

### DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS TALLAHASSEE REGULATORY FIELD OFFICE 2051 EAST DIRAC DRIVE, SUITE 123H TALLAHASSEE, FLORIDA 32310-3760

February 6, 2003

Regulatory Division North Permits Branch Tallahassee Regulatory Office 200200233 (NW-JWS)

Florida Department of Transportation c/o Frank Roberts P.O. Box 607 Chipley, Florida 32428

Dear Mr. Roberts:

REPLY TO ATTENTION OF

Reference is made to your Department of the Army permit, application number 200200233 (NW-JWS), requesting authorization to discharge permanent fill over 0.17 acres of wetlands for the construction/widening of a bridge/approaches and construction of a temporary road crossing (0.42 acres) over Little Tide Creek. The project is located on US 319 (CR 377), Section 26, Township 05 South, Range 03 West, Sopchoppy, Wakulla County, Florida.

This verifies that your fill proposal is authorized by Nationwide Permit Number 14.

All mitigation requirements shall be adhered to and implemented as outlined in the attached 15-page Regional Mitigation Plan for Tates Hell State Forest, as provided by the Northwest Florida Water Management District (NWFWMD).

The Nationwide Permit authorization is approved in accordance with our regulations as stated in the January 15, 2002, Federal Register, Notice of Issuance of Nationwide Permits (67 FR 2020). This verification is valid for two years from the date of this letter, unless this Nationwide Permit is modified, reissued or revoked. It is incumbent on you to remain informed of changes in these nationwide permits. We will issue a public notice announcing any changes when they occur.

In the event that you have not completed the project within the construction window, reverification of your proposed work through the normal application review process will be required. A separate Department of the Army permit is not required providing the work is done in accordance with the enclosed drawings and the nationwide permit conditions (copy enclosed).

This letter does not obviate the requirement to obtain any State or local permits, which may be necessary for your proposed work.

In Florida, projects qualifying for this NWP must be authorized under Part IV of Chapter 373 by the Department of Environmental Protection, a water management district under s. 373.069, F.S., or a local government with delegated authority under s. 373.441, F.S. and receive Water Quality Certification (WQC) and Coastal Zone Consistency Concurrence (CZCC) or waiver thereto, as well as any authorizations required for the use of sovereignty submerged lands that must be obtained as part of the associated WQC or CZCC. You should check State permitting requirements with the Florida Department of Environmental Protection (FDEP) at (850) 488-3704 or the appropriate Water Management District (WMD).

A nationwide permit verification does not give absolute authority to perform the work as specified on your application. The proposed work may be subject to local building permits to determine if your site is located in a flood-prone or floodway area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program. If the local office cannot provide you the necessary information, you may provide this office a letter with a small-scale map showing the location of the site, requesting a flood-hazard evaluation of the site. The request should be addressed to the U.S. Army Corps of Engineers, Flood Control and Floodplain Management Branch, Attn: CESAM-PD-FS, P.O. Box 2288, Mobile, Alabama 36628-0001.

Thank you for your cooperation with our regulatory program. If you have any questions, please contact Jason Steele at (850) 576-0790.

Sincerely,

Keey Funch

for Marie G. Burns Chief, North Permits Branch Enclosures: Nationwide Permit Number 14 Nationwide General Conditions Mitigation Requirements/Special Conditions Self-Certification Statement Request for Permit Transfer Permit Drawings Regional Mitigation Plan (drafted by NWFWMD) Copy Furnished: EC Driver & Associates, Inc. (Attn: Donald Padgett) 7119 Beech Ridge Trail Tallahassee, Florida 32312-5075 NWFWMD (Attn: Duncan Cairns) 81 Water Management Drive Havana, Florida 32333 CESAJ-RD-E (Attn: Alice Kirkland) P.O. Box 4970 Jacksonville, Florida 32232-0019

# MITIGATION REQUIREMENTS AND SPECIAL CONDITIONS ISSUED WITH NATIONWIDE PERMIT VERIFICATION 200200233 (NW-JWS)

# If any work is performed under this permit, the following special conditions must be met:

1) If the approved permit drawings conflict with the specific conditions, then the specific conditions shall prevail.

2) All persons/contractors involved in this permitted activity shall be provided copies of this permit in its entirety. A copy shall remain on site at all times during construction.

3) Prior to any fill being placed on the site, toed-in silt fence with staked haybales shall be installed at the limits of the uplands and permitted fill areas to assist in containing fill. These erosion controls shall be inspected/maintained daily to prevent sedimentation into wetlands.

