

I-75 (SR 93A)

FINAL ENDANGERED SPECIES TECHNICAL MEMORANDUM

PD&E Study from South of Fowler Avenue, Hillsborough County, to South of SR 56, Pasco County

WPI Segment No.: 408459 1
Federal Aid Project Number: 0751 105 I

Reevaluation Study from South of SR 56 to CR 54, Pasco County

WPI Segment No.: 258736 1
Federal Aid Project Number: NH-75-1(91)275

Florida Department of Transportation District Seven



July 2004

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**I-75 Hillsborough and Pasco Counties
Project Development & Environment Study**

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to CR 54, Pasco County**

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The proposed action involves improvements to I-75 from south of Fowler Avenue to County Road 54, a distance of approximately 13.9 miles.

**Florida Department of Transportation
District Seven**

Prepared by:
Parsons Brinckerhoff Quade & Douglas, Inc.

July 2004

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) has conducted studies to evaluate and document the proposed improvements to Interstate 75 (I-75) from south of Fowler Avenue in Hillsborough County to County Road (CR) 54 in Pasco County. A Project Development and Environment (PD&E) Study was conducted for the I-75 segment from south of Fowler Avenue to south of SR 56 in Hillsborough and Pasco Counties, Florida. A Design Change Reevaluation has been approved by the Federal Highway Administration (FHWA) for the remaining I-75 segment from south of SR 56 to CR 54 in Pasco County. The Reevaluation Study compared and documented the new approved design concepts to those contained in the I-75 PD&E Study that was approved by the FHWA on November 27, 2000. The combined length of these studies was approximately 13.9 miles.

This Endangered Species Technical Memorandum has been prepared to aid in determining the type, design and location of improvements to the existing facility and to evaluate the impacts, if any, associated with the alternatives for the proposed improvements.

Preliminary habitat and vegetative mapping of the study area was conducted in February 2002. The habitat and vegetation mapping was based on the Florida Land Use, Cover and Forms Classification System developed by the FDOT. Surveying for protected species was conducted on February 26 and December 17, 2002. The list of protected species potentially occurring within the study area is based on consideration of species range, available habitat within the study area, literature reviews, and agency coordination. The preliminary assessments and the habitats in the project area and agency coordination show that it is likely species known to use pine flatwoods with palmetto understory, longleaf pine-xeric oak, mixed coniferous forests, hardwood, and emergent wetlands may occur.

As a result of the survey efforts and research of the study area, 19 protected animals and 15 protected plants were identified as having the potential to utilize or inhabit the study area. Based upon the assessment detailed in this report, ongoing coordination with regulatory agencies and the commitments made by the FDOT, it has been determined that the proposed project is not likely to adversely affect the existence of any threatened or endangered species, even though they are known or expected to occur in the study area.

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) has conducted studies to evaluate and document the proposed improvements to Interstate 75 (I-75) from south of Fowler Avenue in Hillsborough County to County Road (CR) 54 in Pasco County. A Project Development and Environment (PD&E) Study was conducted for the I-75 segment from south of Fowler Avenue to south of SR 56 in Hillsborough and Pasco Counties, Florida. A Design Change Reevaluation has been approved by the Federal Highway Administration (FHWA) for the remaining I-75 segment from south of SR 56 to CR 54 in Pasco County. The Reevaluation Study compared and documented the new approved design concepts to those contained in the I-75 PD&E Study that was approved by the FHWA on November 27, 2000. The combined length of these studies was approximately 13.9 miles. Figure 1 indicates the limits of the PD&E and Reevaluation Studies.

The general objective of both Studies was to provide documented information necessary for the FDOT to reach a decision on the type, design and location of improvements to I-75. This study incorporated all recommended improvements contained in the FHWA approved Interchange Modification Report for I-75 at CR 581 (Bruce B. Downs Boulevard), hereinafter referred to as the I-75/CR 581 IMR.

