surface waters of the state according to designated use as established by ***Chapter 62-302.400, F.A.C.***, as follows:

Class I	Potable Water Supplies
Class II	Shellfish Propagation or Harvesting
Class III	Fish Consumption; Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife

Class III-Limited	Fish Consumption; Recreation or Limited Recreation; and/or Propagation and Maintenance of a Limited Population of Fish and Wildlife
Class IV	Agricultural Water Supplies
Class V	Navigation, Utility, and Industrial Use

Waterbody Identification Number (WBID) – unique identifiers assigned to polygons that roughly delineate the drainage basins surrounding the waterbody assessment units (drainage basins, lakes, lake drainage areas, springs, rivers and streams, segments of rivers and streams, coastal, bay, and estuarine waters in Florida). WBIDs are assigned a FDEP district as part of their attribution. Projects can be in more than one WBID.

Wellhead Protection Area – an area consisting of a 500-foot radial setback distance around a potable water well where groundwater is provided the most stringent protection measures to protect the groundwater source for a potable water well and includes the surface and subsurface area surrounding the well ***(Chapter 62-521, F.A.C.)***.

11.2 WATER RESOURCES

11.2.1 Aquatic Preserves

Section 258.37, F.S., defines aquatic preserve as "an exceptional area of submerged lands and its associated waters set aside for being maintained essentially in its natural or existing condition". The Florida Legislature, through the ***Florida Aquatic Preserve Act of 1975 (Act), Sections 258.35 – 258.394*** and ***258.40 - 258.46, F.S.***, set aside state-owned submerged lands with exceptional biological, aesthetic, and scientific value as aquatic preserves. The Board of Trustees of the Internal Improvement Trust Fund through the FDEP Division of State Lands is responsible for the implementation, administration, and enforcement of the ***Act***, including the adoption of rules for management of aquatic preserves as found in ***Chapter 18-20, F.A.C.***

Most of the aquatic preserves are located along the coast and involve marine or estuarine environments, with the exception of a few aquatic preserves which are located inland. Many of the aquatic preserves are associated with state or federal parks and refuges. Generally, aquatic preserves designated under ***Chapter 258, F.S.***, are also considered OFWs under ***Rule 62-302.700(2)(f), F.A.C.*** (***Section 11.2.2***).

11.2.2 Outstanding Florida Waters

Section 403.061(27), F.S., grants FDEP rulemaking authority to establish a special category of waterbodies within the State, to be designated as OFWs, which shall be worthy of special protection because of their natural attributes. OFWs are listed in ***Chapter 62-302.700(9), F.A.C.***, which include:

(a) Waters within National Parks and National Memorials

(b) Waters within National Wildlife Refuges

(c) Waters within State Parks, State Wildlife Parks, and State Recreation Areas

(d) Waters within State Ornamental Gardens, State Botanical Sites, State Historic Sites, and State Geological Sites

(e) Waters within State Preserves, State Underwater Archaeological Preserves, and State Reserves.

(f) Waters within Areas Acquired through Donation, Trade, or Purchased Under the Environmentally Endangered Lands Bond Program, Conservation and Recreation Lands Program, Land Acquisition Trust Fund Program, and Save Our Coast Program

(g) Waters within National Seashores

(h) Waters within State Aquatic Preserves

11.2.3 Sole Source Aquifer

The EPA defines a sole or principal source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer ***[40 Code of Federal Regulation (CFR) § 149]***. These areas may have no alternative drinking water source(s) that could physically, legally, and economically supply all those who depend on the aquifer for drinking water. EPA has identified two SSAs in Florida, the Volusia-Floridian and Biscayne Aquifers.

11.3 COORDINATION

Identifying and addressing water resource impacts associated with transportation projects involve engaging various state and federal agencies, as well as other local and regional stakeholders as early as the Planning phase and Efficient Transportation Decision Making (ETDM) process. The goal of early coordination is to proactively identify potential water quality and stormwater requirements and to explore opportunities for innovative stormwater solutions or joint/regional stormwater management projects with stakeholders. The District should document areas of potential cooperation in the project file for future follow up as the project progresses into the Design phase.

11.3.1 Aquatic Preserves

For projects in an aquatic preserve, coordination with FDEP is needed if potential impacts to an aquatic preserve have been identified [e.g., sovereign submerged lands, right of

way (ROW), in-water work]. Once ROW requirements have been defined, aerial maps depicting alternatives with ROW located within the boundary of an aquatic preserve are submitted to FDEP for review and comment. They are addressed to:

Director, Office of Resilience and Coastal Protection
Florida Department of Environmental Protection
3900 Commonwealth Blvd.
Mail Station 235
Tallahassee, FL 32399-3000

A letter requesting a response from FDEP within thirty days accompanies the aerials. This letter must contain the following standard statement for federal projects:

> *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.*

If a determination is made that the project will have no impact after coordination with FDEP, provide documentation according to ***Section 11.4.4.1.1***. If there is an impact, document according to ***Section 11.4.4.1.2***.

11.3.2 Impaired Waters

Section 303(d) of the CWA requires states to identify waters where current pollution control technologies alone cannot meet the water quality standards set for that waterbody. Every two years, states are required to submit a list of impaired waters, plus any waters that may soon become impaired, to the EPA for approval. The impaired waters are prioritized based on the severity of the pollution and the designated use of the waterbody (e.g., fish propagation or human recreation). States must establish the TMDLs of the pollutant(s) in the waterbody for impaired waters on their respective lists.