4) Within 60 days of completion of the work authorization and mitigation, the attached "Nationwide Compliance Certification" must be completed and submitted to the U.S. Army Corps of Engineers. Mail the completed form to the Regulatory Division, Enforcement Branch, Attn: Alice Kirkland, Post Office Box 4970, Jacksonville, Florida 32232-0019.

5) No heavy equipment or mechanical clearing is permitted in wetlands outside of the permanent and temporary fill footprint areas.

6) All slopes shall be stabilized with sod, degradable mats and/or seed and mulch. Erosion controls in the form of toed-in silt fencing and staked hay bales will be installed and maintained until the vegetative cover is established.

7) The permittee shall notify the U.S. Army Corps of Engineers, Tallahassee Regulatory Office, 2051 East Dirac Drive, Suite 123H, Tallahassee, Florida 32310 upon commencement <u>and</u> completion of work authorized by this permit. Such notification must be provided within 14 days of initiation <u>and</u> completion of the authorized work.

8) Prior to construction, the limits of the proposed fill areas shall be clearly flagged and staked by the agent and/or contractor. All construction personnel shall be shown the

location(s) of all wetland areas outside of the construction area to prevent encroachment from heavy equipment into these areas.

9) No building materials, tools or other equipment shall be stockpiled in wetlands or other waters of the United States. All excess materials, tools and equipment shall be removed immediately upon completion of the activity.

10) No wetland vegetation, other than that necessary to access and construct the permanent and temporary roads, shall be removed.

11) The following sequence and reporting requirements shall be followed for the temporary impact of the 0.42 acres required for the temporary road crossing:

(a) Prior to the placement of fill material for the temporary road crossing, the areas shall be photographed and shall be marked to clearly show the pre-fill condition of the area.
Photograph locations shall be identified on a permit drawing.
The photographs and location drawing shall be submitted to the US Army Corps of Engineers, Enforcement Branch, Attn: Alice Kirkland, Post Office Box 4970, Jacksonville, Florida 32236 prior to placement of fill in this area.

(b) Before placement of fill, filter fabric will be placed within the area, of the temporary road crossing, to provide a reference point that will enable the contractor to more easily return the area to its pre-construction conditions.

(c) Within 9 months of the temporary road crossing being built, the temporary road crossing shall be removed and restored to its pre-construction condition.

(d) Within 72 hours of removing all fill from the temporary road crossing area, photographs of the area shall be taken from the same locations as required in (a). These photographs shall be combined with the photographs required in (a) and the location map required in (a) and shall be submitted to the US Army Corps of Engineers, Enforcement Branch, Attn: Alice Kirkland, Post Office Box 4970, Jacksonville, Florida 32236 within 14 days of the completion of the restoration work.

(e) Six months after restoring the temporary road crossing area, and for one year thereafter, photographs of the area shall be taken from the same locations as required in (a), so as to

clearly show the restoration area is naturally revegetating with desired plant species. These photographs and a map showing the photograph locations shall be submitted to the US Army Corps of Engineers, Enforcement Branch, Attn: Alice Kirkland, Post Office Box 4970, Jacksonville, Florida 32236 within 14 days of their being taken.

(f) The restoration area shall be considered successful when the following is met:

 The vegetative cover shall be at least 85% coverage continuously for a period of one year with jurisdictional wetland vegetation. Nuisance and exotic species shall be limited to less than 5% of the total vegetative cover and hydrology and hydric soils, as defined by the 1987 Corps of Engineers Wetland Delineation Manual (87 Manual) shall be present in the restoration area.

(g) A monitoring report shall be conducted for a minimum of one year for the restored wetlands and shall continue (if necessary) until the restoration success criteria is met, as outlined above. The reports shall be submitted every twelve months to the US Army Corps of Engineers, Enforcement Branch, Attn: Alice Kirkland, Post Office Box 4970, Jacksonville, Florida 32236 indicating the status of the project. The cover page shall indicate the permit number, project name and the permittee name. The first annual progress report shall be submitted twelve months from the date of permit issuance, and reports shall continue to be submitted until all work authorized by the permit, including restoration, has been completed. The report shall include the following information:

- a. Date permitted activity was begun; if work has not begun onsite, please so indicate.
- b. Brief description of extent of work (i.e. dredge, fill, monitoring, restoration, management, maintenance) completed since the previous report or since the permit was issued. Show on copies of the permit drawings those areas where work has been completed.
- c. Brief description and extent of work (i.e. dredge, fill, monitoring, restoration, management, maintenance) anticipated in the next twelve months. Indicate on copies of the permit drawings those areas where it is anticipated that work will be done.