The purposes of this Endangered Species Technical Memorandum (ESTM) are to:

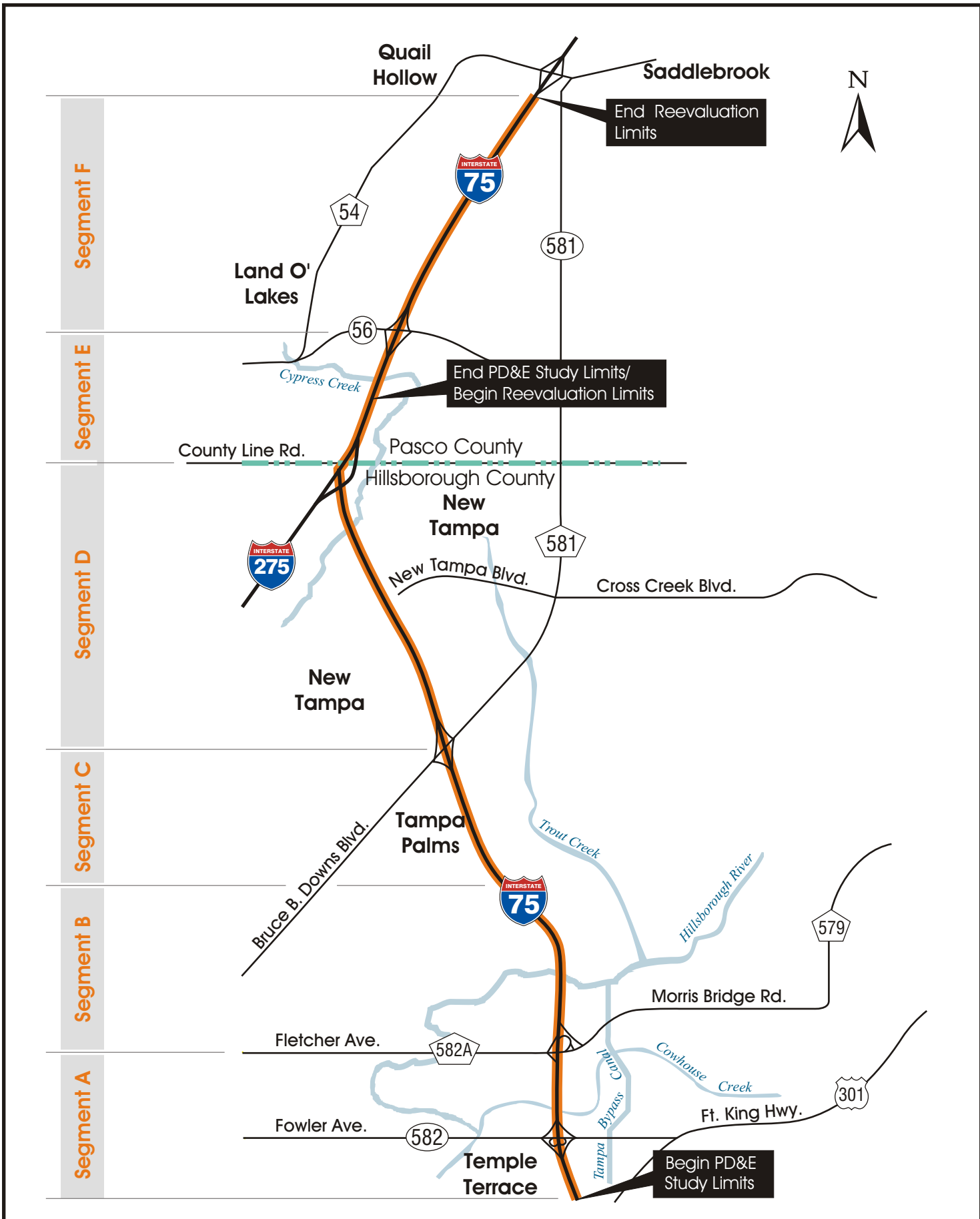
1. Identify the occurrence of threatened or endangered species and their habitats within the study limits;
2. Present qualitative information regarding potential impacts to threatened or endangered species and their habitats;
3. Define permitting and coordination requirements for the project; and
4. Request a project review and solicit comments from regulatory agencies with jurisdiction in the study area.