The ***Florida Watershed Restoration Act (FWRA),*** which is codified at ***Section 403.067, F.S.***, was enacted to protect waters of the state through the TMDL program as required by ***Section 303(d) of the CWA*** and ***33 U.S.C. § 1251***. The TMDL program promotes improvements in the quality of waters of the state by coordinating control of pollution from both point and nonpoint sources. TMDLs are adopted for waters identified as impaired by FDEP in accordance with ***Chapter 62-303, F.A.C.***, also known as the ***Impaired Waters Rule (IWR)***. TMDLs are adopted by law in ***Chapter 62-304, F.A.C.*** TMDLs may be implemented through BMAPs, National Pollutant Discharge Elimination System (NPDES) permits, or through other pollution reduction strategies.

BMAPs are formal plans for restoring impaired waters by reducing pollutant loadings. BMAPs are developed under ***Section 403.067, F.S.***, with local stakeholders, including

FDOT. BMAP obligations upon cities and counties can be costly, and can serve as an incentive for local governments to seek joint/regional stormwater projects with FDOT. Examples of BMAPs are permit limits on wastewater facilities, urban and agricultural best management practices, stormwater best management practices, conservation programs, financial assistance, and revenue generating activities.

The list of TMDLs and their BMAPs can be found on the FDEP website, which is updated regularly. Projects that are located within a BMAP boundary or within the drainage basin of an impaired waterbody with established TMDLs may be subjected to meeting stricter regulatory requirements for water quality.

FDEP implements Reasonable Assurance Plans (RAPS) to restore waterbodies to meet their designated uses. Implementation of RAPs alleviates the need to establish TMDLs. ***Chapter 62-303.600, F.A.C.*** allows FDEP to omit impaired waters if pollution control programs, such as RAPs, are being implemented to restore water quality standards and are deemed sufficient to result in attainment of applicable water quality standards. The FDEP's decision shall be based on a plan that demonstrates reasonable assurance that the proposed pollution control mechanism and expected improvements in water quality in the water segment will attain applicable water quality standards. The list of adopted RAPs can be found on the FDEP website which is updated regularly. It is important to note that the BMAP and RAP boundaries generally encompass a much larger area than the area of the original TMDL or impaired waterbody.

If the project is located within and discharges into the WBID boundary of a waterbody with a BMAP or RAP, the District should coordinate with BMAP or RAP stakeholders to understand FDEP and local concerns. Such coordination may also identify the level of water quality evaluation, additional agencies and stakeholders with whom FDOT should collaborate, level of permitting required, project commitment for nutrients reductions, and whether any potential regional water resource improvement opportunities exist in the project area.

11.3.3 Sole Source Aquifers

When the project has the potential to impact a SSA, the District must coordinate with EPA's Region 4 Underground Injection Control (UIC) Section, to obtain EPA concurrence on the project in compliance with ***Section 1424(e) of the Safe Drinking Water Act (SDWA)*** and ***40 C.F.R. § 149***. Coordination with EPA's Region 4 UIC Section should start during ETDM screening when the Advance Notification (AN) is distributed, and should continue throughout the PD&E Study. The Preliminary Environmental Discussion (PED) should indicate if the project is within the SSA boundary and would impact the SSA.

11.3.4 Regional Stormwater Management

Coordination with regulatory agencies and other stakeholders during a PD&E Study should include the Environmental Look Arounds (ELA) meetings as described in Chapter

5 of the ***FDOT Drainage Manual, Topic No. 625-040-002***. The ELA meetings provide an opportunity for assessing and utilizing options for FDOT to partner in innovative, cooperative regional stormwater management solutions and begins during the Planning phase through the ETDM process. These meetings lead to improved environmental benefit and/or reduced stormwater management costs. The District should convene ELA meeting(s) soon after the stormwater management requirements are estimated and before stormwater management design decisions are established. The ELA meetings should also explore watershed wide stormwater needs and innovative approaches to meeting permit requirements for the project.

Stakeholders may be able to provide information on current drainage issues, possible innovate stormwater management solutions, and possible mitigation credits for the project. Coordination with the stakeholders is an ongoing process and should continue through the Design, Construction, and Maintenance and Operations phases. Any existing issues or possible innovative solutions which may be pursued for a project must be coordinated with other FDOT offices such as Environmental Permits, Maintenance, Environmental Management, Drainage, Legal, and others as needed.

11.4 PROCEDURE

Project impacts to water resources must be evaluated regardless of whether the project is required to meet federal and/or state environmental review requirements. The water resources evaluation should provide the information necessary to estimate potential impacts to water resources as part of the project development process in compliance with the goals and requirements of the ***CWA***, ***Chapter 373, F.S.***, and ***Chapter 403, F.S.*** The ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37***, documents the technical information for the water quality impact evaluation that supports the ***NEPA*** decision making process.

11.4.1 Level of Assessment Determination

The level of assessment for water resources during the PD&E phase depends on the project's involvement with water resources, the quality of the water resources, potential impacts, and the potential implementation of non-traditional water quality treatments.

If the project is located in, over, or adjacent to a water resource designated as an OFW, aquatic preserve, or SSA, additional assessment may be needed. The location of the designated water resource may be determined by using the Environmental Screening Tool (EST). The information can also be found through the following references:

1. A list of aquatic preserves and a link to a map of their locations provided in ***Figure 11-2***. It may be necessary to confirm this determination by referencing ***Chapter 258, F.S.***

2. A list of the OFWs provided in ***Rule 62-302.700(9), F.A.C***. This list includes an

identification of all OFWs by County. Some examples of OFWs include aquatic preserves, National Seashores, waters in national parks, state parks and specially designated areas.

3. The list of SSAs in Florida maintained by EPA. There are two SSAs in Florida: Biscayne Sole Source Aquifer and Volusia Sole Source Aquifer.

4. Designated water resource data layers stored in the Florida Geographic Data Library, which can be accessed through the EST independent of running an ETDM screening event.