- d. The progress of the permitted restoration program. The reports shall include; photographs taken from the permanent stations, some of which must be in the vegetation sampling areas, a description of problems encountered and solutions undertaken, and anticipated work for the next twelve months.
- e. This report shall include on the first page, just below the title, the certification of the following statement by the individual who supervised preparation of the report: "This report represents a true and accurate description of the activities conducted during the twelve month period covered by this report."

(h) The permittee has a continuing obligation to complete the wetland restoration, to correct any unsuccessful attempts to restore the wetlands, and to complete the monitoring and maintenance beyond the expiration date of this permit. If the restoration area is not found to be successful 120 days prior to the expiration date of this permit, the permittee shall submit a written report including any proposed remedial measures, if necessary, to be taken to ensure future success.

12) All mitigation requirements shall be adhered to and implemented as outlined in the attached 15-page Regional Mitigation Plan for Tates Hell State Forest, as provided by the Northwest Florida Water Management District (NWFWMD).

## SELF-CERTIFICATION STATEMENT OF COMPLIANCE

## Permit Number: 200200233 (NW-JWS)

Permittee's Name & Address (Please print or type):\_\_\_\_\_

Telephone Number:\_\_\_\_\_

Location of the Work:

Date Work Started:\_\_\_\_\_ Date Work Completed:

Description of the Work (e.g. bank stabilization, residential or commercial filling, docks, dredging, etc.):\_\_\_\_\_

Acreage or Square Feet of Impacts to Waters of the United States:

Describe Mitigation completed (if applicable):\_\_\_\_\_

Describe any Deviations from Permit (attach drawing(s) depicting the deviations):

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I certify that all work, and mitigation (if applicable) was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

Signature of Permittee

Date

### DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: 200200233 (NW-JWS)

When the structures or work verified by this nationwide are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property.

To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, the transferee should sign and date below. Following completion, the form should be returned to the U.S. Army Corps of Engineers, Tallahassee Regulatory Office, 2051 East Dirac Drive, Suite 123H, Tallahassee, Florida, 32310.

(TRANSFEREE -	SIGNATURE)			

(DATE)

(NAME - PRINTED)

(SUBDIVISION)

(LOT/BLOCK)

(MAILING ADDRESS)

(CITY, STATE, ZIP CODE)



# <u>SR-377(US-319) OVER LITTLE TIDE CREEK</u>



PROJECT LOCATION



JUL 2 2 2002 D E P TALLAHASSEE BRANCH OFFICE

#### CONSTRUCTION DESCRIPTION

- 1. As the first step in the construction process the Contractor will clear and grub the orea required to place the fill for the temporary on-site diversion.
- 2. The Contractor will then place filter fabric over the newly cleared area in order to provide a reference point that will enable the contractor to more easily return the site to its pre-construction contours.
- 3. All unsultable material (muck) that is excavated by the Contractor will be removed from the project site and disposed of in an appropriate location as required in the FDOT Standard Specifications for Road and Bridge Construction. All material used in the temporary on-site diversion will also be removed from the project site and be disposed as indicated for the unsultable material.
- 4. The temporary fill will be in place for approximately 3 months. The area of temporary impact is approximately 0.42 Acres.
- 5. The permanent impacts on the project are confined to the area in the close vicinity of the bridge replacement. The permanent impacts will be from the placement of the new box culvert and the realignment of the roadway ditches required to ensure that they continue to function properly. The area of permanent impact is approximately 0.17 Acres.

## POST CONSTRUCTION MONITORING

- I. The pre-construction condition of the site was documented by the FDOT in their Project Concept Report that is prepared prior to beginning design of a project. The project site must be returned to this condition, and the preferable means is by natural revegetation.
- 2. The FDOT will monitor the site as required by the USACOE to determine if natural revegetation is occurring. A report will be prepared by the FDOT six months following the completion of construction to determine if natural regrowth is occurring and to determine if the removal of exotics is required. This report will contain photographs as appropriate to document the findings at the site. Monitoring and the preparation of the report shall be conducted by someone knowledgeable in the area of environmental mitigation.
- 3. Another report will be prepared one year following the completion of construction. If natural revegetation has not occurred to a point that ensures that the area will completely recover then the FDOT will replant the area with species native to the project site.