This ESTM was conducted in accordance with section 7 of the Endangered Species Act of 1973 as amended to assess the potential effects on threatened or endangered species and their habitats within the project study limits.

The FDOT will be pleased to answer any questions or conduct on-site reviews of the project for regulatory agency personnel. For further information regarding this report, please contact:

Mr. Todd Mecklenborg
Biologist
Florida Department of Transportation, District Seven
11201 North McKinley Drive
Tampa, Florida 33612-6403
(813) 975-6457

todd.mecklenborg@dot.state.fl.us



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PROJECT LOCATION MAP

Figure 1

2.0 PROJECT DESCRIPTION

The PD&E Study addressed proposed improvements to I-75 from south of Fowler Avenue in Hillsborough County to south of SR 56 in Pasco County. The existing facility is typically a four-lane limited access highway. This Study evaluated six-lane and six-lane with auxiliary lanes typical section alternatives and a No-Build Alternative.

A Design Change Reevaluation of Work Program Item Segment No. 258736 1 was approved by the FHWA for the I-75 section from south of SR 56 to CR 54. The previous PD&E Study, approved by the FHWA on November 27, 2000, evaluated adding two lanes (one lane in each direction) to the existing roadway from south of SR 56 to north of SR 52. This Reevaluation Study evaluated design changes within a portion of this original Study.

In order to simplify the alternatives analysis, the I-75 project corridor was divided into the following study segments:

- Segment A – from south of Fowler Avenue to Fletcher Avenue
- Segment B – from Fletcher Avenue to 3,000 feet north of the Hillsborough River
- Segment C – from 3,000 feet north of the Hillsborough River to Bruce B. Downs Boulevard
- Segment D – from Bruce B. Downs Boulevard to the I-275 interchange
- Segment E – from the I-275 interchange to SR 56
- Segment F – from SR 56 to CR 54

All segments were evaluated to determine the effects of providing additional capacity to accommodate future traffic demand.

3.0 NATURAL COMMUNITIES

Natural upland habitat types were initially identified through the use of 1 inch=400 feet scale color aerial photographs and Geographic Information System (GIS) data from the Southwest Florida Water Management District (SWFWMD) database. Following these mapping efforts, the study area was further evaluated through ground-truthing of habitat types. Floral and faunal communities were characterized in each natural habitat and are described below. There is no federally designated critical habitat within the project area.

3.1 Wetland Plant Communities

It is anticipated that this project will involve wetlands impacts. Wetlands and surface waters make up a major portion of the natural communities and are located throughout the project area. These wetlands consist of palustrine emergent, palustrine scrub-shrub, palustrine emergent/scrub-shrub, palustrine forested broad-leaved deciduous, palustrine forested needle-leaved deciduous, palustrine unconsolidated bottom, and riverine lower perennial unconsolidated bottom.

All wetlands identified are located within and adjacent to the proposed right-of-way. Two surface waters, the Hillsborough River and Cypress Creek, are designated as Outstanding Florida Waters according to 62-302.700, Florida Administrative Code (FAC). Cowhouse Creek, a tributary of the Hillsborough River is also within the project area. Additional information on wetland size, type, ecological condition, and potential for impacts can be found in the Wetland Evaluation Report, prepared under separate cover as part of this PD&E Study.

3.2 Upland Plant Communities

Upland plant communities within the project area consist of cropland and pastureland (FLUCFCS 210), improved pasture (FLUCFCS 211), pine flatwoods (FLUCFCS 411), longleaf pine-xeric oak (FLUCFCS 412), hardwood conifer mixed (FLUCFCS 434), and shrub and brushland (FLUCFCS 320).