If further assistance is needed regarding aquatic preserves, and OFWs, the District should contact the FDEP Environmental Technical Advisory Team (ETAT) member; the EPA ETAT member should be contacted for SSAs.

For projects that were screened through the ETDM process, water resource data as well as potential associated project impacts provided through ETAT comments are presented in the ***Programming Screen Summary Report*** (***ETDM Manual, Topic No. 650-000-002***). The summary report specifically includes Geographic Information System (GIS) data and applicable maps that identify the proximity of the proposed action to aquatic preserves, OFWs, or SSAs. ETAT comments under the Special Designations issue should identify any potential project impacts to these resources. Comments by FDEP are especially important as they may identify potential project impacts on other issues such as Wetlands and Surface Waters, and Water Resources.

The Water Quality Impact Evaluation (WQIE) documents the analysis of potential project impacts on water quality within a PD&E Study. The WQIE documentation should have sufficient detail to reflect consideration of water quality issues and coordination with regulatory agencies including the ELA meetings (see ***Section 11.3.4***).

Detailed evaluations are generally not warranted for transportation projects not qualifying for ETDM screening-[typically Type 1 Categorical Exclusions (CEs) and Non-Major State Actions (NMSAs)]. These projects have no significant environmental effects; therefore, they typically require minimal water quality evaluation.

A higher potential for water resource impacts typically exists with transportation projects qualifying for ETDM screening. Most PD&E projects receive prior consideration of water resource issues during the ETDM process. The WQIE in the PD&E Study focuses on issues identified during the ETDM Programming Screen and are documented in the ***Programming Screen Summary Report***.

In accordance with ***Part 1, Chapter 2, Class of Action Determination for Federal Projects***, qualifying projects must complete an ETDM Programming Screen; these projects may have also completed an ETDM Planning Screen. The following items should be addressed as the projects advance through the project development process:

1. **ETDM Planning Screen Evaluation** – In the PED, the District will provide a discussion about known potential project involvement with surface waterbodies and groundwater and their designations in accordance with ***Part 1, Chapter 3, Preliminary Environmental Discussion and Advance Notification***. The District will identify water resources located within the project area using online resources maintained by the FDEP and WMDs, as well as other data sources.

   Specific information identified during the screening may include:

   a. Surface Water

      1. Identification of surface waterbody to which stormwater ultimately discharges;
      2. Any special designations of receiving waterbodies (OFW, Aquatic Preserve);
      3. Whether the project is within a permitted MS4;
      4. WBIDs in which the project is located and associated FDEP Group Number and Name;
      5. WMD in which the project is located;
      6. Water Control Districts or Regional Water Authorities;
      7. Waterbody Classification;
      8. Listing status—whether the WBID is identified as impaired, has a TMDL or is located within a BMAP or RAP boundary;
      9. The appropriate numeric nutrient standard for the waterbody, if applicable; and
      10. If project directly discharges to a waterbody identified as impaired [including the pollutant(s) of concern, numeric criteria, or TMDL (whichever applies)].

   b. Groundwater

      1. Groundwater recharge mechanism;
      2. Identification of the aquifer where the project is located;
      3. Identification of a SSA;
      4. Potentially affected springsheds and spring protection zones;
      5. Whether the potentially affected spring has a BMAP or RAP plan; and
      6. Water Control Districts or Regional Water Authorities with potable water well fields.

2. **ETDM Programming Screen Evaluation** – The District will include a discussion about potential project involvement with surface and groundwater resources (based on the District's familiarity with the project area and information from the Planning Screen) in the PED and the AN Package, as appropriate. As appropriate, the District ETDM Coordinator and the District Project Manager should coordinate with other District (staff such as the District Drainage Engineer, District Permits Coordinator, and others who will be involved with the project in subsequent phases). To document pertinent information regarding affected water resources and to explore opportunities and options for stormwater management for the project. The District will coordinate as needed with the ETAT and other stakeholders throughout the ETDM screening process.

11.4.2 Water Quality Impact Evaluation

The purpose of the WQIE in the PD&E Study is to identify and characterize existing water resources in a project area, assess a project's potential impacts to water resources, identify and evaluate mitigation measures (if necessary) and document coordination that has occurred. Since water quality requirements and basin parameters affect stormwater pond size requirements and drainage criteria, the ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** should be completed prior to finalizing the pond siting analysis.

Project impacts to an aquatic preserve, Outstanding Natural Resource Waters (ONRW), or OFW must also be identified in the ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37***.

The District should prepare a WQIE for each alternative, as appropriate, and continue coordination with regulatory agencies and appropriate stakeholders which was initiated during planning. The appropriate level of documentation must be completed along with the appropriate conceptual drainage analysis based on the level of design detail in the PD&E Study (***Part 1, Chapter 4, Project Development Process***).

If coordination with regulatory agencies or other stakeholders is required, additional documentation in the form of a technical memo may be needed. WQIE results should be documented in the ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** (***Figure 11-3***), briefly summarized in the Environmental Document [Type 2 CE, Environmental Assessment (EA), Environmental Impact Statement (EIS), or State Environmental Impact Report (SEIR)] , and saved in the project file. The ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** should be updated during a re-evaluation if changes have occurred to water quality status, such as the delisting of a waterbody from the verified impaired waterbody list, adoption of new TMDLs, or inclusion in a BMAP or RAP boundary, or if the project impacts to water quality have changed.