L:220506 permits/prmtgannates.dgn	······································		ADDITIONAL I	NFORMATION
PROJECT DESC. SR.377 (US319) OVER LITTLE TIDE CREEK	FLORIDA DEPARTMENT OF TRANSPORTA ION	ECDrive	FINANCIAL PROJ	. ID. 220507-1-52-01
	Naura Onorid & Bidgett	& Assoc	CREEK. WA	KULLA COUNTY
TWP: 5 SOUTH RNG: 3 WEST	SIGNATURE Denail Defratt	DEP	USCG N.A.	SHEET 5
SEC 26	CERTIFICATE NO DATE: /////	USACOE	NWFWMD N.A.	DATE 10/07/02

1. . . . . . . . .



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ATTACHMENT FOR MITIGATION PLAN FOR
THREE WAKULLA COUNTY BRIDGES
0.17 US 319 (CR 377) @ Little Tide Creek—600 acre (200200233 NW-JWS) US 319 (CR 377) @ Curtis Mill Creek—0.20 acre (200205045 NW-JWS) Roberts Landing Rd. @ Silver Lake Cr—0.19 acre (200205047 NW-JWS)
220506-1-52-01; 220507-1-52-01; 406226-1-52-01
Tates Hell / Womack Creek Wetlands

### SCOPE

Replacement of three bridges in Wakulla County (US 319 @ Little Tide Creek (200200233 NW-JWS); US 319 @ Curtis Mill Creek (200205045 NW-JWS); Roberts Landing Road @ Silver Lake Creek (200205047 NW-JWS)) is anticipated to impact 0.56 acre of wetland (per US Anny Corps estimate). Normally, environmental consultants are retained by FDOT to assess and quantify wetland impacts caused by FDOT. However, no information on the type of wetlands being impacted by this project has been provided by FDOT. Analysis of 1999 DOQs and a site visit by NWFWMD staff indicate the impact wetlands were historically bottomland hardwood forest which is now maintained as part of the highway right-of-way. Any measures taken to avoid and minimize wetland impacts are the responsibility of FDOT. The NWFWMD is responsible for designing and implementing mitigation based on estimates of impacts (acreage, FLUCCS type and functional assessment when attainable) provided by FDOT.

In order to plan for sufficient mitigation, for purposes of developing this mitigation plan, it is assumed that the wetlands being impacted are of the highest quality and will be completed destroyed. In actuality, the impact wetlands are lower quality roadside areas diminished by right-of-way maintenance (mowing, etc.), runoff, and altered hydrology from ditches and berms. Preliminary WRAP scores conducted by the NWFWMD staff of the impact sites indicate a total loss of 0.28 WRAP functional units.

## PROJECT GOAL

The goal of this mitigation plan is to adequately compensate for the loss of wetlands and wetland function associated with the FDOT project. To accomplish this, the NWFWMD intends to restore/enhance wetlands within the eastern portion of Tates Hell State Forest. Tates Hell State Forest is owned by the State of Florida and is managed by the Florida Division of Forestry (DOF). Measures will be taken to ensure perpetual preservation and ecological management of wetlands used for mitigation of this FDOT project. These measures will include sufficient funds for long term management. Ecological preservation and management of the mitigation site will be incorporated into DOF's Tates Hell Management Plan. Various sites in Tates Hell were examined as potential mitigation for this FDOT project. After consideration by NWFWMD staff, the site described below was determined to be most appropriate. It is anticipated that mitigation activities on the site will be initiated by late 2003/early 2004.

## MITIGATION SITE

The proposed mitigation site is in the Womack Creek drainage of Tates Hell Swamp. The proposed mitigation area is directly adjacent to the Choctawhatchee River and consists of a total of ~70 acres, ~50 acres that was historically hydric pine and ~20 acres of forested hardwood wetlands. The hydric pine areas were clear cut in the early 1990's and not replanted. The associated hardwood wetlands remained in tact and were not disturbed. Following the clear cut, the historically hydric pine areas were left fallow and allowed to regenerate. The cut over areas are now dominated by 6-20' laurel oaks, live oaks, water oak, sweet gum, maple and titi. Aerial photography flown in 1953 indicate that the site was primarily hydric pine flatwwods with some mixed hardwoods due to the fire exclusion. The NWFWMD proposes mitigate for the FDOT wetland impacts within the 70 acre site by restoring 50 acres of clear cut hydric pine by using a modified roller chop method for a site preparation, followed by burning and replanting 10 acres of the site with wire grass plugs. In tum the associated hardwood wetlands will be enhanced through the restoration of a historic high quality wetland buffer. The Womack Creek Wetlands site is appropriate as mitigation for this FDOT project because of 1) proximity to impact (within ~5 miles of all impacts), 2) mitigation funds available for this FDOT project, 3) its occurrence within the same watershed as the impact wetlands (i.e., the Ochlockonee Basin), and 4) enhancing the wetland buffer adjacent to the hardwood forested wetland.