Cropland and Pastureland

This category (FLUCFCS 210) includes agricultural land that is managed for producing row or field crops and improved, unimproved and woodland pastures. Along the project corridor, land consists of improved pasture (FLUCFCS 211) that has been cleared and seeded with grass. Most of the pasture in this area is composed of bahiagrass (*Paspalum notatum*) dotted with herbaceous depressional wetland systems and small clusters of saw palmetto (*Serenoa repens*) or oaks (*Quercus* spp.). Very few trees are present in these areas. Smaller areas of improved pasture in combination with single-family residences exist adjacent to the east and west right-of-way throughout the remainder of the project area. Cattle are present on some of the improved pastures within the project corridor. This habitat type is prevalent throughout the project area where large expanses of improved pasture exist, extending well off the roadway right-of-way both to the east and west.

Hardwood Conifer Mixed

This upland habitat type (FLUCFCS 434) includes areas where neither upland conifers nor hardwoods achieve 66 percent crown canopy dominance. Vegetation in this habitat type includes pines (*Pinus* spp.), oaks, cabbage palm (*Sabal palmetto*), American beautyberry (*Callicarpa americana*), tickseed (*Bidens* spp.), saw palmetto, persimmon (*Diospyros virginiana*), gayfeather (*Liatris* spp.), and jointweed (*Polygonella gracilis*). This habitat type can be found throughout the project corridor, adjacent to the right-of-way.

Pine Flatwoods

This type of upland community (FLUCFCS 411) is dominated by slash pine (*Pinus elliottii*), longleaf pine (*Pinus palustris*) and less frequently, pond pine (*Pinus serotina*). The common flatwoods understory species include saw palmetto, wax myrtle (*Myrica cerifera*), gallberry (*Ilex glabra*), and a wide variety of herbs and grasses. The pine flatwoods communities occur in small quantities along the project corridor. Slash pine is the dominant pine tree found in these systems, although longleaf pine is also present. Saw palmetto, gallberry, beautyberry, winged sumac (*Rhus copallina*), goldenrod (*Euthamia caroliniana*), Virginia creeper (*Parthenocissus quinquefolia*), and bracken fern (*Pteridium aquilinum*) make up the ground cover in this habitat. Linear areas of planted pines also exist along and within the roadway right-of-way.

Longleaf Pine-Xeric Oak (Sandhill)

This community type (FLUCFCS 412) is dominated by longleaf pine with a midstory canopy of blue-jack oak (*Quercus incana*), turkey oak (*Quercus laevis*), sand post oak (*Quercus margaretta*), and other hardwoods. Slash pine is also a canopy component in this habitat type. Ground cover includes bahiagrass, yellow buttons (*Balduina angustifolia*), rough-leaf goldenaster (*Chrysopsis scabrella*), tread softly (*Cnidosculus stimulosus*), silk-grass (*Pityopsis graminifolia*), elephant's-foot (*Elephantopus elatus*), wiregrass (*Aristida beyrichiana*), and various amounts of leaf litter. Within the project corridor, this community is located in small clusters along the right-of-way edge.