11.4.2.1 Existing Conditions

When applicable, once an ETDM summary report is completed, review the ETAT comments provided for the following issues; Water Quality and Quantity (including comments pertaining to SSAs), Coastal and Marine, Wetlands and Surface Waters, Floodplains, and Special Designations. Also review the comments to identify for any innovative stormwater solutions or joint/regional opportunities suggested by ETAT members for consideration pertaining to the project. Determine the project's involvement with project specific or regional water resource issues from resource agencies' comments. Use information from the ETDM screening event to scope the water quality and stormwater evaluation efforts during the PD&E Study. The Project Manager should discuss scope activities with other offices such as Drainage, Environmental Permits, and Maintenance.

Using the results of the ***Programing Screen Summary Report***, the existing conditions of water resources that may be affected by the proposed project can be documented.

Identify water resource basins or watershed boundaries where the project may have a direct impact on water quality and identify water resource characteristics within the basin boundaries. Review the project area for the existence of joint/regional stormwater management projects by using the ELA process. Joint/regional stormwater management projects may require expansion of the stormwater analysis beyond the project's immediate hydrologic basin boundary(ies). The Project Manager should coordinate with the District Drainage Design Office to determine any additional areas associated with pond siting, water storage, hydrologic restoration, recharge or treatment. Coordination should also include the District Permit Coordinator and NPDES/MS4 Coordinator to identify areas where pollutant load reduction efforts are needed.

Data to evaluate potential water resource issues within the project area can be obtained from various sources such as the EST, of both FDEP and the relevant WMD websites, GIS water resource data, county and city water atlases, regional stormwater master plans, and flood studies.

11.4.2.2 Water Quality Impact Evaluation Documentation

The detailed results of data collection efforts and continued coordination with water resource agencies and stakeholders are documented in the ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** (***Figure 11-3***) and summarized in the Environmental Document. If more than one project alternative is analyzed in detail, a ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** is completed for each alternative. In cases where the project alternatives are in the same drainage basin(s), one ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** is prepared. The results of each alternative are then compared and documented in the ***Preliminary Engineering Report (PER)*** and summarized in the Environmental Document.

11.4.3 Stormwater Impacts

Stormwater impacts associated with transportation projects are addressed through permitting of stormwater management systems.

In accordance with ***Chapter 62-330.301, F.A.C.***, to obtain an approval of an Environmental Resource Permit, FDOT must provide reasonable assurance that the construction, alteration, operation, maintenance, removal, or abandonment of the project:

a. will not cause adverse water quantity impacts to receiving waters and adjacent lands;

b. will not cause adverse flooding to on-site or off-site property;

c. will not cause adverse impacts to existing surface water storage and conveyance capabilities;

d. will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters;

e. will not adversely affect the quality of receiving waters such that the state water quality standards will be violated;

f. will not cause adverse secondary impacts to the water resources;

g. will not adversely impact the maintenance of surface or groundwater levels or surface water flows established pursuant to ***Section 373.042, F.S.***

h. will not cause adverse impacts to a Work of the District established pursuant to ***Section 373.086, F.S.***;

i. will be capable, based on generally accepted engineering and scientific principles, of performing and functioning as proposed;

j. will be conducted by a person with the financial, legal, and administrative capability of ensuring that the activity will be undertaken in accordance with the terms and conditions of the permit, if issued; and,

k. will comply with any applicable special basin or geographic area criteria established in ***Chapter 62-330.301(1)(k), F.A.C.***

11.4.3.1 Federal and State Stormwater Regulations and Permits

FDOT projects must adhere to federal and state regulations. This section summarizes some of those rules as well as the programs designed to aid in improving water quality and addressing stormwater aspects associated with transportation projects. Refer to ***Part 1, Chapter 12, Environmental Permits*** for more information regarding FDOT procedures for obtaining environmental permits.

FDOT transportation projects involving the construction, alteration, operation, maintenance, repair, abandonment and removal of stormwater management systems, dams, impoundments, reservoirs, appurtenant works, and works including structures,

dredging and filling located in, on or over wetlands or other surface waters as defined in ***Chapter 62-340, F.A.C.***, are governed by the Environmental Resource Permit (ERP) Program under ***Chapter 62-330, F.A.C.*** ERP requirements prescribe stormwater management and vary among WMDs. Stormwater pond design criteria for slopes, berms, and clearances, in the ***Drainage Manual, Topic Number 625-040-002***, are set so as to satisfy similar WMD pond design criteria. Generally, ERP requirements regulate stormwater discharge leaving FDOT ROW. Typically, maximum post-development discharge is limited to no greater than pre-development discharge for the specified design storm events required by the WMD. However, in certain basins with historical flooding or limited stormwater conveyance infrastructure, WMDs require onsite development reductions from pre-development discharge. On FDOT transportation projects, ERPs are obtained prior to construction, typically when the drainage design is substantially complete (i.e., after Phase II design plans).

11.4.3.2 Conceptual Drainage and Pond Siting Analysis

Drainage and pond siting analysis conducted during the PD&E Study is dependent on the level of engineering and design analyses required for the PD&E project. The analysis is necessary to determine size and location for stormwater ponds and alternate stormwater management options (e.g., detention, retention, infiltration), as well as drainage concepts which are needed to ensure additional ROW beyond roadway improvements is analyzed for potential impacts to other environmental resources.

At a minimum, drainage and pond siting analysis during PD&E Study should identify the project's drainage requirements and possible challenges that may affect drainage and other design elements, and determine the overall stormwater management approach. Additionally, the analysis should identify possible stormwater design concepts that mitigate stormwater runoff, and estimate the general size and potential locations of stormwater management facilities (ponds) that meet regulatory requirements. Stormwater ponds are sized to meet both attenuation (quantity control) and treatment (quality control) requirements, including the special standards for OFWs and ONRWs set forth in ***62-4.242(2) and (3), F.A.C.*** Coordinate with stakeholders through the ELA meetings to determine potential regional stormwater solutions.