Florida Division of Forestry staff at Tates Hell State Forest are supportive of this restoration proposal. However, there are no existing State Forest plans or funding available to do so. Using FDOT mitigation dollars to restore the site would not constitute a supplanting of other funding. The NWFWMD has worked well with Tates Hell State Forest in restoring other sections of Tates Hell Swamp. The NWFWMD will be responsible for ensuring that the restored area will be managed by DOF for ecological integrity in perpetuity.

## TATES HELL STATE FOREST

Tates Hell Swamp covers some 200,000 acres (>300 mi<sup>2</sup>) of low-lying, poorly drained land between the Apalachicola and Ochlockonee rivers in the Florida Panhandle. Although this area historically was dominated by a variety of wetland types including wet savanna, wet flatwoods, cypress strands and hardwood swamps, much of the swamp was converted to slash pine (*Pinus elliotii*) plantation during the 1960s and 1970s. Degradation of Tates Hell from silvicultural operations included the construction of over 800 miles of

logging roads and drainage ditches, and the establishment of bedded pine stands. These actions disrupted natural flow patterns and caused a lowering of the water table across large sections of the swamp and ponding of some specific locations due to road construction. With the replacement of much of the natural vegetation with stands of bedded pine, the natural functions and biotic diversity (flora and fauna) of the swamp also were severely impacted.

The ecological health of the Ochlockonee and Apalachicola systems is strongly influenced by freshwater flows from Tates Hell. In the early 1990s, the NWFWMD and the State of Florida began acquiring portions of Tates Hell Swamp for wetland habitat preservation and to forestall further water quality declines. Public acquisitions now total some 150,000 acres (i.e., approximately 75% of the swamp), and are managed by the Florida Division of Forestry (DOF). Since 1993, the Northwest Florida Water Management District (NWFWMD), working with DOF, has conducted restoration of portions of Tates Hell Swamp. A long-term vision is eventual restoration of the natural communities of the entire swamp. This mitigation project will complement these ongoing efforts by focusing on an area not previously slated for restoration activities.

## NATURAL RESOURCE MANAGEMENT

The NWFWMD would reach agreements with the Florida Division of Forestry (DOF) to ensure long-term management to preserve ecological and water resources. This will include incorporation of preservation strategies within the DOF Tates Hell Management Plan and provision of adequate funds for long-term preservation and ecological management.

The stated mission of the Florida Division of Forestry is to protect and maintain the biological diversity of the many ecosystems found in and around the state forests while integrating public use of the resources.

## SUCCESS CRITERIA

Success criteria will consist of the implementation of appropriate mitigation at a site within the eastern portion of the Tates Hell State Forest. Historically, the site selected appeared to be a hydric pine flatwoods. Following a clear cut in the early 1990's the site regenerated as laurel oak, water oak, sweet gum, and titi thickets. It is anticipated that restoration/enhancement activities will consist of a May bulldozer chop coupled with a July burn. Previous studies have demonstrated that the historic seedbank will provide a seed source and biodiversity should greatly increase following the burn. Following the burn, 10 acres will be planted with wire grass plugs on 3' spacing (e.g., fixed-point photo documentation, vegetation transects and plots, etc.), management, and reporting will be conducted annually for the next four years. Monitoring reports describing the condition of the vegetation will be sent to the ACOE annually. Specific implementation and success criteria, as appropriate shall include of the following:

- 1. Mechanical reduction and burn in 2004.
- 2. Supplemental planting of 10 acres with wire grass plugs on 3' centers.
- 3. Survival of the planted wire grass plugs shall be 85%.
- 4. Nuisance exotic species, if present, shall be controlled and kept to less than 5% of the total percent cover for the duration of the permit.