Shrub and Brushland

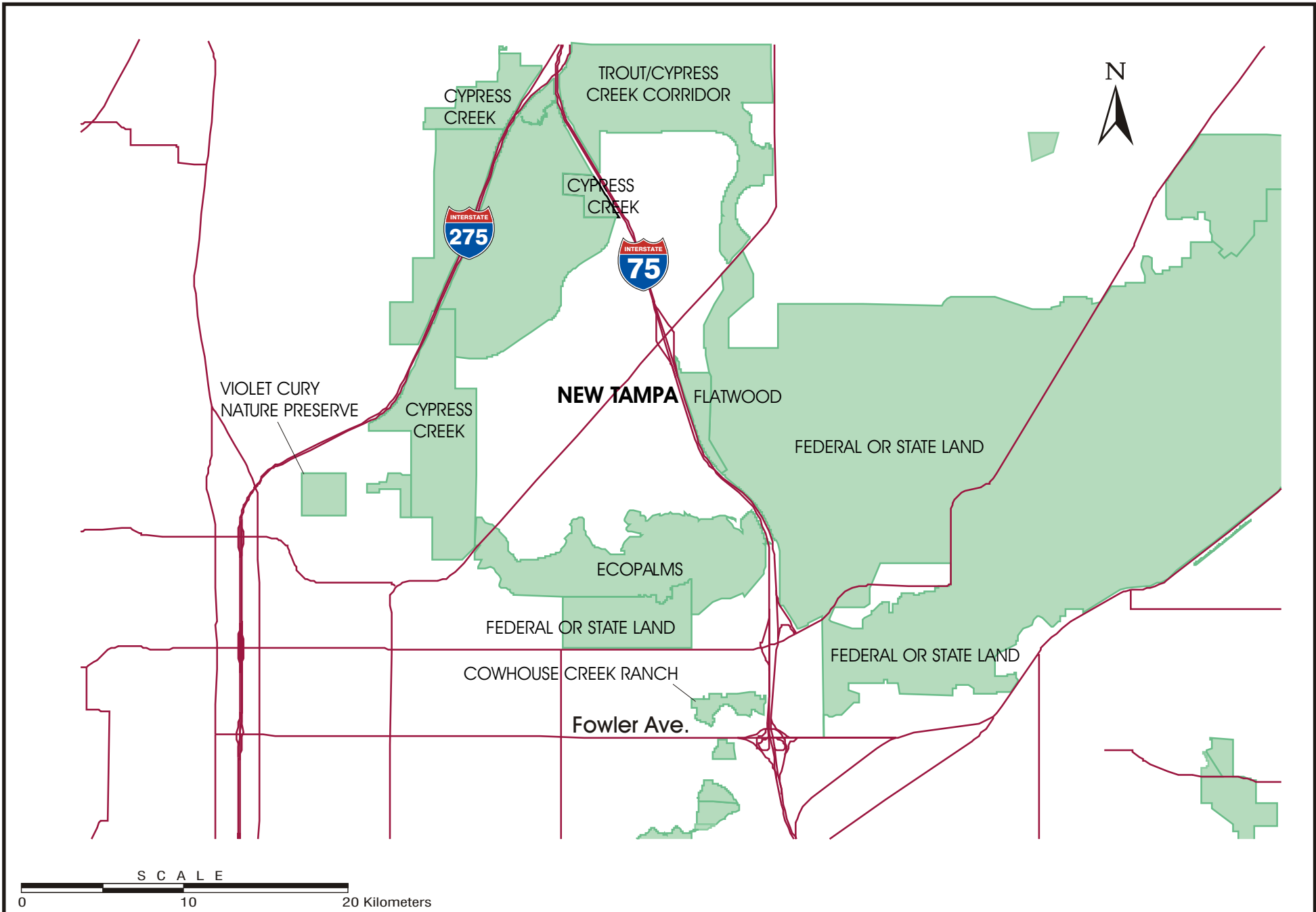
This category (FLUCFCS 320) includes areas with saw palmetto, gallberry and wax myrtle. Saw palmetto is generally the most prevalent vegetative component, intermixed with a variety of woody scrub plants as well as various types of short herbs and grasses. This habitat type is generally found in a somewhat degraded capacity throughout the project area, especially within Hillsborough County.

3.3 Conservation Lands

Approximately 20 percent of the project corridor contains conservation lands primarily affiliated with the Hillsborough River and Cypress Creek. In Hillsborough County, these lands include areas acquired through the Environmental Lands Acquisition and Protection Program (ELAPP), which was established for the purpose of acquiring, preserving and protecting endangered and environmentally sensitive lands. The locations of these preserved areas are indicated in Figure 2. Other preservation areas within the county include the Lower Hillsborough Flood Detention Area which was acquired by the SWFWMD in order to protect the cities of Tampa and Temple Terrace from flooding.