Drainage analysis is documented in the ***PER***, ***Pond Siting Report (PSR)***, and summarized in the Water Resources section of the Environmental Document. More information on the ***PSR*** can be found in the ***Drainage Manual, Topic Number 625-040-002***. The stormwater management facility type, size, location, and cost are documented in the ***PSR***. Projects in an urban core area where adjacent land is fully built out would not necessarily warrant preparation of a ***PSR*** if ROW is not required for treatment; in such cases, a ***Concept Drainage Design Report*** is prepared to document a preliminary drainage analysis and data that will support drainage design in the Design phase. The contents for the ***Concept Drainage Design Report*** are typically expanded during the Design phase when the stormwater management systems are designed in detail.

The information presented in the ***PSR*** and ***Concept Drainage Design Report*** is specific to each project (including the potential) drainage approach. The reports must include a cover page prepared using the ***Technical Report Cover Page, Form No. 650-050-38*** and be signed and sealed by a professional engineer in accordance with ***Chapter 471, F.S.*** A sample cover page is shown in ***Figure 11-3***.

11.4.3.2.1 Existing Drainage Conditions

For each project alternative being evaluated in the PD&E Study, the existing drainage conditions should be identified, as follows:

1. General drainage patterns near the project;

2. Description of the existing drainage basins with their respective outfalls (include information about name and size of basin and whether it is an open or closed basin);

3. The receiving waterbodies, their classifications, their special designations (if appropriate), and if they are verified impaired through the FDEP's TMDL Program;

4. Previous permit information—WMD's permits and drainage connection permits;

5. Base flood elevation, tidal information, Water Control District's seasonal high water table or control elevations;

6. The land use within the project area;

7. Deficiencies in existing conditions—history of flooding, substandard clearances, scour/erosion problems;

8. The soil types within the project area;

9. Description of existing stormwater systems and stormwater management facilities including conveyance system; location and size of cross drains; location and description of bridges; location, type, and size of ponds; other stormwater facilities;

10. Known above or below ground contamination materials that have a potential to be impacted by the project and affect water quality; and

11. Information regarding historical, archeological, and environmental resources that have the potential to be impacted by the drainage of the project.

11.4.3.2.2 Proposed Drainage Conditions

The drainage analysis for proposed conditions should provide a conceptual drainage system, which appropriately includes the following items:

1. Description of the onsite drainage basins with their respective outfalls;

2. Discussion on how stormwater from offsite area will be handled;

3. WMD and FDOT requirements for water quality treatment and the rate (or volume) discharge;

4. Floodplain compensation requirements and estimated compensation volume;

5. General discussion of the preliminary proposed drainage (ditched, piped, ponds);

6. Approximate sizes and potential locations of Stormwater Management Facilities;

7. Approximate locations and sizes of cross drains (new and existing)—evaluate potential for ROW, drainage, or construction easements;

8. Treatment of existing cross drains (e.g., lengthened, type of end treatment, replaced, plugged);

9. Proposed new bridge structures;

10. Modifications to existing bridge structures and;

11. Drainage related design variations;

12. Utility conflicts;

13. Canal rework or relocation.

11.4.3.2.3 Pond Siting Analysis

For stormwater ponds requiring ROW acquisition, a pond siting evaluation is required during the PD&E Study. Location of ponds for the preferred alternative must be evaluated for potential impacts to the human, natural, cultural and/or physical environment. The Project Team should first explore innovative opportunities such as regional facilities, joint facilities, and stormwater re-use systems, through the ELA process. ***Chapter 9 of the FDOT Drainage Design Guide*** provides a process that can be followed during pond siting evaluation.

Stormwater pond design considerations during the PD&E Study include seasonal high groundwater table, soil permeability, tail water, maintenance, constructability, aviation safety issues, and environmental issues. When identifying the size and location of pond sites, it is important to consider the aesthetic qualities of stormwater management ponds on all FDOT projects. The ***FDOT Drainage Manual, Topic No. 625-040-002*** requires the design of stormwater management facilities to be consistent with the ***Highway Beautification, Policy No. 000-650-011*** and integrated with existing and proposed landscaping and adjoining land uses.

11.4.4 Environmental Document

Water resource involvement or impacts are summarized in the appropriate section of the Environmental Document for the project. The Environmental Document should summarize stormwater features such as ponds, which will be implemented to address potential water resource impacts from the project's implementation. Furthermore, the Environmental Document should state whether the project will meet the criteria and requirements of stormwater quantity and water quality criteria. The ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** and ***Sole Source Aquifer Checklist*** (***Figure 11-1***) are maintained in the project file within the StateWide Environmental Project Tracker (SWEPT).

11.4.4.1 Documenting Project Involvement with Aquatic Preserves or Outstanding Florida Waters

11.4.4.1.1 Documentation of Projects Without Aquatic Preserves Impacts

For Type 1 CE projects located in an aquatic preserve, which will have no impact on the aquatic preserve, a copy of the FDEP coordination letter(s) (if applicable) should be uploaded into the project file in SWEPT.

For a Type 2 CE, EA, EIS, or SEIR project located in an aquatic preserve, which will have no impact on the aquatic preserve, the following standard statement is included in the Aquatic Preserves and Outstanding Florida Waters section of the Environmental Document.

> *This project is within the boundaries of (Name of Aquatic Preserve). After coordination with the Florida Department of Environmental Protection, it has been determined that the project will not have an impact on the (Name of Aquatic Preserve).*

Any coordination with FDEP should be discussed in the Environmental Document and coordination letters should be referenced in the document and included in the project file in SWEPT.