# APPLIED MITIGATION RATIO AND FUNCTIONAL ASSESSMENT

Mitigation ratios and/or functional assessment analyses, if necessary, will be determined through consultation with permitting agencies. At present, the NWFWMD is proposing ~100 to 1 (ratio of mitigation acres to impact acres).

## FUNDING

Funding for mitigation activities would come from FDOT mitigation funds. At a maximum rate of \$84,548 per acre of impacted wetland, 0.56 acre of wetland impact would result in \$47,346.88 in funding. All reasonable attempts will be made to maximize cost savings throughout this project.

Preliminary Cost Estimates	
Planning (5%)	2,367.34
Mitigation Activities (95%)	44,979.54
Total	\$47,346.88

## WORK SCHEDULE

2002/2003

• Coordination with Florida Division of Forestry (Tates Hell State Forest) to develop appropriate mitigation plan.

## 2003/2004

• Implement mitigation plan.

## NWFWMD PERSONNEL TO IMPLEMENT MITIGATION

Robert F. Lide – Environmental Scientist David Clayton – Environmental Scientist Duncan J. Cairns – Chief, Environmental and Resource Planning Bureau Dan L. Tonsmeire – Associate Water Resources Planner Ron Bartel – Director, Resource Management Division

Other NWFWMD personnel may be called upon as needed.

## CONTINGENCY PLANS

Ample wetland restoration/enhancement opportunities exist within Tates Hell State Forest. If the NWFWMD is unable to implement mitigation in a section of Tates Hell specifically approved by permitting agencies, measures will be taken, in consultation with the permitting agencies, to implement other appropriate mitigation elsewhere within Tates Hell State Forest. Mitigation efforts will continue until the wetland impacts have been adequately compensated.

# **REGIONAL MITIGATION PLAN**

## **BACKGROUND INFORMATION**

Mitigation Project Name: Womack Creek Wet	lands Pro	ject Number ovided by FDEP):		
Project Manager: Duncan J. Cairns	Pho	<b>Phone Number: 850-539-5999</b>		
County: Franklin				
Location of Mitigation Project (Central Lat/L	ong): 30° l'30" N / 84° 35' l	13" W; Section 2 T6S R4W		
IMP	ACT INFORMATION			
IMP. FDOT FM#: FM 2205061, FM 2205071; FM 4062261	ACT INFORMATION ERP #: Not Applicab	le <b>COE#</b> 20220547 (NW-JWS), 200205045 (NW-JWS), 200200233 (NW-JWS)		
IMP. FDOT FM#: FM 2205061, FM 2205071; FM 4062261 Drainage Basin: Ochlockonee River Watershed	ACT INFORMATION ERP #: Not Applicab	le COE# 20220547 (NW-JWS), 200205045 (NW-JWS), 200200233 (NW-JWS)		
IMP. FDOT FM#: FM 2205061, FM 2205071; FM 4062261 Drainage Basin: Ochlockonee River Watershee Water Body: Curtis Mill Br; Little Tide Cr.; Si	ACT INFORMATION ERP #: Not Applicab	le COE# 20220547 (NW-JWS), 200205045 (NW-JWS), 200200233 (NW-JWS) SWIM Water Body?: No		

		MITIGATION E	NVIRONMENTAI	L INFORMATION	· · · ·		
Mitigation Type:	Creation	x Restoration	x Enhancement	Preservation	Mitigation Area (Acres): 50 acres		
SWIM Proj	ect?: No A	quatic Plant Con	trol Project?: No	Exotic Plant Con	trol Project?: No		
If yes, give FDEP/WMD           Mitigation Bank?: No         Mitigation Bank Permit #: Not Applicable         COE #: Not Available							
Drainage Ba	sin: Ochlocko	nee River Watersh	ed				
Water Body	: Tates Hell Sy	wamp / Womack C	reek		SWIM Water Body?: No		
			Project Descriptio	n			
A. Overall	project goal:						
Restoration/enhancement of wetlands within the Womack Creek drainage in the eastern portion of Tates Hell State Forest, coupled with implementation of long-term ecological management.							
B. Brief description of current condition:							
Some 150,000+ acres of Tates Hell Swamp have been acquired by the NWFWMD and the State of Florida. Much of the swamp was drained and converted to pine plantation during the 1960s, and has substantial encroachment of titi and other invasive plants. Restoration/enhancement opportunities abound. Restoration of portions of the swamp has been implemented by DOF (the land manager) and the NWFWMD. This project will augment ongoing restoration efforts by focusing on 50 acres in the eastern portion of Tates Hell Swamp.							