4.0 GENERAL SPECIES SURVEYS

Preliminary data for this report were collected through literature and online searches of available information to determine if protected species and critical habitat occur within the project area. Data sources reviewed include the Florida Breeding Bird Atlas online data (FFWCC, 1995), Eagle nest locator data online (FFWCC, 2002), Bureau of Protected Species Management online data (FFWCC, 2002), Florida Natural Inventory Data (FNAI, 1997-1999), Florida Division of Forestry (DOF, 2002) online data for Federally-listed Plants, FFWCC Official Lists of Florida's Endangered Species, Threatened Species, and Species of Special Concern (1997), Field Guide to the Rare Animals and Plants of Florida (FNAI, 2000), and SWFWMD and Florida Geographic Data Library (FGDL) GIS databases. Field reviews and pedestrian surveys of the project corridor were conducted on February 26 and December 17, 2002, during daylight hours. A list of threatened and endangered plants and animals that may occur within the project area was developed after review of available information. Additionally, aerial photographs of the project area and the Hillsborough County (NRCS, 1989) and Pasco County (NRCS, 1982) soil surveys were reviewed in order to assess and quantify the habitat types that may contain protected species.



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CONSERVATION LANDS WITHIN PROJECT CORRIDOR

Figure 2

These habitats were then assigned a FLUCFCS code (FDOT, 1999) and potentially occurring species were noted for each location within the project area. Lists of potentially occurring threatened and endangered floral and faunal species that may reside in or utilize the study area were developed, as shown in Table 1 and Table 2.

**Table 1
Protected Fauna Potentially Occurring Within the I-75 Study Area**

Scientific Name	Common Name	USFWS	State
Amphibians and Reptiles			
<i>Alligator mississippiensis</i>	American alligator	T (S/A)	SSC
<i>Drymarchon corais couperi</i>	Eastern Indigo snake	Threatened	Threatened
<i>Gopherus polyphemus</i>	Gopher tortoise	Not listed in FL	SSC
<i>Pituophis melanoleucus mugitus</i>	Florida Pine snake	None	SSC
<i>Rana capito</i>	Gopher frog	None	SSC
Mammals			
<i>Sciurus niger shermani</i>	Sherman's fox squirrel	None	SSC
<i>Podomys floridanus</i>	Florida mouse	None	SSC
Avian			
<i>Ajaia ajaja</i>	Roseate spoonbill	None	SSC
<i>Aramus guarauna</i>	Limpkin	None	SSC
<i>Athene cunicularia floridana</i>	Florida burrowing owl	None	SSC
<i>Egretta caerulea</i>	Little blue heron	None	SSC
<i>Egretta rufescens</i>	Reddish egret	None	SSC
<i>Egretta thula</i>	Snowy egret	None	SSC
<i>Egretta tricolor</i>	Tricolored heron	None	SSC
<i>Eudocimus albus</i>	White ibis	None	SSC
<i>Falco sparverius paulus</i>	Southeastern American kestrel	None	Threatened
<i>Grus canadensis pratensis</i>	Florida sandhill crane	None	Threatened
<i>Haliaeetus leucocephalus</i>	Bald eagle	Threatened	Threatened
<i>Mycteria americana</i>	Wood stork	Endangered	Endangered

Notes: T (S/A) = Threatened by similarity of appearance
SSC = Species of Special Concern

Table 2
Protected Flora Potentially Occurring Within the I-75 Study Area

Scientific Name	Common Name	USFWS	State
<i>Adiantum tenerum</i>	Brittle maidenhair fern	None	Endangered
<i>Asclepias curtissii</i>	Curtiss' milkweed	None	Endangered
<i>Asplenium auritum</i>	Auricled spleenwort	None	Endangered
<i>Blechnum occidentale var. minor</i>	Sinkhole fern	None	Endangered
<i>Bonamia grandiflora</i>	Florida bonamia	Threatened	Endangered
<i>Cheiroglossa palmate</i>	Hand fern	None	Endangered
<i>Chrysopsis floridana</i>	Florida goldenaster	Endangered	Endangered
<i>Glandularia tampensis</i>	Tampa vervain	None	Endangered
<i>Lechea cernua</i>	Nodding pinweed	None	Threatened
<i>Lechea divaricata</i>	Spreading pinweed	None	Endangered
<i>Litsea aestivalis</i>	Pondspice	None	Endangered
<i>Pteroglossaspis ecristata</i>	Giant orchid	Management concern	Threatened
<i>Schwalbea americana</i>	Chaffseed	Endangered	Endangered
<i>Triphora latifolia</i>	Broad-leaved nodding caps	None	Endangered
<i>Zephyranthes simpsonii</i>	Rain lily	None	Threatened

