



**WETLAND EVALUATION REPORT**  
for the  
**WEKIVA PARKWAY (SR 429)/SR 46 REALIGNMENT PD&E STUDY**

**Orange, Lake, and Seminole Counties, Florida**

**Financial Project ID: 238275 1 22 01 and 240200 1 22 01**

**Federal Aid Project Number: TBD**

**Prepared for**  
**Orlando-Orange County Expressway Authority**  
**and**  
**Florida Department of Transportation, District Five**

**Prepared by**



**June 2010**

# Table of Contents

---

<u>Section</u>	<u>Page</u>
<b>Executive Summary</b> .....	<b>iii</b>
<b>1.0 Project Summary</b> .....	<b>1-1</b>
1.1 Project Background.....	1-1
1.2 Project Purpose and Need.....	1-3
1.3 Project Description.....	1-7
1.4 Analysis of Alignment Alternatives.....	1-8
1.4.1 Initial Alternatives.....	1-8
1.4.2 Viable Alternatives.....	1-8
1.4.3 Recommended Preferred Alternative.....	1-9
1.5 Purpose of the Wetland Evaluation Report.....	1-16
<b>2.0 Wetland Identification and Assessment</b> .....	<b>2-1</b>
2.1 Identification Methods.....	2-1
2.2 Surface Water Features.....	2-5
2.2.1 Wekiva River (510), an OFW, WSR, AP, and RHPZ.....	2-5
2.2.2 Lakes (523 and 524).....	2-8
2.2.3 Reservoirs and Ponds (533 and 534).....	2-8
2.3 Wetlands.....	2-8
2.3.1 Mixed Wetland Hardwoods (617).....	2-9
2.3.2 Wetland Forested Mixed (630).....	2-9
2.3.3 Other Wetland Shrub (631).....	2-11
2.3.4 Freshwater Marshes (641), Wet Prairies (643) and Emergent Aquatic Vegetation (644).....	2-11
2.4 Essential Fish Habitat.....	2-13
<b>3.0 Wetland Impacts</b> .....	<b>3-1</b>
3.1 UMAM Analysis.....	3-1
3.2 Impact Assessment.....	3-2
3.2.1 Direct Impacts.....	3-3
3.2.2 Secondary Impacts.....	3-3
3.2.3 Cumulative Impacts.....	3-6
<b>4.0 Conceptual Mitigation</b> .....	<b>4-1</b>
4.1 Avoidance and Minimization.....	4-1
4.2 Compensatory Mitigation.....	4-2
<b>5.0 Agency and Permit Coordination</b> .....	<b>5-1</b>
5.1 Federal Dredge and Fill Permit.....	5-1
5.2 NPDES Permit.....	5-2

# Table of Contents (continued)

---

5.3	Environmental Resource Permit .....	5-3
5.4	Sovereign Submerged State Lands .....	5-4
<b>6.</b>	<b>References .....</b>	<b>6-1</b>

## Appendices

- Appendix A - Existing Conditions on Project Aerials (*Under Separate Cover*)
- Appendix B - UMAM Assessment and Scoring Worksheets
- Appendix C - Summary of Wetland Impacts by Habitat Type
- Appendix D - Correspondence

## List of Tables

Page

Table 2-1.	Natural Areas in the Project Area Identified by Land Use Category Descriptions.....	2-3
Table 3-1.	UMAM Parameters and Scores for Representative Wetlands of Existing Conditions .....	3-2
Table 3-2.	Summary of Potential Direct Impacts to Wetlands and Natural Surface Waters within the Preferred Alternative Right-of-Way..	3-4
Table 5-1.	Potentially Required Permits .....	5-1

## List of Exhibits

Page

Exhibit 1-1.	Project Study Area .....	1-2
Exhibit 1-2.	Regional Transportation Network - Congested SIS Facilities ..	1-4
Exhibit 1-3.	Overall Project Layout - Preferred Alternative.....	1-11
Exhibit 1-4.	Orange County Preferred Alternative .....	1-13
Exhibit 1-5.	Lake County West Preferred Alternative.....	1-14
Exhibit 1-6.	Lake County East Preferred Alternative .....	1-15
Exhibit 1-7.	Seminole County Preferred Alternative .....	1-16
Exhibit 2-1.	Wekiva River Aquatic Preserve Boundary Map .....	2-7

# Executive Summary

---

In compliance with Presidential Executive Order 11990, the Federal Highway Administration (FHWA) Technical Advisory T6640.8A, Title 23 Code of Federal Regulations (CFR) Part 777, and the requirements set forth in the Florida Department of Transportation (FDOT) *Project Development and Environment (PD&E) Manual, Part 2, Chapter 18*, extensive assessments of wetland and natural resources within the Wekiva Parkway (SR 429)/SR 46 Realignment PD&E Study project corridor have been conducted.

A major purpose of this assessment was to identify significant and sensitive resources within the study area, defined roughly as an 800-foot wide corridor along the viable alternatives that includes area for potential stormwater treatment pond locations. From the many viable alternatives, a Preferred Alternative was selected in April 2007. A final *Wetland Evaluation Report* was approved in March 2008. Since that time, extensive discussions on funding options led to the determination that the project would not be financially feasible without tolls on the Wekiva Parkway. In response to residents in east Lake County who expressed concerns over paying a toll for a local trip, a service road concept was developed to provide a non-tolled alternative for local trips. The service road would be within the previously identified right-of-way for Wekiva Parkway, and would extend from just north of the Wekiva Parkway interchange near Neighborhood Lakes to just east of the Wekiva River in Seminole County. The service road concept eliminates the need for two full interchanges in east Lake County and reduces the previous estimate of wetland impacts. This updated final *Wetland Evaluation Report* (June 2010) provides information and data on the potential effects of the revised Preferred Alternative on regional wetland resources.