Regional Mitigation Plan, Page 2 of 2

## C. Brief description of proposed work:

Restoration/enhancement will entail chopping and burning approximately 50 acres of bottomland wetland forest (FLUCCS 615 Stream and Lake Swamps) that has been impacted by past silviculture, rutting and fire exclusion. In addition, 10 acres will be planted with appropriate wetland species. Management of surrounding uplands will be conducted by DOF in accordance with their management plan (Selected portions attached). The area selected for restoration/enhancement will augment ongoing restoration efforts and will be managed for preservation in perpetuity by DOF.

## D. Brief explanation of how this work serves to offset the impacts of the specified DOT project(s):

Throughout Tates Hell Swamp, which is proximate to the FDOT project impacts, are substantial ecological restoration/enhancement needs due to past silviculture, ditching, and road construction. The area targeted for mitigation will provide adequate compensation regarding type and kind of wetlands (FLUCCS 615—Stream and Lake Swamps (Bottomland), proximity to impacts, and water quality functions. Restoration/Enhancement of 50 acres of bottomland forested wetlands will more than offset 0.56 acres of impact to bottomland forest (FLUCCS 615), including all secondary and cumulative impacts.

E. Brief explanation of why a mitigation bank was/was not chosen, including a discussion of cost:

No permitted mitigation banks exist in the Ochlockonee River watershed or are proximate to the impacts.

F. Brief explanation of why a SWIM project was/was not chosen as mitigation, in whole or in part, including a discussion of cost, if the anticipated impacts are located within a SWIM water body:

No approved swim plan exists for this waterbody and therefore no appropriate SWIM project has been identified for funding the acquisition, long-term ecological management, and potential restoration of this FDOT mitigation project.

MITIGATION PROJECT IMPLEMENTATION						
Entity responsible for construction: Northwest Florida Water Management District						
Contact Name: Duncan J. Cairns (Duncan, Cairns@nwfwmd.state.fl.us) Phone Number: 850-539-5999						
Entity responsible for monitoring and mai	intenance: Northwest Florida V	Water Management District				
Proposed timeframe for implementation Commence Date: 4/04 Complete Date: 4/09						
Total Project Cost (attach itemized cost estimate): \$47,346.88 (based on \$84,548 / Impact Acre)						

	Attachments
x	1. Detailed description of existing site and proposed work.
x	2. Location map and design drawings of existing and proposed conditions.
x	3. Recent aerial photograph with date and scale showing impact sites and mitigation area
x	4. Recent aerial photograph showing proposed mitigation area.
x	5. Historic aerial photography showing area prior to road impoundment
x	6. Current site conditions showing berm road and conversion of bottomland forested wetland to marsh
x	7. Detailed schedule for work implementation, including any and all phases
x	8. Long-term maintenance plan.
x	9. Detailed explanation of how this work serves to offset the impacts of the specified DOT project(s).

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Polygon (*)	A" Three Bride	es Imnact Si	tes		P	Historic Wetla	nd Type: Bottom	and Hardwood Forest	
Acreage 0	.56	<u>go mpuer or</u>			I	Current Wetland Type: Cutover Highway Right-of			
		r		•	· · · ·				
			Raw V	VRAP Variable	Scores				
Variable			"Existing" (A)	"Without" Impact (B)	"With" Impact (C)	Raw Mitigation Delta (B/3 – C/3)	Temporal Lag (T)	Adjusted Mitigation Delta (B/3 – C/3) * (T)	
Wildlife Utiliz	zation		1.5	1.5	0	0.500	1	0.500	
Overstory/Shr	rub Canopy		0.5	0.5	0	0.167	1	0.167	
Vegetative Ground Cover			1.5	1.5	0	0.500	1	0.500	
Adjacent Buffer			1.5	1.5	0	0.500	1	0.500	
Hydrology			2	2	0	0.667	1	0.66 <b>7</b>	
Water Quality	Input and Trea	atment	2	2	0	0.667	1	0.66 <b>7</b>	
		Sum	9	9	0				
	WRAP Sco	res / Deltas	0.500	0.500	0.000	0.500		0.500	
						Tota	al Impact Value		
					(Polygon	Acreage * Adjuste	d Impact Delta)	0.28	
Notes on Var	iable Scores	<u> </u>	11. 1 1.1	<u> </u>					
Wildlife	"Existing"	Roadside c	litch with some	forest (sapling) c	omponents				
	"With"				······································				
	"Without"								
Overstory	"Existing"	No oversto may exten	ory in highway r d into bottomlar	ight-of-way. Son nd hardwood wet	me sapling recru land forest.	uitment from adjacer	nt bottomland hard	wood forest. Impacts	
	"With"								
	"Without"		• .	· ·		×	· · · · · · · · · · · · · · · · · · ·		
Ground Cover	"Existing"	Understory vegetation consists of grasses and sedges, with some button bush and seedlings of forested species.							
	"With"								
	"Without"								
Buffer	"Existing"	Buffer includes a hardwood bottomland forest on one side and a road on the other.							
	"With"								
	"Without"								
Hydrology	"Existing"	Historic f	low patterns hav	ve been altered th	rough created r	oadside ditches.			
	"With"								
	"Without"								
WQ	"Existing"	' Impairme	ent from road ru	noff.					
	"With"								
	"Without"	·							
MANAG	EMENT:								
	•								
11									