5.0 RESULTS

The results of the February 26, 2002 field inspection indicated the presence of several gopher tortoise (*Gopherus polyphemus*) burrows along the eastern side of the right-of-way. These were located along the grassed edges of the maintained portions of the right-of-way, where dry, sandy soils persist. These gopher tortoise burrows were not evident during the site visit conducted on December 17, 2002. No specific occurrences or observations were made for any other listed species that would occur within Hillsborough and Pasco Counties. The lack of specific habitat for listed species within the study area is to be expected as the corridor is urban in nature and is highly developed in some areas. Additionally, no native upland habitats will be affected as a result of the project.

Coordination with the Florida Fish and Wildlife Conservation Commission (FFWCC) indicates that there are no known bald eagle nests within 1 mile of the I-75 project site. No occurrence records of listed species or critical habitat are contained within the FFWCC database for the project area.

No threatened or endangered plant species were observed within the project corridor.

A bird rookery and nesting area exists adjacent to the project area south of the apex between the I-275 northbound and I-75 southbound lanes (Figure 3). It is entirely contained within the Cypress Creek Preserve, land acquired through the Hillsborough County ELAPP Program. Several types of wading birds including wood storks utilize this rookery. Although this area will not be directly impacted by the proposed project, additional field surveys, coordination and impact analysis will be required during the design phase of this project to insure that impacts to the rookery are minimized or avoided to a practicable extent.

6.0 COMMITMENTS AND CONCLUSIONS

Based upon the findings of the preliminary data collection, the general corridor surveys and ongoing coordination with the USFWS and FFWCC, the following commitments are made:

1. Due to the prior presence of active and inactive gopher tortoise burrows adjacent to the existing right-of-way, a gopher tortoise survey within construction limits (including roadway footprint, construction staging areas and stormwater management ponds) will be performed prior to construction. Agency coordination will be conducted and appropriate permitting will be completed as necessary.
2. Based on the newest habitat management guidelines for wood storks (USFWS, 2002b), all non-forested wetlands within 30 km (18.6 miles) of a wood stork nesting area are considered to be Core Foraging Area (CFA). These guidelines require that any affected non-forested wetlands within the CFA be mitigated within the CFA. Agency coordination will be conducted and appropriate mitigation within the CFA will be provided.
3. To help assure that protected species are not adversely affected by future project activity (i.e., construction activity) outside the proposed right-of-way, and by those activities where their locations have not been identified (e.g., staging/disposal areas, fill/disposal areas, and access roads), the FDOT is committed to siting activities outside of protected species habitat to the fullest extent practicable. Additionally, consideration for protected species involvement will be incorporated into the project design to avoid adverse effects. In the event that occupied protected species habitat cannot be avoided, the FDOT will coordinate with the USFWS to minimize and/or mitigate any impacts.
4. Impacts to wetlands along the edges of the existing roadway facility will be unavoidable and mitigation will be required. Mitigation for wetland impacts associated with this project will be compensated pursuant to Part IV, Chapter 373, F.S. and 33 U.S.C. 1344.

Given the above commitments and previously mentioned data collection efforts, it has been determined that the proposed project may affect, but is not likely to adversely affect or jeopardize, the existence of any threatened or endangered species, although they are expected to occur in the study area.



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BIRD ROOKERY LOCATION MAP

Figure 3

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