Several freshwater wetland habitats and surface water types were identified, classified, and characterized within the study area. These include marshes, shrub wetland, forested swamps, rivers, lakes, and ponds. Wetlands were identified, classified, described, and quantified within the study area by CH2M HILL ecologists.

Special Waters Designation in or adjacent to the project study area includes:

- The Wekiva River is designated by the State of Florida as an Outstanding Florida Water and Aquatic Preserve and has both state and federal designations as a Wild and Scenic River.
- Rock Springs Run is designated an Outstanding Florida Water.

#### Riparian Habitat Protection Zone:

- The Wekiva River and Rock Springs Run designated protection zone of forested uplands adjacent to the river, per 40C-41 (3)(e)1., Florida Administrative Code (F.A.C.).

#### Essential Fish Habitat (EFH):

- None in, or near, the project study area.

Potential wetland impact areas were determined from preliminary roadway typical sections and plans for the viable alternatives. Wetland impact avoidance was an important criterion in the selection of the Preferred Alternative. Where avoiding wetlands was not possible, impacts to wetlands were minimized to the extent practical based on safe and sound engineering and construction constraints. Further impact minimization efforts will be considered during the final design phase.

Wetlands and surface waters (natural and man-made) within the proposed right-of-way for the Preferred Alternative are estimated to be approximately 97.6 acres. Additional wetland areas might be secondarily impacted if remaining within 25 feet of the roadway. Secondary impacts are addressed during the detailed design and project permitting phases.

Direct impacts consist of filling, dredging, temporary disturbance, or shading of wetlands and surface waters. Approximately 24 acres of the impacts will be in forested wetlands, 43 acres in herbaceous marsh, and 7 acres in shrub wetlands. Unavoidable wetlands that would be directly impacted by the construction of the Preferred Alternative may be less than these estimates, depending on detailed design and treatment pond configurations. Surface waters that would be potentially impacted for the Preferred Alternative are estimated to be 2 acres of natural lakes, 1 acre of river, and 20 acres of man-made ponds. Impacts from the Preferred Alternative to wetlands and surface water are defined by habitat type and by type of impact (roadway or pond) in Sections 2.0 and 3.0 of this report.

No significant adverse affects to Special Waters or to EFH downstream of the project limits are anticipated as a result of the proposed roadway improvements.

The Uniform Mitigation Assessment Method (UMAM), per Chapter 62-345, F.A.C., was utilized to evaluate the function and condition of representative wetlands to be potentially impacted by the proposed improvements.

In 1988, the Florida Legislature signed into law the *Wekiva River Protection Act*, Chapter 369, Part II, Florida Statutes (F.S.). The Act delineates an area within portions of Orange, Lake, and Seminole Counties as the “Wekiva River Protection Area”, which is declared to be a “natural resource of state and regional importance”. The purpose of the Act is to protect “the water quantity, water quality, hydrology, wetlands, aquatic and wetland-dependent wildlife species, habitat of species

designated pursuant to rules 39-27.003, 39-27.004, and 39-27.005, F.A.C., and native vegetation in the Wekiva River Protection Area". In June 2004, former Governor Jeb Bush signed the *Wekiva Parkway and Protection Act*, Chapter 369, Part III, F.S. into law. The "landmark legislation" permits construction of an environmentally sensitive expressway through the basin. In addition to the protection provided by the *Wekiva River Protection Act*, the *Wekiva Parkway and Protection Act* includes provisions to conserve land adjacent to the Wekiva Parkway to protect open space and to preserve habitat, spring and groundwater recharge areas within the basin.

Freshwater wetland impacts that are unavoidable will be mitigated. The FDOT portion of the Wekiva Parkway (SR 429) project in Lake and Seminole Counties could be mitigated under the Central Florida Beltway Mitigation Trust Fund (F.S. 338.250), but the related CR 46 Realignment in Lake County East and the SR 46 Reconstruction and Realignment in Lake County West, as well as the SR 46 widening in Seminole County, are likely to require mitigation under Senate Bill 1986, pursuant to F.S. 373.4137. For the portion of Wekiva Parkway (SR 429) in Orange County, which is the Orlando-Orange County Expressway Authority's responsibility, use of the Central Florida Beltway Mitigation Trust Fund (F.S. 338.250) is authorized. The Beltway Fund and the Senate Bill establish the collection of fees for environmental mitigation for the acquisition of lands and for environmental restoration of projects of corresponding regional environmental benefit.

Also, the *Wekiva Parkway and Protection Act* stipulates that FDOT and Expressway Authority funds expended for conservation lands such as Neighborhood Lakes and the Wekiva River Mitigation Bank (formerly known as New Garden Coal) "shall be eligible as environmental mitigation". How that environmental mitigation credit is determined will have to be addressed with the permitting agencies. Discussions on the mitigation details will also need to be coordinated between the signatory parties to the Multi-Party Settlement Agreement with the Wekiva River Mitigation Bank. Those parties include the Florida Department of Environmental Protection, Division of State Lands, FDOT, the Expressway Authority, and the Wekiva River Mitigation Bank, LLC.

Further impact minimization efforts shall be considered as part of the permitting process during the final design phase. Coordination with state and federal regulatory agencies and environmental groups will continue into subsequent phases of the project, including the detailed design phase and throughout the permitting process.