Type 2 CE: The standard statement above should be included in the Aquatic Preserves and Outstanding Florida Waters section of the ***Type 2 Categorical Exclusion Determination Form***. The FDEP coordination letter(s) should be included in the project file, if applicable.

EA and EIS: Include the above standard statement in the Aquatic Preserve and Outstanding Florida Waters section of the Environmental Document. Discussion of coordination with FDEP in the Comments and Coordination section should be consistent with the Aquatic Preserve and Outstanding Florida Waters section and a copy of FDEP coordination letter(s) should be placed in an Appendix.

SEIR: Place an "X" in the “No” column in the Environmental Analysis section of the SEIR. Include the above standard statement in the Aquatic Preserves and Outstanding Florida Waters section of the document. Provide justification of the decision in the Supporting Information column and supplement with attachments as necessary to substantiate the impact determination. Correspondence with FDEP should be referenced in the SEIR and included in the project file, if applicable.

11.4.4.1.2 Documentation of Projects with Aquatic Preserve Impacts

For a Type 1 CE, impacts to an aquatic preserve would be addressed during permitting. For a Type 2 CE, EA, EIS, or SEIR project located in an aquatic preserve, which will impact the aquatic preserve, the following areas should be assessed and included in the Aquatic Preserves and Outstanding Florida Waters section of the Environmental Document.

1. Identify the aquatic preserve affected and show the location of that part of the project that may affect the aquatic preserve on a figure or map.

    a. Discuss the extent of potential impacts to the aquatic preserve.

    b. Assess the impacts that the proposed project will have on the aquatic preserve.

    c. Discuss why there is no practicable alternative to locating the project outside the aquatic preserve.

    d. Identify all measures to minimize harm to the aquatic preserve.

    e. Identify permits needed and appropriate permitting agencies.

    f. Provide results of coordination with appropriate agencies having jurisdiction over the aquatic preserve and address related ETAT comments.

Type 2 CE: Document the results of the assessment in the Aquatic Preserves and Outstanding Florida Waters section of the ***Type 2 Categorical Exclusion Determination Form***. Provide supplemental information and coordination letter(s) in the project file in SWEPT.

EA and EIS: A copy of the FDEP coordination letter(s) and any other correspondence should be placed in an Appendix. In addition, discussion of coordination with FDEP, as applicable in the Comments and Coordination section should be consistent with the Aquatic Preserve and Outstanding Florida Waters section.

SEIR: In the Environmental Analysis section of the SEIR, place an "X" in the appropriate column indicating the level of impact. If an issue exists but the project will alter it in a positive manner, mark the column indicating “ENHANCE.” If there is a potential for substantial impact, mark the column “YES”. Provide justification of the decision in the

Supporting Information column and supplement with attachments as necessary to substantiate the impact determination. Correspondence with FDEP should be referenced in the SEIR and included in the project file.

11.4.4.1.3 Projects with Impacts to Outstanding Florida Waters

For Type 1 CE projects located in an OFW, a copy of the FDEP coordination letter(s) (if applicable) should be placed in the project file in SWEPT.

For Type 2 CE, EA, EIS, and SEIR projects located in an OFW, the following should be assessed and included in the Aquatic Preserves and Outstanding Florida Waters section of the Environmental Document.

1. Identify the OFW and provide a map or figure showing how it relates to the project,
2. Address related ETAT comments,
3. Identify potential impacts to OFWs that can be evaluated prior to permitting, including potential treatment strategies.

Type 2 CE: This information should be included in the Outstanding Florida Waters section of the ***Type 2 Categorical Exclusion Determination Form***. Provide supplemental information and correspondence with FDEP in the project file in SWEPT.

EA and EIS: Include any correspondence with FDEP in an Appendix. In addition, discussion of coordination with FDEP in the Comments and Coordination section should be consistent with the Aquatic Preserves and Outstanding Florida Waters section.

SEIR: In Section 3.C.2, Environmental Analysis, of the ***State Environmental Impact Report Form, Form No. 650-050-43*** place an "X" in the appropriate column indicating the level of impact. If an issue exists but the project will alter it in a positive manner, mark the column indicating “ENHANCE.” If an issue exists but there is little or no impact, mark the column indicating “NO.” If there is a potential for substantial impact, mark the column “YES”. Provide justification of the decision in the Supporting Information column and supplement with attachments as necessary to substantiate the impact determination. Correspondence with FDEP should be referenced in the SEIR and included in the project file.

11.4.4.1.4 Section 4(f) Applicability

Aquatic preserves and OFWs may be protected by ***Section 4(f)*** if their designated functions are primarily for park, recreation, or refuge purposes. Additionally, publicly owned lands in the immediate proximity of aquatic preserves or OFWs may also be protected by ***Section 4(f),*** depending on the ownership and the manner in which they are administered by the managing agency. See ***Part 2, Chapter 7, Section 4(f) Resources*** for more information on ***Section 4(f)*** Applicability. The District should determine if there are multiple-use public land holdings per ***23 CFR § 774.11(d)*** within the aquatic preserve,

or OFW. ***Section 4(f)*** applies to only those portions of the aquatic preserve or OFW which are designated by statute or identified in the official management plan for the aquatic preserve or OFW and determined through coordination with the Official with Jurisdiction (OWJ) as functioning or planned for park or recreational purposes or as wildlife and waterfowl refuges or which are significant historic sites. In addition, the significance of those portions shall be made by the OWJ over the aquatic preserve, or OFW of those portions considered protected by ***Section 4(f)***.