	I		,	Warnak Creek W		JD 1 D /1 /30 /03)		Α	
Palvon	Womack Wetla	nd	Womack Creek Wetlands / In-house WRAP (1/28/03)						
Acreage	50		Target Kegrowth" (water oak / sweet gum / titi thicket)					Ivdric Pine Flatwoods	
			Raw V	<b>VRAP Variable</b>	Scores				
						Raw		Adjusted	
				"With"	"Without"	Mitigation	Temporal	Mitigation	
	Variable		"Existing"	(R)	Mitigation (C)	Delta (R/3 C/3)		Delta $(R/2 - C/2) + (T)$	
Wildlife U	tilization		2	2.75	$\frac{1}{2}$	0.250		0.215	
Overstory/	Shrub Canopy		1	3	- <u></u>	0.667	0.7324	0.489	
Vegetative Ground Cover 1 3 1 0.6						0.667	0.9350	0.624	
Adjacent B	luffer		2.75	2.75	2.75	0.000	1	0.000	
Hydrology			3	3	3	0.000	1	0.000	
Water Qua	lity Input and Tro	eatment	3	3	3	0.000	1	0.000	
		Sum	12.75	17.5	12.75		<u> </u>		
<b></b>	WRAP Sco	res / Deltas	0.708	0.972	0.708	0.264		0.221	
			•		Polygon Acre	Total IVI Minested N	itigation Credit	11.05	
Notes on V	/ariable Scores				U UIYEUU AUU	age - Aujusteu m	IIIgauva Denaj 1	11.05	
Wildlife	"Existing"	Although	provides some w	/ildlife habitat, t	hick water oak / sw	veet gum / titi elim	ninates species dive	ersity.	
	"With"	Species as	semblages shoul	ld shift to more a	appropriate types a	s wetland recovers	s from "regrowth"	forest to hydric pine	
	"Without"	No Chang	e.				······		
Overstory	/ "Existing"	Dense thic	ket of small wat	ter oak / sweet g	,um/titi.		in the second	1. d	
	"With"	Eventual r	Eventual recovery to hydric pine flatwood. 20-year Lag.						
	"Without"	No Chang	;e.						
Ground Cover	"Existing"	Existing w	vater oak / sweet	t gum / titi thicke	et eliminates appro	priate groundcove	ст.		
	"With"	Shift to m	Shift to more appropriate ground cover species with restored natural hydrology. S-year lag.						
	"Without"	No Chang	je.						
Buffer	"Existing"	Natural bi	uffer. Some pos	sible reduction i	in value from fores	try practices.			
	"With"	No Chang	No Change.						
	"Without"	No Chang	ge				<u></u>		
Hydrolog	gy "Existing"	' Appropri	ate hydrology.		,				
-	"With"	No Chan	ge.						
	"Without"	' No Chan	ge.		<u> </u>				
WQ	"Existing	" Natural b	ouffer results in o	excellent buffer.					
	"With"	No Chan	No Change.						
	"Without" No Change.								
MAN/	AGEMENT:								
	Chop (April/N	May) and burn	n (June/July).						

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# Impact and Potential Mitigation Sites





# Tates Hell State Forest: Womack Creek Wetlands Restoration Site (~50 Acres)



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1000

2000 Feet





# Tates Hell State Forest: Womack Creek Wetlands Restoration Site (~50 Acres)



# Tates Hell State Forest: Womack Creek Wetlands Restoration Site (~50 Acres)