11.4.4.2 Documenting Sole Source Aquifer Project Review

Projects with federal funding located within the boundaries of designated SSA must be planned and designed to assure they will not contaminate the aquifer. During PD&E study, ***Sole Source Aquifer Checklist*** (***Figure 11-1***) is completed to determine if the project has the potential to impact an SSA. The completed ***Sole Source Aquifer Checklist*** and ***WQIE Checklist*** is submitted to the EPA's Region 4 UIC Section by the District for EPA's evaluation and concurrence with the FDOT's proposed measures to protect the aquifer. The District should respond to EPA's inquiries, comments, or mitigation measures before the Environmental Document is finalized. Comments raised by EPA should be addressed in the Water Resources section of the Environmental Document, and when applicable, avoidance or minimization measures documented in the Commitments section. Additionally, the EPA concurrence letter must be referenced and attached to the final Environmental Document. The results of any coordination meetings should be documented in the Comments and Coordination section of an EA or EIS.

11.4.4.3 Water Quality and Stormwater

Documentation for water quality and stormwater should be provided as follows:

Type 1 CEs and NMSAs: Verify that the project does not involve significant impacts on water resources. See ***Part 1, Chapter 2, Class of Action Determination for Federal Projects*** and ***Part 1, Chapter 10, State, Local, or Privately Funded Project Delivery*** for more guidance.

Type 2 CE, EA and EIS: Major elements of the ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** and ***PSR*** are summarized in the Water Resources section of the Environmental Document. The results of any coordination meetings should be documented in the Comments and Coordination section of an EA or EIS and, when applicable, the Commitments section.

SEIR: The ***State Environmental Impact Report Form, Form No. 650-050-43*** should indicate the level of water quality impact in the appropriate column. If a project does not involve impacts to water resources, mark the column indicating "NOINV." If water resources exist but the project will improve water quality, mark the column indicating "ENHANCE." If water resources exist but there is little or no impact, mark the column indicating "NO." If there is a potential for significant impacts to water resources, mark the column "YES." Provide justification of decision in the Supporting Information column as

necessary to support the impact determination. All commitments made through coordination efforts should be documented in the Commitments section of the ***State Environmental Impact Report Form, Form No. 650-050-43***. The ***Water Quality Impact Evaluation Checklist, Form No. 650-050-37*** should be saved in the project file.

11.4.4.4 Commitments

Water resource commitments may be related to BMAP/RAP commitments, ELA commitments, or actions/activities required to advance the project and/or require action for the Contractor to implement. Commitments may include the retrofitting of structures to increase water quality treatment; building of water quality improvement features; hydrologic enhancement; recharge or reuse projects; or continued coordination with water resource agencies or other stakeholders. Commitments must be coordinated with other District offices prior to inclusion in the Environmental Document to ensure commitments are feasible.

Commitments related to water resource issues made by the FDOT should be included in the Environmental Document consistent with ***Part 2, Chapter 22, Commitments*** and transmitted to the next phase of project development in accordance with ***Procedure No. 650-000-003, Project Commitment Tracking***.

11.4.4.5 Re-evaluation

Changes to the project which may affect water quality impacts after approval of the Environmental Document must be documented in a ***Re-evaluation Form*** consistent with ***Part 1, Chapter 13, Re-evaluations***. Commitments and coordination, and the status of permits, should be discussed in the Water Resources, Commitment Status, and/or Status of Permits sections of the ***Re-evaluation Form***.

11.5 REFERENCES

Chapter 62-302, F.A.C., Surface Water Quality Standards

Chapter 62-303, F.A.C., Identification of Impaired Surface Waters

Chapter 62-304, F.A.C., Total Maximum Daily Loads

Chapter 62-621, F.A.C., Generic Permits

Chapter 62-624, F.A.C., Municipal Separate Storm Sewer Systems

Chapter 373, F.S., Water Resources

Chapter 403, F.S., Environmental Control Clean Water Act of 1972, as amended. http://www.fws.gov/laws/lawsdigest/fwatrpo.html

EPA, Safe Drinking Water Act, Section 1424(e), 1976.
https://www.epw.senate.gov/sdwa.pdf

FDEP, Guidance on Developing Restoration Plans and Alternatives to TMDLs – Assessment Category 4b and 4e Plans, April 2018.
https://floridadep.gov/dear/watershed-assessment-section/documents/guidance-developing-restoration-plans-alternatives-tmdls

FDEP, Permitted Phase I MS4s in Florida, April 2018.
https://floridadep.gov/water/stormwater/content/stormwater-facility-information

FDEP, Permitted Phase II MS4s in Florida, April 2018.
https://floridadep.gov/water/stormwater/content/stormwater-facility-information

FDEP, Wastewater Facility Information,
http://dep.state.fl.us/water/wastewater/facinfo.htm

FDOT, Drainage Manual, Topic No. 625-040-002.
https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/drainage/files/drainagemanual2020.pdf?sfvrsn=54b052a4_2

FDOT, Efficient Transportation Decision Making Manual.
http://www.fdot.gov/environment/pubs/etdm/etdmmanual.shtm

FDOT, Statewide Stormwater Management Plan, 2012.
https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/maintenance/fdotstormwatermgmtplan2012.pdf?sfvrsn=858ebaa2_0

Memorandum of Understanding Between FHWA and FDOT Concerning the State of Florida's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 U.S.C. 327, December 14, 2016.
http://www.fdot.gov/environment/pubs/Executed-FDOT-NEPA-Assignment-MOU-2016-1214.pdf

Memorandum of Understanding, EPA, FDOT and FHWA, executed on January 25, 1999.
https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/executed-fdot-nepa-assignment-mou-2016-1214.pdf?sfvrsn=fe9a018f_0

11.6 FORMS

State Environmental Impact Report Form, Form No. 650-050-43

Technical Report Cover Page, Form No. 650-050-38

Water Quality Impact Evaluation Checklist, Form No. 650-050-37

11.7 HISTORY

2/25/2004, 7/27/2016, 6/14/2017: NEPA Assignment, re-numbered from Part 2, Chapter 20, and re-named Water Quality and Water Quantity, 01/14/2019: re-named Water Quality and Stormwater

PROJECT NAME:

NAME OF SOLE SOURCE AQUIFER:

1. Location of project:
2. Project description.
3. Is there any increase of impervious surface? If so, what is the area?
4. Describe how storm water is currently treated on the site?
5. How will storm water be treated on this site during construction and after the project is complete?
6. Are there any underground storage tanks present or to be installed? Include details of such tanks.
7. Will there be any liquid or solid waste generated? If so, how will it be disposed of?
8. What is the depth of excavation?
9. Are there any wells in the area that may provide direct routes for contaminates to access the aquifer and how close are they to the project?
10. Are there any hazardous waste sites in the project area, especially if the waste site has an underground plume with monitoring wells that may be disturbed? Include details.
11. Are there any deep pilings that may provide access to the aquifer?
12. Are Best Management Practices planned to address any possible risks or concerns?
13. Is there any other information that could be helpful in determining if this project may have an effect on the aquifer?
14. Does this Project include any improvements that may be beneficial to the aquifer, such as improvements to the wastewater treatment plan?

The EPA Sole Source Aquifer Program may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

Figure 11-1 Sole Source Aquifer Checklist

AQUATIC PRESERVES

1. Fort Clinch State Park
2. Nassau River - St. Johns River Marshes
3. Pellicer Creek
4. Tomoka Marsh
5. Mosquito Lagoon
6. Banana River
7. Indian River - Malabar to Vero Beach
8. Indian River - Vero Beach to Fort Pierce
9. Jensen Beach to Jupiter Inlet
10. Loxahatchee River - Lake Worth Creek
11. Biscayne Bay
12. Biscayne Bay – Cape Florida to Monroe County Line
13. North Fork: St. Lucie
14. Yellow River Marsh
15. Fort Pickens State Park
16. Rocky Bayou State Park
17. St. Andrews State Park
18. St. Joseph Bay
19. Apalachicola Bay
20. Alligator Harbor
21. St. Martins Marsh
22. Matlacha Pass
23. Pine Island Sound
24. Cape Romano - Ten Thousand Islands
25. Lignumvitae Key
26. Coupon Bight
27. Lake Jackson
28. Pinellas County
29. Estero Bay
30. Cape Haze
31. Wekiva River
32. Rookery Bay
33. Cockroach Bay
34. Gasparilla Sound - Charlotte Harbor
35. Terra Ceia
36. Guana River Marsh
37. Big Bend Seagrasses
38. Boca Ciega Bay
39. Rainbow Springs
40. Lemon Bay
41. Oklawaha River

Detailed information on Aquatic Preserves: https://floridadep.gov/fco/aquatic-preserve
Map showing locations of Aquatic Preserves: https://ca.dep.state.fl.us/mapdirect/?focus=conpro

Figure 11-2 Aquatic Preserves

WATER QUALITY IMPACT EVALUATION CHECKLIST

PART 1: PROJECT INFORMATION

Project Name:	
County:	
FM Number:	
Federal Aid Project No:	
Brief Project Description:	

PART 2: DETERMINATION OF WQIE SCOPE

Does project discharge to surface or groundwater? ☐ 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:

Water Management District:

Environmental Look Around meeting date: ____/____/_____
Attach meeting minutes/notes to the checklist.

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

Groundwater
Sole Source Aquifer (SSA)? ☐ Yes ☐ No Name_____
If yes, complete Part 5, D and complete SSA Checklist from EPA website (***Figure 11-1***)

Other Aquifer? ☐ Yes ☐ No Name_____

Springs vents? ☐ Yes ☐ No Name_____

Well head protection area? ☐ Yes ☐ No Name_____

Figure 11-3 Water Quality Impact Evaluation

Groundwater recharge? □ Yes □ No Name_____

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: ____/____/_____

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:

Potential direct effects associated with project construction and/or operation identified? □ Yes □ No

If yes, describe:

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

Figure 11-3 Water Quality Impact Evaluation (Page 2 of 5)

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: ___/___/____ (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):	
Title:	
Signature:	Date:

Figure 11-3 Water Quality Impact Evaluation (Page 3 of 5)

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

*** 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.

Figure 11-3 Water Quality Impact Evaluation (Page 4 of 5)

Table 2: Regulatory Agencies/Stakeholders Contacted

Receiving Water Name (list all that apply)	Agency's Contact and Title	Date Contacted	Follow-up Required (Y/N)	Comments

Figure 11-3 Water Quality Impact Evaluation (Page 5 of 5)

POND SITING REPORT (OR CONCEPT DRAINAGE DESIGN REPORT)

Florida Department of Transportation

District X

Project Title

Limits of Project

County, Florida

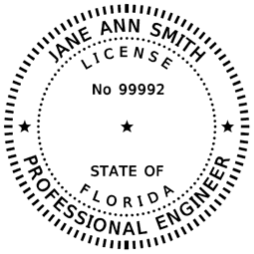
Financial Management Number: XXXXX-X

ETDM Number: XXXXXX

Date

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.

(Signature Block as Needed)



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:
JANE ANN SMITH
Date: 2013.10.09 16:40:48 - 4'00'
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMENTS.

ROADWAY ENGINEERS, INC.
123 MAIN STREET
TALLAHASSEE, FL 32301
CERTIFICATE OF AUTHORIZATION: 12345
JANE ANN SMITH, P.E. NO. 99992

Figure 11-4 Sample Pond Siting Report Cover Page